

Original Research Article

Impact of Debt Composition and Accounting Conservatism on Financial Distress in Emerging Markets

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ABSTRACT

Aims: This study investigates the impact of debt composition, specifically short-term and long-term debt, on corporate financial distress, focusing on the moderating role of accounting conservatism. It aims to understand how firms in emerging markets, particularly Kenya, can achieve financial stability through prudent debt structuring and conservative accounting practices.

Study design: The research adopted an explanatory research design.

Place and Duration of Study: The study utilized financial data from firms listed on the Kenyan Securities Exchange between 2008 and 2021.

Methodology: The study analyzed a sample of 45 firms trading at the Nairobi Stock Exchange over 14 years from 2008 to 2021. The study used panel logistic regression, a statistical method for analyzing data with multiple observations over time, to test its hypotheses.

Results: The results show that both short-term and long-term debt increase the likelihood of financial distress, with accounting conservatism further intensifying the risk for firms heavily reliant on short-term debt while mitigating it for those with long-term debt. This suggests that conservative accounting practices, which promote early recognition of losses, may exacerbate financial distress for firms heavily reliant on short-term debt. In contrast, for long-term debt, accounting conservatism has a mitigating effect helping firms manage their debt obligations more effectively over time. This highlights a nuanced role of accounting conservatism, where it increases the pressure on firms with short-term debt while providing stability for those with long-term obligations.

Conclusion: The findings suggest that corporate managers in emerging markets should carefully balance short- and long-term debt to minimize financial distress risks. Additionally, adopting conservative accounting practices can serve as a safeguard, providing early warning signals for financial trouble and enhancing corporate stability. Managers should therefore carefully balance short-term and long-term debt to reduce financial distress while adopting conservative accounting practices to enhance financial transparency and risk management. Policymakers can support firms by promoting responsible debt management and offering incentives for conservative financial reporting to strengthen overall financial stability.

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Keywords: Accounting Conservatism, Long-term Debt, Short-term Debt, Financial Distress

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1. INTRODUCTION

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Corporate financial distress is increasingly prevalent worldwide, as businesses face mounting challenges in fulfilling their financial obligations. Defaults on debt repayments,

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9 restructuring efforts, and shrinking asset bases have become common occurrences in both
10 developed and emerging economies [1]. Research shows that capital structure decisions are
11 the main reasons why companies face financial distress. In addition, research has also
12 indicated that accounting conservatism acts as a protective mechanism for improving
13 the financial sustainability of firms [2]. Managing capital structure mix, particularly debt
14 finance has become a central focus for firms seeking to maintain stability and avoid financial
15 distress.

16 Empirical research reveals that debt composition which is typically classified into short-term
17 and long-term debt. Short-term debt, which refers to obligations due within a year, often
18 provides liquidity for immediate needs but can increase financial pressure if not managed
19 prudently, [3]. On the other hand, long-term debt involves obligations due after more than a
20 year, offering a longer horizon for repayment but posing risks if a firm's cash flow cannot
21 sustain the repayment over the long term, [4]. The relative proportions of short- and long-
22 term debt in a company's capital structure can significantly influence its financial stability.

23 While the relationship between debt composition and corporate financial stability has been
24 studied in the context of both developed and emerging markets, moderating role of
25 accounting conservatism on this relationship remain underexplored. Accounting
26 conservatism, which encourages the early recognition of potential losses and liabilities, can
27 help mitigate the risks associated with debt financing by ensuring that firms recognize
28 financial distress at an earlier stage, allowing for proactive management, [5]. In emerging
29 markets, where access to long-term financing is often limited, and short-term debt reliance is
30 higher, accounting conservatism can be especially valuable in helping firms manage debt
31 portfolios and maintain corporate stability.

32 This study seeks to examine the effects of debt compositions specifically, short-term and long-
33 term debt—on corporate financial stability, with a particular focus on the moderating role of
34 accounting conservatism in this relationship. The research aims to provide insights into how
35 debt structuring and accounting practices interact to influence corporate resilience,
36 especially in the context of emerging markets such as Kenya.

37 Financial distress occurs when a company struggles to generate enough cash flow to meet
38 its debt obligations. This inability to pay creditors, suppliers, and other stakeholders often
39 signals a broader liquidity issue that can, if unaddressed, escalate into bankruptcy or
40 insolvency [6, 7]. The reliance on debt as a primary source of financing is common for
41 corporations, but the composition of this debt whether it is short- or long-term plays a crucial
42 role in determining the level of financial risk a Firm faces.

43 Short-term debt, while often necessary for maintaining liquidity, can become a source of
44 financial strain if a firm is unable to roll over its debt or generate sufficient cash flow to meet
45 repayment obligations. Firms with high levels of short-term debt may find themselves under
46 constant pressure to secure new financing or boost revenues, leading to heightened
47 vulnerability during periods of economic instability [3]. Furthermore, the inability to manage
48 short-term debt effectively can result in liquidity crises, which may quickly spiral into broader
49 financial distress.

50 In contrast, long-term debt provides a longer timeline for repayment and can offer more
51 stability, particularly in volatile market environments. However, firms that take on excessive
52 long-term debt without considering their future cash flow prospects may find themselves
53 constrained by debt service obligations that limit their ability to invest in growth opportunities
54 or respond to market changes [4]. The interest and principal repayments on long-term debt

55 can become a heavy burden if the firm's revenue streams do not keep pace with its debt
56 obligations, potentially leading to financial distress over time.

57 Accounting conservatism is a financial reporting approach that prioritizes the recognition of
58 potential losses and liabilities over gains. By encouraging firms to report expected losses
59 earlier, conservatism reduces the risk of overstating financial health and provides a more
60 realistic view of a firm's financial position [5]. In the context of debt financing, accounting
61 conservatism can act as a safeguard by ensuring that firms recognize financial distress
62 earlier and take corrective action before the situation worsens.

63 [8] suggest that accounting conservatism improves a firm's ability to manage cash flow and
64 mitigate the risks associated with debt financing. By promoting early loss recognition,
65 conservatism can help firms avoid excessive debt accumulation and reduce the likelihood of
66 financial distress. This is particularly relevant for firms with high levels of short-term debt,
67 where the risk of financial distress is elevated due to the need for constant liquidity
68 management. Accounting conservatism can provide an additional layer of protection by
69 encouraging firms to take a more cautious approach to debt financing, ensuring that
70 potential risks are identified and addressed promptly[5].

71 In emerging markets, where access to capital is often more constrained, and firms may have
72 fewer options for long-term financing, the role of accounting conservatism becomes even
73 more critical[9]. Firms in these markets are often more reliant on short-term debt, which
74 increases their exposure to financial distress. By adopting conservative accounting
75 practices, firms can better manage the risks associated with short-term debt and improve
76 their overall financial stability, [10].

77 Emerging markets such as Kenya face unique challenges in managing corporate debt.
78 Access to long-term financing is often limited, forcing companies to rely more heavily on
79 short-term debt to meet their liquidity needs [1]. This reliance on short-term debt can make
80 firms more vulnerable to financial distress, particularly during periods of economic downturn
81 or market volatility. As a result, firms in emerging markets must pay particular attention to the
82 composition of their debt portfolios to ensure financial stability.

83 Research has shown that firms with high levels of short-term debt are more susceptible to
84 financial difficulties, especially during periods of economic instability [1]. However, the
85 specific impact of debt composition on corporate financial stability, particularly in the context
86 of emerging markets, remains underexplored. This study seeks to fill that gap by analyzing
87 how the balance between short-term and long-term debt influences financial distress among
88 firms listed on the Kenyan Securities Exchange.

89 Moreover, the study will examine the moderating role of accounting conservatism in this
90 relationship. By focusing on the interaction between debt composition and accounting
91 practices, the research aims to provide a comprehensive understanding of how firms can
92 structure their debt portfolios to enhance financial stability and reduce the risk of distress,
93 particularly in volatile market conditions.

94 **Specific objectives of the study**

- 95 i. To determine the impact of long-term debts on the likelihood of financial distress
- 96 ii. To determine the effect of short-term debts on the likelihood of financial distress
- 97 iii. To determine the moderating role of accounting conservatism on the relationship
98 between long-term debts and the likelihood of financial distress
- 99 iv. To determine the moderating role of accounting conservatism on the relationship
100 between short-term debts and the likelihood of financial distress

101 **Literature Review**

102 **Theoretical review**

103 **Agency Theory**

104 Agency Theory, as explained by [11], highlights conflicts between principals (shareholders)
105 and agents (managers) due to differing goals. Managers might prioritize their interests, such
106 as excessive risk-taking or empire-building, which could negatively affect shareholders. Debt
107 helps mitigate agency costs by limiting managers' control over free cash flow. Short-term
108 debt, if poorly managed, increases financial distress risk, while long-term debt offers stability
109 but may reduce managerial efficiency[12]. Accounting conservatism enhances transparency,
110 helping curb opportunistic behavior by managers[13].

111 **Positive Accounting Theory**

112 Positive Accounting Theory (PAT), as outlined by[14], seeks to predict and explain firms'
113 accounting choices based on stakeholder interests, particularly managers, creditors, and
114 shareholders. It suggests that managers make accounting decisions to maximize their utility
115 within the firm's constraints. PAT emphasizes that accounting conservatism helps reduce
116 financial distress by promoting early recognition of losses and liabilities, curbing earnings
117 management, and minimizing agency conflicts. This is especially crucial for firms with high
118 debt, as it enhances transparency and aids in debt negotiations[15].

119 **Trade-Off Theory and Pecking Order Theory**

120 The Trade-Off Theory [16] and Pecking Order Theory [18] address firms' capital structure
121 decisions from different perspectives. The Trade-Off Theory suggests that firms balance the
122 tax benefits of debt against the costs of financial distress, with short-term debt increasing
123 distress risk and long-term debt providing stability but at higher costs. Accounting
124 conservatism supports this balance by facilitating early recognition of economic issues,
125 improving debt structuring, and reducing distress risk [17].

126 The Pecking Order Theory, on the other hand, posits that firms prioritize internal financing
127 over debt and equity, preferring short-term debt due to its perceived lower cost. However,
128 overreliance on short-term debt can lead to liquidity problems and financial distress.
129 Accounting conservatism mitigates this risk by providing timely financial information, aiding
130 firms in making informed financing decisions, and reducing distress probability [19].

131 **Empirical Review and Hypotheses Development**

132 The link between debt composition and financial distress has long been a critical area of
133 research, with both short-term and long-term debt playing distinct roles in determining
134 corporate financial stability[20]. The introduction of accounting conservatism into this
135 discussion adds an important layer of financial prudence, emphasizing timely recognition of
136 losses and risks[8]. Below is a review of the existing empirical studies and theoretical
137 frameworks that support the development of hypotheses related to the impact of long-term
138 and short-term debt on financial distress, and the moderating role of accounting
139 conservatism.

140 **Long-Term Debt and Financial Distress**

141 Long-term debt, due to its extended repayment period, typically offers firms the flexibility to
142 invest in capital-intensive projects without the immediate pressure of repayment[21].
143 However, if not properly managed, it can increase the overall debt burden and strain cash
144 flows in the long run, especially if a firm's revenue streams are not sufficient to cover debt

145 servicing costs. According to [22], firms with high levels of long-term debt are more
146 vulnerable to financial distress if they fail to generate adequate returns from their
147 investments. This is particularly true in volatile market conditions, where income streams can
148 become unpredictable.

149 On the other hand, some studies suggest that long-term debt may help firms avoid financial
150 distress by providing a stable, predictable repayment structure [23, 24]. The static trade-off
151 theory posits that firms with higher leverage, particularly long-term debt, may experience
152 lower distress due to tax shields[25]. However, the relationship is not universally agreed
153 upon, as certain studies have found mixed results depending on the industry and economic
154 environment[26].

155 Based on the above discussion, the first hypothesis is:

156 ***H1: Long-term debt has a significant effect on the likelihood of financial distress***
157 ***among corporate entities trading at NSE.***

158 **Short-Term Debt and Financial Distress**

159 Short-term debt often entails higher risks due to its short maturity and frequent refinancing
160 requirements. Firms with higher levels of short-term debt are more susceptible to liquidity
161 crises, as they must continuously generate sufficient cash to repay these obligations.
162 Several studies, such as [3]and[27], have shown that reliance on short-term debt can
163 significantly increase the risk of financial distress, especially during economic downturns
164 when refinancing becomes difficult or interest rates rise unexpectedly.

165 The pecking order theory suggests that firms prefer short-term debt to long-term debt
166 because it is often easier to secure and involves lower transaction costs[28]. However, this
167 short-term focus can backfire when cash flow becomes tight, forcing firms into distress[29].
168 Empirical studies in emerging markets, including Kenya, demonstrate that firms with higher
169 proportions of short-term debt face elevated risks of financial instability due to their reliance
170 on this form of finance [1].

171 Thus, the second hypothesis is formulated as:

172 ***H2: Short-term debt has a significant effect on the likelihood of financial distress***
173 ***among corporate entities trading at NSE.***

174 **Accounting Conservatism as a Moderator**

175 Accounting conservatism, which emphasizes the timely recognition of liabilities and potential
176 losses, is considered a protective mechanism against financial distress. By adopting
177 conservative accounting practices, firms can recognize financial challenges earlier, allowing
178 them to adjust their financial strategies, such as restructuring debt or conserving cash for
179 debt repayment[8]. [30]found that accounting conservatism helps firms restructure earlier
180 after covenant breaches, leading to better recovery rates in cases of default.

181 The moderating role of accounting conservatism can be particularly relevant for firms with
182 high levels of long-term debt, as it encourages prudent management of long-term financial
183 obligations. Firms that apply conservative accounting practices are more likely to recognize
184 potential repayment difficulties and adjust their operations accordingly, thus reducing the
185 likelihood of distress (Biddle et al., 2020).

186 Based on this reasoning, the third hypothesis is proposed:

187 ***H3: Accounting conservatism moderates the relationship between long-term debt and***
188 ***the likelihood of financial distress among corporate entities trading at NSE.***

189 In the case of short-term debt, which poses immediate repayment obligations, accounting
190 conservatism can play a crucial role in mitigating the risk of financial distress by promoting
191 timely recognition of short-term liquidity problems. [31] found that firms with conservative
192 accounting practices were better able to manage short-term debt, as they recognized
193 financial risks early and made preemptive adjustments to avoid default.

194 Consequently, the fourth hypothesis is developed as:

195 ***H4: Accounting conservatism moderates the relationship between short-term debt***

196 **2. METHODOLOGY**

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198 **Data Collection**

199 Secondary data was collected from the annual financial reports of the 45 firms listed on the
200 NSE during the study period. The data covers the period from 2008 to 2021. The firms
201 included were chosen based on data availability and consistency across the years, ensuring
202 the integrity of the panel dataset.

203 **Measurement of Variable**

204 **Dependent Variable:**

205 Financial Distress: Financial distress is measured using a modified version of Altman's Z-
206 score [32] to evaluate the financial health of the sample firms. Research suggests that this
207 model works well for both manufacturing and non-manufacturing firms, including those in
208 emerging markets. Accordingly, a Z-Score of "1" was assigned to distressed firms and "0" to
209 healthy ones.

210 **Independent Variables:**

211 Short-term Debt: This is measured as the ratio of short-term debt to total assets. Short-term
212 debt refers to the liabilities due within one fiscal year and includes items such as short-term
213 loans and trade payables [33].

214 Long-term Debt: Long-term debt is measured as the ratio of long-term debt to total assets. It
215 includes financial obligations due after one fiscal year, such as long-term bonds and
216 loans [34].

217 **Moderating Variable:**

218 Accounting Conservatism: Accounting conservatism is measured using the C-Score model
219 developed by [35], which captures the tendency of a firm to recognize losses more quickly
220 than gains. A higher score indicates a more conservative accounting approach.

221 **Control Variables:**

222 Firm Size: Measured as the natural logarithm of total assets, firm size accounts for scale
223 effects on financial stability.

224 Firm Age: Measured as the natural logarithm of total assets, firm size accounts for scale
225 effects on financial stability.

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3. RESULTS AND DISCUSSION

Descriptive results

230 The descriptive statistics presented in Table 1 provide insights into the financial
231 characteristics and stability of firms listed on the Nairobi Securities Exchange, based on a
232 sample of 630 observations. The variables analyzed include financial distress (FD), long-
233 term debt (LTD), short-term debt (STD), accounting conservatism (AC), firm age (FA), and
234 firm size (FS).

235 The results show that the mean likelihood of financial distress (0.231) indicates that, on
236 average, approximately 23.1% of the firms are experiencing some level of financial distress.
237 This relatively low percentage suggests that while financial distress is present, a majority of
238 firms may be managing their financial obligations adequately. The standard deviation (0.422)
239 indicates substantial variability in distress levels among firms, implying that some firms face
240 significant financial challenges, while others remain stable. The minimum value (0.000)
241 shows that some firms do not experience any distress, whereas the maximum value (1.000)
242 indicates that others are fully distressed. This wide range highlights the differing financial
243 health across the sample.

244 Similarly, the results also indicate that the Mean long-term debt was (2.202) suggesting that,
245 on average, firms have more than twice their equity financed through long-term debt. This
246 could indicate a strategy of leveraging long-term borrowing for investment and growth. The
247 high standard deviation (3.606) shows significant differences in long-term debt levels among
248 firms. Some firms are heavily indebted, while others have minimal long-term obligations, as
249 suggested by the negative minimum value (-8.926), which might reflect accounting losses or
250 capital structure anomalies. The maximum value of 57.218 points to some firms having
251 extremely high levels of long-term debt, potentially increasing their risk of financial distress if
252 revenue does not cover repayment obligations.

253 Further, the results show that the Mean short-term debt (STD) was 0.316 suggesting a
254 moderate reliance on short-term financing among the firms, indicating that many firms utilize
255 short-term debt to manage immediate liquidity needs. A standard deviation of 0.274 reflects
256 variability in short-term debt levels, indicating that while some firms manage this type of debt
257 effectively, others may face greater risks associated with high short-term obligations. The
258 minimum value of -0.856 indicates that some firms may have negative short-term debt
259 (potentially reflecting excess cash or negative working capital), while the maximum value of
260 0.938 shows that certain firms are heavily reliant on short-term borrowing.

261 Table 1 also shows that the mean accounting conservatism score was (-0.843) implies a
262 generally conservative approach to financial reporting among the firms. Negative values
263 suggest that these firms are quick to recognize losses, which can help manage financial risk.
264 The standard deviation (0.426) indicates some variability in accounting practices, with
265 certain firms adopting more conservative approaches than others. The minimum value (-
266 2.785) indicates a strong tendency toward conservatism in some firms, while the maximum
267 value (-0.196) suggests that others are less conservative, potentially leading to varying
268 financial reporting outcomes.

269 In addition, the average firm age was (3.976 years) which suggests that the sample consists
270 of relatively young firms. This may imply a dynamic environment where firms are still in their
271 growth or establishment phases. The standard deviation (0.543) reflects some diversity in
272 firm ages, suggesting that while many firms are young, there are also older firms in the
273 sample. With a minimum age of 1.386 years and a maximum of 4.836 years, the range

274 indicates that the sample includes both newly established firms and those with slightly more
275 experience, which may influence their strategies and financial stability.

276 The average firm size was (7.029) indicating a moderate operational scale among the firms
277 in the sample, which can influence their ability to manage debts and investments. A standard
278 deviation of 1.132 suggests significant variability in firm sizes, indicating that the sample
279 comprises both larger and smaller firms. The minimum size value of 3.818 and the maximum
280 value of 9.201 suggest that the sample includes firms of varying operational scales, which
281 can affect their financial decision-making processes and resilience against financial distress.

282 **Table 1 Distribution of the Mean and Standard Deviation of the Variables**

Variable	Obs	Mean	Std. Dev.	Min	Max
FD	630	0.231	0.422	0.000	1.000
LTD	630	2.202	3.606	-8.926	57.218
STD	630	0.316	0.274	-0.856	0.938
AC	630	-0.843	0.426	-2.785	-0.196
FA	630	3.976	0.543	1.386	4.836
FS	630	7.029	1.132	3.818	9.201

283 **FD:** Likelihood of financial distress, **LTD:** Long term debt, **STD:** Short term debt, **AC:**
284 Accounting conservatism, **FA:** Firm Age, **FS:** Firm Size, **P50:** 50th percentile, **Sd:** standard
285 deviation, **Min:** minimum, **Max:** maximum, **N:** number of firms.

286 **Source: Research (2024)**

287 **Correlation Analysis**

288 The correlation results for the variables related to financial distress (FD) provide insights into
289 how firm age (FA), firm size (FS), long-term debt (LTD), short-term debt (STD), and
290 accounting conservatism (AC) relate to the likelihood of financial distress among corporate
291 entities trading at the Nairobi Securities Exchange (NSE). Below is an interpretation focusing
292 solely on these variables' correlation with FD:

293 Table 2 shows that Firm Age has a positive and significant correlation with financial distress,
294 (0.172, $P < 0.05$). This suggests that as firms age, they may face an increased likelihood of
295 financial distress. While the correlation is relatively weak, it indicates that older firms may be
296 more susceptible to financial challenges, potentially due to factors like increased operational
297 complexities or outdated business models. These findings are consistent with [21] and [36],
298 found that older firms often become entrenched in outdated practices, which can lead to
299 inefficiencies and increased vulnerability to market fluctuations.

300 In addition, the results reveal that the correlation between firm size and financial distress is
301 negative and significant (-0.271, $P < 0.05$). This indicates that larger firms are associated with
302 a lower likelihood of financial distress. This negative relationship implies that larger firms
303 may benefit from economies of scale, more diversified revenue streams, and better access
304 to financing, which can enhance their financial stability. These findings are consistent with
305 [37] and [21], who argued that larger firms typically have better access to capital markets and
306 diversified operations, which can reduce their financial risk. Additionally, larger firms are
307 often more resilient during economic downturns due to their established market positions
308 and resource availability.

309 Further, the correlation between long-term debt and financial distress is positive and
310 significant (0.348, $P < 0.05$). This suggests that higher levels of long-term debt are

311 associated with an increased likelihood of financial distress. This finding indicates that while
 312 long-term debt can be a tool for financing growth, excessive reliance on it can lead to
 313 financial strain if firms struggle to meet repayment obligations. These findings are consistent
 314 with agency theory, [38] and [39], which posits that high levels of debt can lead to conflicts
 315 between shareholders and creditors, ultimately increasing the risk of distress. Furthermore,
 316 demonstrated that firms with high long-term debt are more likely to face financial difficulties,
 317 particularly if they encounter revenue shortfalls.

318 Additionally, there is a strong positive correlation between short-term debt and financial
 319 distress, significant (0.707, $P < 0.05$). This high correlation indicates that firms with higher
 320 levels of short-term debt are considerably more likely to experience financial distress. This
 321 suggests that short-term debt can pose significant risks, particularly in terms of cash flow
 322 management, as firms may face liquidity challenges when obligations come due. This finding
 323 is consistent with [40], who noted that firms relying heavily on short-term financing often face
 324 liquidity issues that can lead to distress, especially during economic downturns. Additionally,
 325 [41] emphasized that firms with high short-term debt levels are more likely to encounter
 326 challenges in cash flow management, leading to increased financial instability.

327 Moreover, the correlation between accounting conservatism and financial distress is
 328 negative and significant (-0.102, $P < 0.05$). This implies that firms that practice accounting
 329 conservatism tend to have a lower likelihood of financial distress. By adopting conservative
 330 accounting practices, firms may be better positioned to manage risks and provide a more
 331 accurate reflection of their financial health, which can help in decision-making and financial
 332 planning. This finding is supported by [5], who argued that accounting conservatism helps
 333 firms recognize losses early, thus providing a more accurate representation of their financial
 334 health. Furthermore, [35] found that firms practising accounting conservatism are less likely
 335 to experience financial distress as they maintain a more prudent approach to financial
 336 reporting and risk management.

337 **Table 2: Correlation results**

	FD	FA	FS	LTD	STD	AC
FD	1.000					
FA	0.172*	1.000				
FS	-0.271*	-0.053	1.000			
LTD	0.348*	-0.053	0.299*	1.000		
STD	0.707*	-0.445	0.343*	0.290*	1.000	
AC	-0.102*	0.041	0.035	-0.086*	-0.056	1.000

338 **** Correlation is significant at the 0.01 level (2-tailed).**

339 *** Correlation is significant at the 0.05 level (2-tailed)**

340 **FD:** Likelihood of financial distress, **LTD:** Long term debt, **STD:** Short term debt, **AC:**
 341 Accounting conservatism, **FA:** Firm Age, **FS:** Firm Size, **P50:** 50th percentile, **Sd:** standard
 342 deviation, **Min:** minimum, **Max:** maximum, **N:** number of firms.

343 **Source: Research (2024)**

344 **Panel logistic regression results**

345 **Effects of Firm age and Firm size on the likelihood of financial distress**

346 The analysis reveals that firm age has a positive and significant impact on the likelihood of
347 financial distress ($\beta = 32.711$, $P < 0.05$). A one-unit increase in firm age raises the likelihood
348 of distress by 32.711 units. This suggests that older firms may become more vulnerable to
349 financial distress due to factors such as complacency, reduced innovation, and loss of
350 competitive advantage. These results align with previous studies by [42], [21] and [43] who
351 also found a positive relationship between firm age and financial distress.

352 In contrast, firm size shows a negative and significant impact on financial distress ($\beta = -$
353 5.479 , $P < 0.05$). This indicates that smaller firms are more likely to experience financial
354 distress, with a unit change in firm size leading to a decrease of 5.479 units in distress
355 likelihood. Larger firms, with their access to economies of scale, better resources, and
356 diversification, are better equipped to avoid financial distress. These results are consistent
357 with findings from [44], [45], [46], [47], [48], [49], and [50]. However, they contradict
358 [51] and [52], who found a different relationship. The negative coefficient is explained by
359 larger firms' ability to leverage operational efficiencies, strong market positions, financial
360 flexibility, and greater access to capital, which reduce their likelihood of financial distress.

361 **Effect of Long-Term Debt on financial distress**

362 The results provided in Table 3 reveal a positive relationship between long-term debt and
363 financial distress, with a coefficient of 0.238, $P < 0.05$. This suggests that higher levels of
364 long-term debt are associated with an increased likelihood of financial distress. A positive
365 coefficient indicates that higher long-term debt is associated with increased log odds of
366 financial distress. This implies that a unit increase in long-term debt increases the log odds
367 of the likelihood of financial distress by 0.238 units. Financially healthy firms tend to rely
368 more on equity than debt, as increasing long-term debt raises the likelihood of financial
369 distress due to investors' perceptions of firms with high debt levels. Scholars argue that long-
370 term debt reduces financial flexibility and therefore exposes firms to a higher risk of financial
371 distress (the reduced-flexibility hypothesis). Additionally, elevated debt levels can result in
372 higher interest expenses, which reduce profitability and exacerbate financial distress [53] [54].

373 A company with a high debt-to-total assets ratio may need to allocate a significant portion of
374 its profits to debt repayment, either by retaining earnings or being obligated to distribute
375 profits according to debt agreements [54]. Firms with high debt levels often face restrictions
376 on their financial flexibility, making it difficult to adapt during economic downturns or cash
377 flow shortages, further increasing their risk of financial distress. Higher long-term debt leads
378 to elevated interest payments, which can strain cash flows. If revenues are insufficient to
379 cover these expenses, the firm may encounter financial distress. Moreover, firms with
380 substantial debt may be subject to restrictive covenants imposed by lenders, limiting their
381 operational flexibility and financial strategies. Failing to meet these conditions heightens the
382 risk of distress.

383 High long-term debt also magnifies the effects of market fluctuations on profitability. Negative
384 changes in market conditions can disproportionately affect firms with significant debt, making
385 them more vulnerable to financial distress. Additionally, high levels of long-term debt signal
386 greater risk to investors and creditors, potentially resulting in higher borrowing costs or
387 reduced investment, which further exacerbates the risk of distress [38]. Firms with substantial
388 debt may also experience downgrades in their credit ratings, leading to higher interest rates
389 on new loans and difficulty securing financing, thus contributing to financial distress [39].

390 These findings align with previous research, including studies by [55], [21], [56], [57] found
391 that long-term debt has a significant positive relationship with the likelihood of financial
392 distress. However, the results contradict studies by [58], [59], and [26], found that long-term
393 debt does not significantly increase the likelihood of financial distress. Similarly, these

394 findings are inconsistent with research by [60] and [61], who found no significant influence of
395 long-term debt on financial distress.

396 **Effect of Short-Term Debt on financial distress**

397 Table 3 also shows that Short-term debt significantly impacts the likelihood of financial
398 distress, as indicated by a positive coefficient of 7.199 ($p < 0.05$). This suggests that as
399 short-term debt increases, the log odds of financial distress rise substantially. A unit increase
400 in short-term debt leads to an increase of 7.199 units in the likelihood of financial distress,
401 meaning that firms with higher levels of short-term debt are more likely to experience
402 financial instability.

403 The reliance on short-term debt can increase a firm's vulnerability to financial distress
404 because these debts need to be repaid or refinanced within a shorter timeframe, often during
405 periods of tight liquidity. Scholars argue that short-term debt introduces significant financial
406 pressure, as firms may struggle to meet their repayment obligations, especially if cash flow is
407 insufficient. Additionally, high short-term debt levels can result in higher borrowing costs and
408 increased exposure to interest rate fluctuations, which can further strain the firm's financial
409 health [62, 63].

410 Firms with substantial short-term debt may also face challenges in securing refinancing
411 during economic downturns or when credit markets tighten, exacerbating the risk of financial
412 distress. Short-term debt can amplify the risk of liquidity crises, as firms may lack the
413 necessary cash reserves to meet their obligations [2]. This aligns with the pecking order
414 theory, which suggests that firms prioritize internal financing before seeking external funds,
415 and short-term debt is often a last resort when other sources of capital are unavailable. As a
416 result, high short-term debt levels signal financial weakness, increasing the likelihood of
417 distress [28].

418 These findings are consistent with several studies that have identified a positive and
419 significant relationship between short-term debt and financial distress, such as [55][56], [21],
420 [57], [64], and [65]. However, the findings contradict research by [59] and [61], which found
421 that short-term debt does not significantly affect financial distress. The discrepancy may
422 arise from differences in the industry or market conditions studied, as well as the ability of
423 some firms to efficiently manage short-term debt without increasing distress risks.

424 Furthermore, studies by [54] and [53] suggest that firms with high short-term debt levels are
425 at greater risk of financial distress, particularly due to increased sensitivity to liquidity
426 shortages and interest rate risks. Thus, firms that rely heavily on short-term debt may face
427 significant challenges in maintaining financial stability, as reflected in the positive and
428 significant coefficient found in this analysis.

429 **Moderation results**

430 **Moderation Effect of Accounting Conservatism on the relationship between** 431 **Long-Term Debt and financial distress**

432 The results in Table 3 also reveal a significant and negative moderating effect of accounting
433 conservatism on the link between financial leverage and financial distress ($\beta = -2.840$, $P <$
434 0.05). Since the beta coefficient is not zero and the model is significant with a notable R-
435 Square change, it confirms that accounting conservatism plays a significant role in
436 moderating this relationship. The findings suggest that although financial leverage generally
437 increases the likelihood of financial distress, this effect is reversed when accounting
438 conservatism is factored in. This implies that firms practising higher levels of conservatism
439 are less likely to experience financial distress due to high leverage than those firms with high
440 financial leverage but practice low levels of accounting conservatism. This is because

441 accounting conservatism leads to conservative financial reporting, which provides a more
442 favourable picture of the company's financial stability, even in the presence of significant
443 financial leverage.

444 This is because conservatism ensures that any potential difficulties in meeting debt
445 obligations are reflected in the financial statements before they become critical [66]. By
446 recognizing losses or setting aside provisions early, conservatism helps firms manage their
447 financial risks more effectively. This proactive approach can reduce the likelihood of financial
448 distress, even when a firm is highly leveraged. In addition, Creditors and other stakeholders
449 often view conservative financial reporting as a sign of prudent management. When a highly
450 leveraged firm practices accounting conservatism, it signals to creditors that the firm is
451 aware of its financial risks and is taking steps to mitigate them [67]. This increased
452 confidence can lead to more favourable financing terms, such as lower interest rates or more
453 flexible repayment schedules, which can reduce the financial pressure on the firm and
454 decrease the likelihood of financial distress. Firms that practice conditional conservatism are
455 likely to take corrective actions sooner, such as restructuring their debt or adjusting their
456 capital structure, in response to early signs of financial trouble. This proactive approach can
457 prevent financial distress by addressing potential problems before they escalate [68].

458 By recognizing the risks associated with high leverage early and making necessary
459 adjustments, conservatism helps firms maintain financial stability [69]. Firms that apply
460 conservative accounting principles are likely to implement stricter risk management
461 practices. By recognizing potential losses earlier and more cautiously, these firms are better
462 equipped to handle financial difficulties, reducing the negative impact of high financial
463 leverage. Conservative accounting helps stabilize earnings by avoiding overly aggressive
464 revenue recognition and asset valuations. This reduced earnings volatility makes it easier for
465 firms to manage their debt obligations, thus lowering the risk of financial distress. Additionally,
466 conservative accounting often leads to lower book values for assets and higher recognition
467 of potential losses. This approach creates a financial cushion against shocks, making firms
468 more resilient to the pressures of high leverage.

469 By practicing conservative accounting, firms can enhance investor confidence in their
470 financial reports. Increased confidence can result in more stable stock prices and better
471 access to capital, even with high leverage. Furthermore, conservative accounting improves
472 debt management by offering a more accurate view of a firm's financial position, which can
473 help in negotiating better terms with creditors and mitigating the effects of high leverage on
474 financial distress. Finally, conservative accounting can help prevent excessive debt
475 accumulation by highlighting potential risks and losses, thus reducing the likelihood of
476 overleveraging and its associated financial distress. Firms that practice accounting
477 conservatism may also be more conservative in their investment decisions. By avoiding
478 overly aggressive or risky investments, these firms can reduce the likelihood of financial
479 distress even when leveraging their capital.

480 **Moderation Effect of Accounting Conservatism on the relationship between** 481 **Short-Term Debt and financial distress**

482 The moderation effect of accounting conservatism on the relationship between short-term
483 debt and financial distress is both positive and significant, with a coefficient of 17.518 ($p <$
484 0.05). This result indicates that accounting conservatism amplifies the impact of short-term
485 debt on the likelihood of financial distress. Specifically, as firms increase their use of short-
486 term debt, the presence of a conservative accounting approach leads to a significantly
487 higher increase in the likelihood of financial distress.

488 Accounting conservatism, which typically involves recognizing potential losses earlier than
489 gains, can heighten the negative impact of short-term debt by limiting financial flexibility.
490 Conservative accounting practices may make a firm's financial position appear weaker,
491 increasing the perception of risk among creditors and investors. As a result, firms with higher
492 short-term debt levels and conservative accounting may find it more difficult to secure
493 favourable financing or manage liquidity risks, further exacerbating financial distress.

494 The coefficient of 17.518 suggests that for firms with higher short-term debt, adopting
495 conservative accounting practices significantly magnifies the log odds of financial distress.
496 This finding aligns with the view that accounting conservatism, while beneficial for prudent
497 financial reporting, can act as a double-edged sword. It may protect creditors by highlighting
498 potential risks earlier, but it can also increase the pressure on firms that rely on short-term
499 debt by accelerating the recognition of potential financial difficulties. As a result, firms may
500 face higher interest rates, tighter borrowing conditions, or challenges in refinancing, all of
501 which contribute to financial distress.

502 This moderation effect is supported by prior research, including studies [5], [70], and [66],
503 suggest that accounting conservatism enhances the transparency of financial reporting,
504 often revealing financial strains earlier. Similarly, [71] and [72] found that accounting
505 conservatism can expose firms to higher risks of financial distress by limiting the recognition
506 of profits and emphasizing financial weaknesses.

507 In contrast, [73] and [73] highlight the protective role of conservatism in reducing agency costs
508 and safeguarding creditors, but even these studies acknowledge the potential downside
509 when firms face liquidity constraints from short-term debt. Additionally, [74] argue that
510 conservatism can make it more challenging for highly leveraged firms to manage short-term
511 financial obligations, especially during periods of financial stress.

512 **Practical Implications for Managers and Policymakers**

513 Managers of older firms should prioritize innovation and continuous improvement to
514 counteract the increased likelihood of financial distress due to complacency or competitive
515 loss, while smaller firms should scale up operations and improve efficiencies to mitigate
516 distress risks. Policymakers can support these efforts by encouraging modernization
517 programs and offering incentives for firm growth, improved access to capital, and better
518 financial management. In managing debt, managers should carefully balance long-term and
519 short-term debt, focusing on debt restructuring, maintaining a balanced capital structure, and
520 developing strong cash flow management to minimize financial distress. Accounting
521 conservatism can aid firms with high leverage by ensuring early recognition of financial
522 difficulties, which promotes prudent debt management and signals financial stability to
523 creditors and investors. However, managers should avoid overly conservative practices that
524 may amplify the negative effects of short-term debt. Policymakers can assist by establishing
525 guidelines that balance conservatism with financial flexibility, providing financial advisory
526 services, and fostering access to affordable long-term financing. By promoting proactive risk
527 management and ensuring accessible credit markets, particularly for firms practicing
528 conservative financial reporting, policymakers can help firms manage financial risks
529 effectively, thereby reducing the likelihood of financial distress and contributing to overall
530 economic stability.

531 **Table 3: Panel Logistic Regression Analysis Results**

532 Variables	Model 1	Model 2	Model 3	Model 4
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Constant	-57.919(1.61) **	-68.48(17.1) **	-51.284(15.2) **	-56.913 (17.5) **
Firm Age	32.711 (9.05) **	38.427 (10.4) **	30.712(9.2) **	34.011(10.61) *
Firm Size	-5.918 (14.7) **	-3.809(1.81) *	-4.549(2.4) *	-4.669(2.07) *
Predictors				
Long-term debt		0.238(0.08) *	0.592(0.14) **	0.589(0.14) **
Short-term debt		7.199 (0.69) *	8.271(0.85) **	8.666(0.92) **
533	Interactions			
Long-Term Debt *Accounting conservatism			-2.84 (0.63) **	-3.02(0.65) **
Short-Term Debt * Accounting conservatism.				17.518(7.6) **
534	Model summary statistics			
Wald chi2	18.59	30.55	43.96	41.77
Prob > chi2	0.000	0.000	0.000	0.000
Log-likelihood	-177.538	-159.471	-141.253	-137.49
R Square	0.112	0.17	0.264	0.283
R2 Change	-	0.058	0.094	0.019
Obs per group	14	14	14	14
No_ of firms	45	45	45	45
Total Panel			630	630
Observations	630	630		

535 ** Significant at 0.01 level * Significant at 0.05 level; Figures in parenthesis are

536 4. CONCLUSION

537

538 Summary of Key Findings

539 The study highlights several key relationships between firm characteristics, debt structures,
540 accounting conservatism, and financial distress. First, firm age positively correlates with
541 financial distress, suggesting older firms are more susceptible due to factors such as
542 complacency or reduced competitiveness, while larger firms exhibit a negative relationship
543 with distress, benefiting from economies of scale, diversification, and financial flexibility. The
544 findings also reveal that both long-term and short-term debt increase the likelihood of
545 financial distress, though long-term debt does so at a slower rate compared to short-term
546 debt, which poses immediate liquidity challenges. Accounting conservatism is shown to
547 moderate the debt-distress relationship, mitigating the negative effects of long-term debt by
548 improving financial transparency and risk management, but potentially amplifying distress in
549 firms reliant on short-term debt by reducing financial flexibility. These results underscore the
550 importance of appropriate debt structuring and the role of conservative accounting practices
551 in managing financial health.

552 Limitations of the study and future research

553 Several limitations were identified in the current study. First, the study does not account for
554 industry-specific factors, such as market volatility or capital intensity, which could affect the
555 relationship between debt and financial distress. Future research should address this by
556 exploring how sector-specific characteristics influence debt management and distress risk.
557 Second, the study primarily focuses on long-term and short-term debt without considering
558 alternative financial strategies, such as debt restructuring, equity financing, or hybrid
559 securities, that could mitigate distress. Future studies could examine how these strategies

560 interact with various forms of debt and provide firms with more effective ways to manage
561 financial risks. Third, the study's cross-sectional approach limits the understanding of how
562 the moderating role of accounting conservatism may evolve. Longitudinal studies could
563 assess how the impact of conservatism shifts with changing market conditions or as firms
564 mature. Lastly, cross-country comparative research would be valuable in exploring how
565 different national financial systems, regulatory frameworks, and cultural factors influence the
566 debt-conservatism-distress relationship, particularly between developed and emerging
567 markets.

568
569 Disclaimer (Artificial intelligence)

570 Author(s) hereby declare that NO generative AI technologies such as Large Language
571 Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the
572 writing or editing of this manuscript.

573

574 **COMPETING INTERESTS**

575 Authors have declared that they have no known competing financial interests OR non-
576 financial interests OR personal relationships that could have appeared to influence the work
577 reported in this paper.

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800
801
802 **APPENDIX**

Model specification

$$\text{logit}(p)_{it} = \beta_0 + \beta_1 \text{SIZE}_{it} + \beta_2 \text{AGE}_{it} + \epsilon \dots \text{Model 1}$$

$$\text{logit}(p)_{it} = \beta_0 + \beta_1 \text{SIZE}_{it} + \beta_2 \text{AGE}_{it} + \beta_3 \text{LTD}_{it} + \beta_4 \text{STD}_{it} + \epsilon \dots \text{Model 2}$$

$$\text{logit}(p)_{it} = \beta_0 + \beta_1 \text{SIZE}_{it} + \beta_2 \text{AGE}_{it} + \beta_3 \text{LTD}_{it} + \beta_4 \text{STD}_{it} + \beta_5 \text{LTD}_{it} * \text{Mit} + \epsilon \dots \text{Model 3}$$

$$\text{logit}(p)_{it} = \beta_0 + \beta_1 \text{SIZE}_{it} + \beta_2 \text{AGE}_{it} + \beta_3 \text{LTD}_{it} + \beta_4 \text{STD}_{it} + \beta_5 \text{LTD}_{it} * \text{Mit} + \beta_7 \text{STD}_{it} * \text{Mit} + \epsilon \dots \text{Model 4}$$

Where:

p = is the probability of the event occurring

logit(p) = natural logarithm of the odds of the event occurring (i.e. the logarithm of p divided by 1-p) [$\log[p/(1-p)]$]

β_0 = constant

$\beta_1 \dots \beta_{11}$ = regression coefficients

SIZE = Firm size

AGE = Firm age

LTD = Long-term Debt

STD = Short-term Debt

M = Accounting conservatism which is the moderator

ϵ = Error term

i = Company

t = Year