Journal of Economics, Business, and Government Challenges

Volume 8 Nomor 2 November 2025
DOI: doi.org/10.33005/ebgc.v8i2.1611
Page: 101-115

ISSN (Cetak): 1979-7117
ISSN (Online): 2614-4115

Local CEO and Financial Distress Risk: The Moderating Effects of Leverage

✉**Nurul Fitriani[1] ; Siti Nur Aini[2]**
[1]*Faculty of Economics and Business, UPN Veteran Jawa Timur*
[2]*Faculty of Economics and Business, Airlangga University*

✉ nurul.fitriani.febis@upnjatim.ac.id

ARTICLE INFORMATION

Received: 4th, August 2025
Revised: 23rd, Sept 2025
Accepted: 1st, October 2025

Keywords: CEO local; financial distress risk; leverage; pecking order theory; place attachment theory

ABSTRACT

This study aims to explore how having local CEOs impacts a firm's likelihood of encountering financial distress, and to evaluate the role of leverage as a moderating factor in this relationship. The research employs 1,500 firm-year observations from non-financial firms listed on the Indonesia Stock Exchange (IDX) during the 2021–2023 period. Hierarchical regression analysis is employed to test the hypotheses, whereas the Coarsened Exact Matching (CEM) technique is employed to guarantee the reliability and stability of the results. These findings show that local CEOs have a reduced financial distress tendency, and this could be as a result of the fact that they have emotional and social connections with the area they live in, which may tend to result into more conservative and future-oriented decisions. However, such mitigating effect diminishes in the presence of leveraged enterprises whose leverage is an independent factor to increase the likelihood of financial distress. Theoretically, the study helps in integrating place attachment theory and pecking order theory to help explain the positive combined effect of the locality of the CEO and the capital structure in explaining financial performance among emerging economies. Empirically, the paper helps in explaining the strategic advantage of hiring local CEOs especially in firms that are forced to deal with volatility. The findings also give the significance of collaborate of executive characters with financial structure of the firm in order to increase resilience.

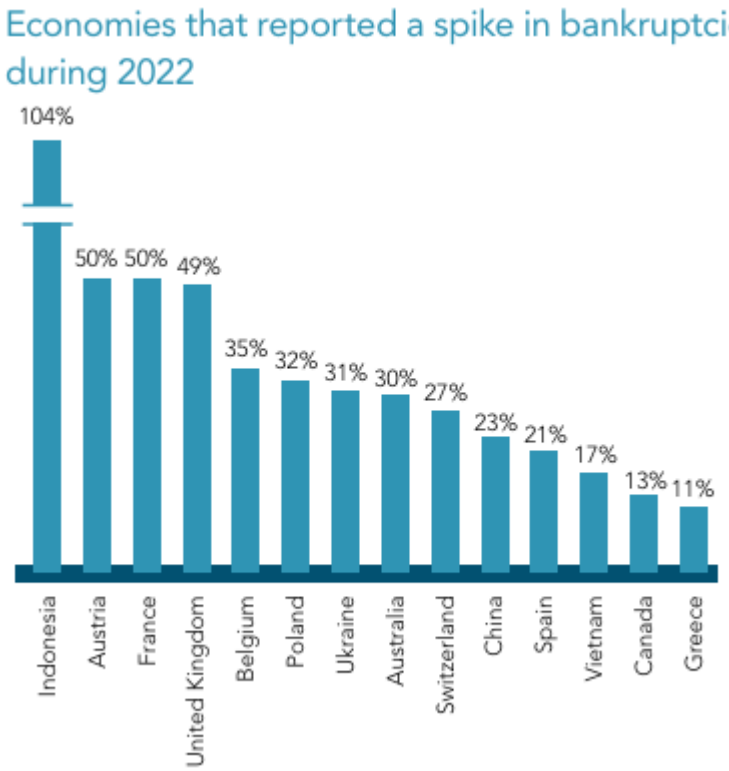
INTRODUCTION

Financial distress is commonly recognized as a precursor to corporate bankruptcy. As such, information regarding potential financial distress is highly valuable for both managers, who must design strategies to prevent bankruptcy, and investors, who need to formulate informed investment plans (Dwiantari & Artini, 2021; Nugrahanti et al., 2020). One important factor influencing financial distress is the profile of

corporate leadership. Previous studies have investigated the connection between CEO attributes and the risk of financial distress across various settings (Chowdhury & Doukas, 2022; Mohammed et al., 2024; Muien et al., 2024; Yao, 2021).

The recent data indeed illuminate the gravity of the situation. 2022 witnessed the highest surge of bankruptcies in the world recorded in Indonesia with an increase of 104%, far exceeding the recorded bankruptcies emerging in economies such as Austria (50%), France (50%), and the United Kingdom (49%). The Japanese figure is most particularly striking as it underscores the emerging and heightened susceptibility of Indonesian firms to distress and financial ruin. This makes it all the more important to examine the factors contributing to financial vulnerability, especially those pertaining to the domain of corporate governance and the structure of the firm's capital.

Figure 1. Economies that reported an increase in bankruptcies in 2022



Source: Dun & Bradstreet (2023)

However, the role of CEO local, which may reflect the leader's social and cultural proximity to the firm's operating environment, remains underexplored, especially in developing economies. In this regard, local CEO defined as a CEO who hold the same nationality as the country where the firm operates are presumed to exert a different influence compared to their foreign counterparts (Lai et al., 2020; Ren et al., 2021; Tong et al., 2023). Place attachment theory explains how individuals form emotional bonds with specific places and communities, leading to a sense of belonging and responsibility (Mesch, 1996). According to this perspective, local CEOs are likely to develop stronger emotional ties and a heightened sense of obligation toward the communities in which their firms are embedded (Tong et al., 2023). These connections may foster a stronger commitment to long-term corporate sustainability and lead to more cautious and future-oriented managerial decisions.

In addition to the numerous leadership aspects, the financial relation technique of a firm, in particular the use of debt, the usage of which deeply influences the financial risk exposures of e firm, is crucial. Myers & Majluf (1984) and Myers (1984) propounded the concept of the pecking order theory, which states that a business will prefer to utilize internal funds before external financial sources. Firms will use external

financing in the form of debt financing when the internal financing resources are depleted. An excessive reliance on debt financing, however, can increase risk exposure by raising financial obligations and decreasing the ability to allocate and deploy resources (Umam & Yusuf, 2024). Regardless of the significance, there exists a substantial gap in the literature exploring the relationship between CEO attributes and capital structure, focusing on leverage, which is particularly relevant.

The underspecified local CEO impact on a firm's financial vulnerability deserves more sophisticated scrutiny, particularly as such analyses become more thoughtful regarding the financial structure. This research attempts to narrow that gap by not only examining how the presence of a local CEO directly relates to financial distress, but also by shedding light on the often-overlooked role of leverage as a moderating force in that relationship. This study is the first attempt to place the paradox of pecking order capital structure and place attachment to a territory in the context of leadership traits recalibrating the financial distress risk capital structure in an emerging economy.

This study aims to investigate the extent to which the presence of a local CEO influences the likelihood of financial distress and whether leverage acts as a moderating variable in this relationship. The analysis is based on 1,500 firm-year observations from non-financial firms listed on the Indonesia Stock Exchange between 2021 and 2023. This period represents a phase of economic recovery following the COVID-19 pandemic, making it an appropriate context for assessing how local CEO leadership affects firms' financial vulnerability. The study employs hierarchical regression for hypothesis testing and applies the Coarsened Exact Matching method for robustness checks. The results indicate that firms led by local CEOs tend to face a lower risk of financial distress. However, when leverage reaches high levels, the risk of financial distress increases and the positive effect of local CEO leadership becomes less pronounced.

This study offers valuable contributions both theoretically and practically. From a theoretical perspective, it broadens the understanding of the relationship between CEO characteristics and financial distress (Chowdhury & Doukas, 2022; Mohammed et al., 2024; Muien et al., 2024; Yao, 2021) by incorporating insights from place attachment and pecking order theory, particularly within the context of emerging markets. Additionally, it complements prior findings that examine the impact of local CEO presence on various firm outcomes, such as debt costs (Tong et al., 2024), labor investment efficiency (Tong et al., 2023), short-term decision-making tendencies (Lai et al., 2020), firm performance (Gatot et al., 2022), and competitive advantage (Badru, 2016). From a practical standpoint, the findings can inform corporate boards and investors in enhancing executive selection policies and financial planning strategies.

This paper is structured to first present the theoretical framework and hypotheses, followed by the research design. It then outlines the findings along with robustness analyses, and concludes with key insights from the study.

LITERATURE REVIEW

Place attachment theory

Place attachment arises in the sphere of environmental psychology and sociology, defining emotional connection that people form with a given place, often representing the place of origin (Mesch, 1996). This attachment is developed by individual, social and cultural experience and then informs the values, duties, and behavior of that individual in various spheres of life including leadership styles in corporations. In managerial contexts, the chief executive officers (CEOs) sharing the same country or even the same region of origin with the headquarters of the enterprise have closer connections with the locality than CEOs without such kind of connection (Tong et al., 2023). Such attachment promotes ethical attitude of making efforts to uphold the continuity of the corporation as it takes care of the community around it. Therefore, local CEOs do not usually have as much pressure to demonstrate their abilities through quick and short-term outcomes (Lai et al., 2020). There is the ensuing release of this pressure which matters in enabling local CEOs to have a long-term orientation in pursuing strategic decisions, thus enhancing the sustainability of business operations (Lai et al., 2020; Ren et al., 2021; Tong et al., 2023, 2024). This kind of long-term orientation dampens managerial opportunism, agency costs, and reduces uncertainty (De Groote et al., 2023; Nienhaus, 2022), and reduces

the firm when promising to meet its debt obligations (Flammer & Bansal, 2017). In the time of financial distress, it is expected that this local attachment ensures that it makes more conservative decisions in trying to maintain reputation and credibility by avoiding a high-risk expansion or excessive debt leverage.

Pecking order theory

The pecking order theory, formulated by Myers (1984) and Myers & Majluf (1984), elucidates a firms inclination in choosing funding sources. This theory suggests that firms opt for internal financing initially because it involves reduced information costs and risks. When internal resources are inadequate, firms seek debt financing, while equity remains the final alternative (Kalash, 2023). In practice, high levels of debt (high leverage) increase a firm's fixed obligations, such as interest payments and principal installments (Umam & Yusuf, 2024). This reduces financial flexibility and increases risk, especially if the firm's revenue declines or economic conditions worsen. In crisis situations, such as the Covid-19 pandemic, highly leveraged firms are more vulnerable to liquidity pressures and difficulties in meeting their obligations, which can lead to financial distress. Previous literature has shown a positive correlation between leverage and financial distress (Safitri & Yuliana, 2021; Umam & Yusuf, 2024; Waqas & Md-Rus, 2018), indicating that leverage is considered one of the key determinants of financial distress risk.

Local CEO and financial distress risk

Local CEO referes to a chief executive officer who holds the same nationality as the country where the firm operates (Ren et al., 2021). This variable captures the leader's social and cultural proximity to the firm's environment. Empirical data document relatively more stable financial performance of firms whose chief executive officers (CEOs) are locally based, and this association is linked to their high awareness of nonfinancial factors and reputation in the community where they work (Lai et al., 2020; Ren et al., 2021; Tong et al., 2024). These CEOs are bound to take into account the financial objectives together with the purported uncertainties of ethical scrutiny or social standing (Tong et al., 2024), thus adopting a more circumspect attitude toward options that might compromise the firm's capital foundation. In addition, the local contextual knowledge and social networks that these CEOs access, thanks to the deep local roots, are a goldmine in anticipating and managing shifting financial ecosystems, operating within the local market, and attending to multiple stakeholders, all of which offer a robust financial distress risk mitigant (Tong et al., 2023). Place attachment theory suggests that local CEOs are more inclined to foster enduring sustainability and embrace more financially conservative approaches, thereby lessening the risk of financial distress.

H_1: Local CEOs have a negative effect on financial distress risk

Leverage and financial distress risk

Leverage measured as the ratio total liabilities to total assets, reflects the extent to which a firm's assets are financed by debt (Kuzey et al., 2023). A higher leverage ratio indicated that a larger portion of the firm's resources is tied to external obligations, which increases vulnerability to financial risk. In an environment where the macroeconomy is not stable, or revenues are declining, firms with high liability-to-asset ratios may struggle to generate sufficient resources to cover their commitments (Nugrahanti et al., 2020; Umam & Yusuf, 2024). A high proportion of liabilities in the capital structure reduces financial flexibility and hightens the probability of financial distress. Empirical studies consistently show that leverage positively contributes to financial distress risk (Safitri & Yuliana, 2021; Umam & Yusuf, 2024; Waqas & Md-Rus, 2018). According to pecking order theory, reliance on debt is a natural step when internal funds are insufficient, but excessive leverage amplifies financial vulverability and distress risk.

H_2: Leverage has a positive effect on financial distress risk

The moderating effect of leverage on the connection between local CEO and risk of financial distress

This study also examines the interaction between leadership (local CEO) and financial structure (leverage). Even though the available bodies of empirical research have revealed that local chief executive

officers (CEOs) are agents that have been endowed with attributes favorable in ensuring that they can develop a long-term strategy and be able to carefully manage risk (Lai et al., 2020; Ren et al., 2021; Tong et al., 2023, 2024), the effect of these benefits can be avoided under extreme conditions of financial stress. When the proportion of liabilities relative to assets is high, firms have less flexibility in managing resources, and local CEOs may be forced to prioritize short-term survival over long-term strategic orientation. This condition can limit their ability to implement conservative approaches despite their intrinsic preference to do so (Umam & Yusuf, 2024). Simply, the beneficial effect of local CEOs in reducing the risk of financial distress commonly becomes less effective in cases where leverage ratios are high. Earlier research indicates that a firm's financial health can enhance or diminish the influence of specific CEO traits on decision-making (Tripathi et al., 2024; Xuezhou et al., 2021). Grounded in both place attachment theory and pecking order theory, it is expected that leverage, as measured by the liability-to-asset ratio, moderates the relationship between local CEO presence and financial distress risk, weakening the protective effect of local leadership under conditions of high debt reliance.

H_3: The negative effect of local CEOs on financial distress risk is weaker in firms with high leverage.

RESEARCH METHODS

The investigation will include the sample of firms listed beside the Indonesia Stock Exchange in 2021 to 2023 and exclude those firms that receive the protection of the Standard Industrial Classification code number six which is under the financial sector. This decision is based on the unique regulatory structure that governs financial institutions, as discussed by Guizani & Abdalkrim (2023). By removing these firms, the study achieves greater uniformity among the firms being analyzed, a step that aligns with the approach recommended by Ngelo et al. (2022). The resulting dataset consists of 1,500 firm-year entries. The study deliberately applied purposive sampling so that only firms fitting the predetermined criteria were included, while all subsequent statistical procedures were carried out with the aid of Stata software. The final dataset comprises 1,500 firm-year observations, with a summary of how the sample was derived presented in Table 1. Table 2 captures the distribution of firms in various business sectors. The manufacturing group, which includes food processing, chemical production, oil refining, has the greatest share of the firms making up a total of 25.27 percent. Secondly is the group of transportation, communication, and utility service-related group which has an overall proportion of 18.60 percent of the total observations. These statistics underline the vital role both groups play in Indonesia's economic structure. Meanwhile, the category that includes healthcare, legal, education, and consultancy services has the fewest firms represented. This smaller presence might reflect a slower pace of growth compared to other sectors that are expanding more rapidly in the country, as noted by Rizki et al. (2024).

Table 1. Sample Selection Process

Descriptions	Number of observations
Total listed non-financial firm from IDX for 2021 – 2023	2,826
(-) Missing data: CEOLOCAL	1,261
(-) Missing data: FDR	49
(-) Missing data: CEOAGE	16
Total sample observations	1,500

Source(s): Author's own work

Similar to trends in the existing body of research, this study implements a hierarchical regression model (Oware & Mallikarjunappa, 2023; Xie et al., 2019). Within this study, leverage is explored in the role of a moderating factor. A moderator refers to a variable that, through its association with another factor, can meaningfully alter the linkage between an independent and a dependent variable (Oware & Mallikarjunappa, 2023). The central aim of this analysis is to test whether leverage reshapes the connection between the presence of a local CEO and the likelihood of financial distress. To evaluate this, a stepwise hierarchical regression is applied: (i) the initial model estimates the influence of a local CEO on financial distress, (ii) the

subsequent model incorporates leverage into the regression framework, and (iii) a final step added the interaction term LOCAL_LEV to test the moderating effect. The regression equation that would be used in the modelling is given below.

$FDR_{i,t} = \alpha + \beta_1 CEOLOCAL_{i,t} + \beta_2 CEOGENDER_{i,t} + \beta_3 CEOAGE_{i,t} + \beta_4 BSIZE_{i,t} + \beta_5 FSIZE_{i,t} + \beta_6 ROA_{i,t} + \beta_7 CASHTA_{i,t} + \beta_8 Year\ FE_{i,t} + \beta_9 Industry\ FE_{i,t} + \varepsilon$…….....(1)

$FDR_{i,t} = \alpha + \beta_1 CEOLOCAL_{i,t} + \beta_2 LEV_{i,t} + \beta_3 CEOGENDER_{i,t} + \beta_4 CEOAGE_{i,t} + \beta_5 BSIZE_{i,t} + \beta_6 FSIZE_{i,t} + \beta_7 ROA_{i,t} + \beta_8 CASHTA_{i,t} + \beta_9 Year\ FE_{i,t} + \beta_{10} Industry\ FE_{i,t} + \varepsilon$ …....(2)

$FDR_{i,t} = \alpha + \beta_1 LOCAL_LEV_{i,t} + \beta_2 CEOLOCAL_{i,t} + \beta_3 LEV_{i,t} + \beta_4 CEOGENDER_{i,t} + \beta_5 CEOAGE_{i,t} + \beta_6 BSIZE_{i,t} + \beta_7 FSIZE_{i,t} + \beta_8 ROA_{i,t} + \beta_9 CASHTA_{i,t} + \beta_{10} Year\ FE_{i,t} + \beta_{11} Industry\ FE_{i,t} + \varepsilon$…….(3)

Table 2. Sample Distribution by SIC

SIC	Freq.	Percent	Cum.
0 (Agriculture, Forestry, and Fishing)	78	5.20%	5.20%
1 (Mining and Construction)	205	13.67%	18.87%
2 (Manufacturing 1)	379	25.27%	44.13%
3 (Manufacturing 2)	221	14.73%	58.87%
4 (Transportation, Communications, and Utilities)	279	18.60%	77.47%
5 (Wholesale and Retail Trade)	140	9.33%	86.80%
7 (Service 1)	149	9.93%	96.73%
8 (Service 2)	49	3.27%	100%
Total	1,500	100.00%	

Source(s): Author's own work

The study in question incorporates the concept of financial distress risk (FDR) as a dependent variable, whose measurement the Altman Z-score model (Aminatuzzuhro et al., 2024; Boubaker et al., 2020; Kuzey et al., 2023) will be used to determine. In particular, the greater values of Altman Z-score are associated with decreased FDR. The primary predictor is CEOLOCAL with binary values showing the presence or absence of agreement in the region of the chief executive officer in the same region as the firm (Ren et al., 2021). In this study, the variable of CEO nationality is operationalized as CEOLOCAL and coded as 1, in the case of an Indonesian national CEO and 0 otherwise, following Al-Duais et al. (2021).

Table 3. Variables Operationalization

Variable	Definition	Measurement	Source
Dependent Variable			
FDR	Financial distress risk	Altman Z-score = 1.200 (Working capital / total assets) + 1.400 (Retained earnings/ total assets) + 3.300 (EBIT / total assets) + 0.600 (Market value of equity / book value of total liabilities) + 0.999 (Net sales / total assets)	Financial Report
Independent Variable			
CEO LOCAL	Local CEO	Dummy variable, 1 when the citizenship of CEO is Indonesian and 0 when otherwise	Annual Report
Moderator Variable			
LEV	Leverage	Total liabilities / total assets	Financial Report
Control Variable			
CEOGENDER	Gender CEO	Dummy variable that equals 1 when there is a female CEO employed by the firm and 0 otherwise	Annual Report
CEOAGE	CEO age	CEO's age	Annual Report

Variable	Definition	Measurement	Source
BSIZE	Board size	The total amount of board of directors and commissioners	Annual Report
FSIZE	Firm size	The natural log of the total assets of the firm	Financial Report
ROA	Return on Assets	Net income / total assets	Financial Report
CASHTA	Slack	Cash and cash equivalents / total assets	Financial Report

Source(s): Author's own work

Leverage is included as a moderating variable, denoted as LEV. Leverage indicates the ratio of a firm's assets that are funded through debt. An elevated leverage ratio signifies a stronger dependence on borrowing, which can heighten business risk, particularly during challenging economic periods (Nugrahanti et al., 2020). In accordance with the method of Kuzey et al. (2023), leverage is calculated by dividing total liabilities by total assets. The analysis incorporates multiple control variables, adhering to the framework set by previous research (Ali et al., 2023; Aminatuzzuhro et al., 2024; Boubaker et al., 2020; Huang et al., 2025; Kuzey et al., 2023). Corporate governance is controlled using variables related to CEO attributes, specifically age and gender, as well as board characteristics, specifically board size. Firm-level characteristics are captured by firm size, while financial performance is controlled using measures of profitability and liquidity. Table 3 provides detailed descriptions and the operationalization of each variable. In line with the approach utilized by Aminatuzzuhro et al. (2024), the analysis incorporates fixed effects for year and industry to account for unobserved variability over time and between sectors.

RESULT AND DISCUSSION

Result

Descriptive statistics

This research utilizes descriptive statistics to obtain a preliminary insight into the utilized data. Table 4 outlines the mean, standard deviation, minimum and maximum scores of each variable under study. The dependent variable is the financial distress risk (FDR) and it is calculated using Altman Z-Score method. The bigger the Z-Score the lower the chance of the financial distress diminishes, and vice versa. The descriptive results indicate that the mean FDR is equal to 5.320, standard deviation is 13.361, and the minimum of the FDR is equal to -13.305 which is accompanied by the maximum of 103.120, therefore, indicating a significant level of heterogeneity among firm financial conditions. The main independent variable, CEOLOCAL has a mean of 0.919 indicating that about 91 percent of the firms are run by Indonesian citizens. Moderating variable leverage (LEV) will consist of ratios where total liabilities will be divided by total assets. Its minimum of 0.016 means that it has low debt dependence, and its maximum of 3.388 implies that it has great dependence on debt financing that exceeds the corresponding asset base.

Table 4. Descriptive Statistics

	Mean	Median	Minimum	Maximum	SD
FDR	5.320	2.598	-13.305	103.120	13.361
CEOLOCAL	0.919	1.000	0.000	1.000	0.272
LEV	0.501	0.427	0.016	3.388	0.468
CEOGENDER	0.071	0.000	0.000	1.000	0.257
CEOAGE	54.236	54.000	30.000	79.000	10.076
BSIZE	7.593	7.000	4.000	18.000	3.111
FSIZE	28.120	28.065	23.383	33.212	1.913
ROA	0.020	0.029	-0.616	0.423	0.130
CASHTA	0.125	0.076	0.001	0.741	0.141

Source(s): Author's own work

Pearson Correlation

Table 5 presents the Pearson correlation test results among financial distress risk (FDR), CEO locality (CEOLOCAL), and leverage (LEV). The analysis indicates the correlation coefficient between CEOLOCAL and FDR as being equal to 0.0209, and a p-value of 0.4191. Considering this p-value, it is defined that the relationship of these two variables is not significant. Contrarily, LEV displays a high negative relationship with FDR having a coefficient of -0.6822 and p-value of 0.000. These results imply that those firms that experience a larger leverage tend to be exposed to financial distress. However, Pearson correlation test assumes the identification of only direct linear relationships hence a multivariate analysis is essential to see whether CEOLOCAL has a certain impact on FDR given that LEV is introduced as a moderating variable. Moreover, all correlation coefficients are below 0.8, suggesting no multicollinearity issues in the model (Binesh et al., 2025; Umar et al., 2025). This is further supported by the Variance Inflation Factor (VIF) values from the main regression model, all of which fall well below the commonly accepted threshold of 10 (Yadav & Asongu, 2025).

Table 5. Pearson Correlation

Panel A: From FDR to CASHTA						
		[1]	[2]	[3]	[4]	
[1]	FDR	1.0000				
[2]	CEOLOCAL	0.0209	1.0000			
		(0.4191)				
[3]	LEV	-0.6822***	-0.0741***	1.0000		
		(0.0000)	(0.0041)			
[4]	CEOGENDER	0.1056***	0.0060	-0.0529**	1.0000	
		(0.0000)	(0.8162)	(0.0404)		
[5]	CEOAGE	-0.0363	-0.0598**	0.0517**	-0.0544**	
		(0.1595)	(0.0206)	(0.0454)	(0.0352)	
[6]	BSIZE	0.0186	-0.1507***	0.1012***	0.0064	
		(0.4717)	(0.0000)	(0.0001)	(0.8058)	
[7]	FSIZE	-0.0694***	-0.0649**	0.1831***	-0.0115	
		(0.0071)	(0.0120)	(0.0000)	(0.6565)	
[8]	ROA	0.5638***	0.0085	-0.3384***	0.1074***	
		(0.0000)	(0.7429)	(0.0000)	(0.0000)	
[9]	CASHTA	0.4382***	0.0057	-0.2715***	0.0518**	
		(0.0000)	(0.8259)	(0.0000)	(0.0448)	
Panel B: From CEOAGE to CASHTA						
		[5]	[6]	[7]	[8]	[9]
[5]	CEOAGE	1.0000				
[6]	BSIZE	0.1593***	1.0000			
		(0.0000)				
[7]	FSIZE	0.1735***	0.6581***	1.0000		
		(0.0000)	(0.0000)			
[8]	ROA	0.0672***	0.2050***	0.2501***	1.0000	
		(0.0092)	(0.0000)	(0.0000)		
[9]	CASHTA	0.0762***	0.1821***	0.1491***	0.3833***	1.0000
		0.0032	(0.0000)	(0.0000)	(0.0000)	

Source(s): Author's own work

Independent T – Test

Independent t-test was applied to examine the occurrence or absence of difference in firm financial distress risk (FDR) due to the nationality of chief executive officer (CEO). This analysis showed a significant difference whereby organisations that were headed by domestically appointed CEOs had an average FDR of 5.546 as opposed to the mean FDR of 2.749 of firms that had their CEOs appointed by foreign countries. This bivariate comparison had a statistical significance of 5 % showing a t -statistic of 2.211 with a coefficient of 2.797. Its findings therefore signify that the domestic leadership tends to have lower financial distress risk.

Another important distinction turned out to be capital structure. The average leverage value in firms managed by locally appointed CEOs stood at 0.492 compared to an average leverage of 0.610 observed in firms managed by foreign based CEOs. At 1 % significance level, this difference was statistically significant because t-value was -2.682 and the coefficient value was -0.119. The results indicate that local managed firms were likely not to use as much debt financing as those managed by foreigners. Even though the independent t-test provides a starting point of contrasts between groups, the bivariate nature of the test fails to appreciate variables that could be controls or moderators. This means that multivariate regression analysis is relevant in providing a more insightful and accurate causal relationship.

Table 6. Independent T – Test

	MEAN			
	CEOLOCAL	CEOFOREIGN	COEF	T-VALUE
FDR	5.546	2.749	2.797**	2.211
LEV	0.492	0.610	-0.119***	-2.682
GENDERCEO	0.072	0.066	0.006	0.232
CEOAGE	54.063	56.207	-2.144**	-2.247
BSIZE	7.471	8.983	-1.513***	-5.173
FSIZE	28.091	28.454	-0.363**	-2.003
ROA	0.020	0.012	0.008	0.669
CASHTA	0.125	0.126	-0.001	-0.040

Source(s): Author's own work

Main Regression

The first hypothesis (H1) postulates that the firms with local chief executive officers (CEOLOCAL) will have a lower tendency to face financial distress. This inclination is supported by the empirical testing. In Model 1 of Table 7, the t-value of the coefficient of CEOLOCAL is 3.66 and the coefficient is 2.252, therefore the hypotheses holds true at the significance level of 0.01.

Table 7. Main Regression

	(1)	VIF	(2)	VIF	(3)	VIF
	FDR	Value	FDR	Value	FDR	Value
LOCAL_LEV					-3.112***	8.45
					(-3.02)	
CEOLOCAL	2.273***	1.05	1.532***	1.05	3.365***	2.10
	(3.66)		(2.74)		(3.48)	
LEV			-7.717***	1.38	-5.082***	7.79
			(-9.25)		(-7.96)	
GENDERCEO	-0.120	1.04	0.287	1.04	0.331	1.04
	(-0.11)		(0.26)		(0.30)	
CEOAGE	-0.096***	1.08	-0.066*	1.09	-0.065*	1.09
	(-2.75)		(-1.94)		(-1.91)	
BSIZE	-0.057	1.87	-0.052	1.87	-0.061	1.87
	(-0.41)		(-0.38)		(-0.44)	
FSIZE	-0.925***	1.99	-0.788***	1.99	-0.771***	2.00
	(-3.25)		(-2.88)		(-2.82)	

ROA	17.694***	1.13	4.370	1.45	3.933	1.46
	(5.02)		(1.07)		(0.95)	
CASHTA	21.494***	1.06	19.186***	1.08	19.190***	1.08
	(4.88)		(4.57)		(4.58)	
_cons	32.499***		32.545***		30.521***	
	(4.03)		(4.17)		(3.93)	
Year FE	Yes		Yes		Yes	
Industry FE	Yes		Yes		Yes	
R^2	0.139		0.192		0.193	
R^2_Adjusted	0.129		0.182		0.183	
N	1500		1500		1500	
Mean VIF		2.12		2.10		2.87

Source(s): Author's own work

Still, in Table 7, Model 2 adds a leverage variable (LEV) to the regression model, but the coefficient linking CEOLOCAL and FDR is significant at 1 % level (coefficient = 1.532; t value = 2.74). Conversely, the insertion of LEV displays a strong negative correlation between it and FDR, as the coefficient at -7.717 and the t-value at -9.25 is significant at 1 % level. These findings also confirm the second hypothesis (H2), increasing leverage raises the probability of distress.

Next, Model 3 indicates that leverage diminishes the impact of local CEOs on the risk of financial distress. The coefficient for the interaction of CEOLOCAL and LEV is -3.112, with a t-value of -3.02, which is significant at the 1% level. This indicates that the beneficial impact of local CEOs on minimizing financial distress diminishes in firms with high leverage. In other words, the ability of local CEOs to strengthen the firm's financial condition diminishes when the firm carries a large debt burden. Therefore, the third hypothesis (H3) is also supported.

Discussion

The results of the hierarchical regression shown in Table 7 demonstrate that having a local CEO notably lowers the likelihood of a firm facing financial distress. This aligns with the perspective presented by Tong et al. (2023), suggesting that local CEOs, because of their emotional and social connections to their communities, tend to make more sensible business choices. It also correlates indirectly with Tong et al. (2024), who suggest that local CEOs are linked to reduced borrowing expenses, as they often refrain from taking on excessive debt to preserve their personal reputation and professional credibility. Their familiarity with local culture, awareness of regional norms, and strong desire to maintain a positive image contribute to their tendency to avoid decisions that may elevate financial risk. These results provide empirical support for place attachment theory, which argues that individuals with strong ties to their communities tend to prioritize long-term stability and adopt conservative strategies, thereby mitigating financial distress risk.

In addition, the analysis confirms that higher leverage significantly contributes to increased financial distress. This finding is consistent with the research of Dwiantari & Artini (2021), which notes that a capital structure heavily reliant on debt can restrict financial agility and strain liquidity. The obligations related to interest payments and long-term debt commitments reduce a firm's capacity to adapt to external shocks, particularly during periods of economic uncertainty (Nugrahanti et al., 2020). These results reinforce earlier studies that found a positive link between leverage and financial distress risk (Dwiantari & Artini, 2021; Nugrahanti et al., 2020; Safitri & Yuliana, 2021; Umam & Yusuf, 2024; Waqas & Md-Rus, 2018). This finding aligns with the pecking order theory, which explains that while firms rely on debt financing when internal funds are insufficient, excessive dependence on debt heightens vulnerability and increases the probability of financial distress.

Furthermore, the analysis reveals that the beneficial effect of having a local CEO in reducing financial distress risk diminishes when a firm operates with high levels of leverage. In such cases, financial pressure within the firm may outweigh the personal preferences of CEOs to manage risk cautiously. Although local CEOs are generally known for being prudent and focused on long-term outcomes (Lai et al., 2020), they may

still be forced to make short-term decisions to ensure business continuity. This result underscores the interaction between place attachment theory and pecking order theory, while local CEOs' emotional bonds with their communities encourage long-term stability, the structural constraints imposed by high leverage reduce their ability to act on these preferences, weakening the protective effect of local leadership. Therefore, the impact of leadership characteristics such as CEO nationality is highly dependent on internal structural conditions, particularly the level of leverage.

Robustness Test

Coarsened Exact Matching (CEM) Regression

Referring to Rizki et al. (2024), to reduce bias arising from observed variables, this study adopts the Coarsened Exact Matching (CEM) regression. CEM is a nonparametric data preprocessing technique designed to balance the characteristics between the treatment and control groups by controlling for the influence of confounding variables prior to analysis. The main objective of this approach is to minimize sample selection bias by reducing observable differences across firms, thereby enhancing the validity of comparisons between groups.

This study utilizes Coarsened Exact Matching (CEM) by grouping control variables into three strata for the matching process. The outcomes of the CEM procedure are summarized in Table 8. Following matching, the sample comprises 1,436 firm-year observations. The results obtained from the CEM-based regression align with those from the primary regression analysis shown in Table 7. The research findings demonstrate consistency across both unmatched and matched samples, showing that local CEO leadership is associated with a reduced risk of financial distress. On the other hand, leverage continues to exhibit a significant positive association with increased financial distress risk. Furthermore, the analysis indicates that the effectiveness of local CEOs in mitigating this risk tends to decline in firms with high debt burdens.

Table 8. CEM Regression

	LOCAL CEO = 0		LOCAL CEO = 1
All	121		1379
Matched	121		1315
Unmatched	0		64
	(1)	(2)	(3)
	FDR	FDR	FDR
LOCAL_LEV			-5.247***
			(-3.59)
CEOLOCAL	2.305***	1.242**	4.256***
	(3.66)	(2.17)	(3.86)
LEV		-9.314***	-5.315***
		(-7.82)	(-7.85)
GENDERCEO	-0.221	0.240	0.333
	(-0.20)	(0.22)	(0.30)
CEOAGE	-0.083**	-0.057*	-0.055
	(-2.40)	(-1.68)	(-1.63)
BSIZE	-0.037	-0.035	-0.051
	(-0.25)	(-0.24)	(-0.35)
FSIZE	-1.008***	-0.744**	-0.697**
	(-3.36)	(-2.54)	(-2.37)
ROA	18.489***	3.254	2.102
	(4.22)	(0.63)	(0.40)
CASHTA	20.949***	18.229***	18.084***
	(4.67)	(4.28)	(4.26)
_cons	33.833***	31.715***	28.095***
	(4.05)	(3.92)	(3.47)

Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
R^2	0.129	0.182	0.185
R^2_Adjusted	0.119	0.172	0.175
N	1436	1436	1436

Source(s): Author' own work

CONCLUSIONS

This research seeks to examine the impact of having a local CEO on the risk of financial distress and to evaluate the influence of leverage as a moderating factor in that connection. The results indicate that having a local CEO is strongly linked to a decreased risk of financial distress. Conversely, elevated corporate leverage raises the chances of financial trouble. Nonetheless, the positive impact of local CEOs in reducing such risk seems to diminish in firms with significant debt loads. By applying the Coarsened Exact Matching (CEM) method, the results remain consistent, thereby strengthening the validity and reliability of the analysis. These findings imply that both leadership quality and capital structure must be considered when evaluating a firm's financial resilience. A local CEO can serve as a strategic asset, particularly in times of financial pressure, if supported by a sound capital structure. This suggests that leadership effectiveness cannot be separated from a firm's financial and institutional context, as both interact to influence performance and stability.

Even though this study has contributed to the field, there are some limitations. First, the proxy of local CEOs only depends on the nationality, where a CEO is considered local when he or she is Indonesian citizen or otherwise. Such a strategy fails to capture the emotional or geographic attachment of the CEO to the area of operations of the firm. Future studies are welcomed to integrate quantitative measures of attachment like place of birth or years of residence, with more qualitative methods like in-depth interviews in order to obtain a more complete picture of the emotional and social aspect of attachment of a CEO to the local community. Moreover, this research paper only uses the Altman Z Score as a single indicator of the financial distress risk. The use of one measure can restrict the applicability and the extent of the research. In future research, more prediction models, like the Zmijewski Score or Ohlson O-Score, should be taken into account to reinforce the validity of results and enable a comparison of methods. The multiple indicators will be used to give a more comprehensive picture of the situation of financial distress of a firm.

References

AL-Duais, S., Qasem, A., Wan-Hussin, W., Bamahros, H., Thomran, M., & Alquhaif, A. (2021). CEO Characteristics, Family Ownership and Corporate Social Responsibility Reporting: The Case of Saudi Arabia. *Sustainability*, *13*(21), 12237. https://doi.org/10.3390/su132112237

Ali, S., Rehman, R. ur, Aslam, S., Khan, I., & Murtaza, G. (2023). Does board diversity reduce the likelihood of financial distress in the presence of a powerful Chinese CEO? *Management Decision*, *61*(6), 1798–1815. https://doi.org/10.1108/MD-01-2022-0007

Aminatuzzuhro, Indrawati, T., & Fitriani, N. (2024). Corporate Reputation, Available Slack, And Financial Distress Risk. *Jurnal Akuntansi*, *28*(1), 125–146. https://doi.org/10.24912/ja.v28i1.1821

Badru, B. O. (2016). Companies' financial outcomes in Nigeria: Does chief executive officer nationality matter? *Raji, Jimoh Olajide*, 599–615.

Binesh, F. (Nasim), E-Vahdati, S., & Ozdemir, O. (2025). ESG performance and financial distress during COVID-19: the moderating effects of innovation and capital intensity. *Asia-Pacific Journal of Business Administration*, *17*(1), 212–238. https://doi.org/10.1108/APJBA-12-2022-0515

Boubaker, S., Cellier, A., Manita, R., & Saeed, A. (2020). Does corporate social responsibility reduce financial distress risk? *Economic Modelling*, *91*, 835–851. https://doi.org/10.1016/j.econmod.2020.05.012

Chowdhury, R., & Doukas, J. A. (2022). Are CEOs to Blame for Corporate Failure? Evidence from Chapter 11 Filings. *Review of Corporate Finance*, *2*(1), 1–63. https://doi.org/10.1561/114.00000011

De Groote, S., Bruynseels, L., & Gaeremynck, A. (2023). Are All Directors Treated Equally? Evidence from Director Turnover Following Opportunistic Insider Selling. *Journal of Business Ethics*, *185*(1), 185–207. https://doi.org/10.1007/s10551-022-05127-9

Dun & Bradstreet. (2023). *Global Bankruptcy Report - 2023*.

Dwiantari, R. A., & Artini, L. G. S. (2021). The Effect of Liquidity, Leverage, and Profitability on Financial Distress (Case Study of Property and Real Estate Companies on the IDX 2017-2019). *American Journal of Humanities and Social Sciences Research (AJHSSR), 5*(1), 367–373.

Flammer, C., & Bansal, P. (2017). Does a long-term orientation create value? Evidence from a regression discontinuity. *Strategic Management Journal*, *38*(9), 1827–1847. https://doi.org/10.1002/smj.2629

Gatot, N. A., Prasetyo, M. R. P., Buchdadi, A. D., Suherman, Widyastuti, U., & Kurniawati, H. (2022). The Effect of CEO Characteristics on Firm Performance of Food and Beverage Companies in Indonesia, Malaysia and Singapore. *Quality - Access to Success*, *23*(186). https://doi.org/10.47750/QAS/23.186.15

Guizani, M., & Abdalkrim, G. (2023). Does gender diversity on boards reduce the likelihood of financial distress? Evidence from Malaysia. *Asia-Pacific Journal of Business Administration*, *15*(2), 287–306. https://doi.org/10.1108/APJBA-06-2021-0277

Huang, Y., Zhu, Q., Yan, C., & Zeng, Y. (2025). Your gender identity is who you are: Female <scp>chief executive officers</scp> and corporate debt structure. *International Journal of Finance & Economics*, *30*(1), 426–454. https://doi.org/10.1002/ijfe.2923

Kalash, I. (2023). The financial leverage–financial performance relationship in the emerging market of Turkey: the role of financial distress risk and currency crisis. *EuroMed Journal of Business*, *18*(1), 1–20. https://doi.org/10.1108/EMJB-04-2021-0056

Kuzey, C., Uyar, A., Wasiuzzaman, S., Karaman, A. S., & Inwinkl, P. (2023). Financial distress and corporate transparency/opacity: The role of firm visibility. *International Review of Economics & Finance*, *88*, 766–798. https://doi.org/10.1016/j.iref.2023.07.019

Lai, S., Li, Z., & Yang, Y. G. (2020). East, west, home's best: Do local CEOs behave less myopically? *Accounting Review*, *95*(2), 227–255. https://doi.org/10.2308/accr-52555

Mesch, G. S. (1996). The Effect of Environmental Concerns and Governmental Incentives on Organized Action in Local Areas. *Urban Affairs Review*, *31*(3), 346–366. https://doi.org/10.1177/107808749603100303

Mohammed, I., Okpanachi, J., Yahaya, O. A., & Tauhid, S. (2024). CEO ATTRIBUTES AND FINANCIAL DISTRESS LIKELIHOOD OF LISTED DEPOSIT MONEY BANKS IN NIGERIA: MODERATED BY RISK COMMITTEE GENDER. *Gusau Journal of Accounting and Finance*, *4*(2), 254–273. https://doi.org/10.57233/gujaf.v4i2.15

Muien, H. M., Nordin, S., & Badru, B. O. (2024). Gender diversity and corporate financial distress in the Pakistan stock market: the interacting effect of family-controlled companies. *Journal of Family Business Management*, *14*(1), 2–27. https://doi.org/10.1108/JFBM-03-2023-0035

MYERS, S. C. (1984). The Capital Structure Puzzle. *The Journal of Finance*, *39*(3), 574–592. https://doi.org/10.1111/j.1540-6261.1984.tb03646.x

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, *13*(2), 187–221. https://doi.org/10.1016/0304-405X(84)90023-0

Ngelo, A. A., Harymawan, I., & Nasih, M. (2022). Ex-auditor executives and investment efficiency: evidence from Indonesia. *Asian Review of Accounting*, *30*(4), 559–580. https://doi.org/10.1108/ARA-01-2022-0015

Nienhaus, M. (2022). Executive equity incentives and opportunistic manager behavior: new evidence from a quasi-natural experiment. *Review of Accounting Studies*, *27*(4), 1276–1318. https://doi.org/10.1007/s11142-021-09633-5

Nugrahanti, Y. W., Sutrisno, T., Rahman, A. F., & Mardiati, E. (2020). Do firm characteristics, political connection and corporate governance mechanism affect financial distress? (Evidence from Indonesia). *International Journal of Trade and Global Markets*, *13*(2), 220–250. https://doi.org/10.1504/IJTGM.2020.106753

Oware, K. M., & Mallikarjunappa, T. (2023). Financial Performance and Gender Diversity: The Moderating and Mediating Effect of CSR Disclosure and Expenditure of Listed Firms in India. *Vision: The Journal of Business Perspective*, *27*(2), 243–255. https://doi.org/10.1177/09722629211001985

Ren, S., Wang, Y., Hu, Y., & Yan, J. (2021). CEO hometown identity and firm green innovation. *Business Strategy and the Environment*, *30*(2), 756–774. https://doi.org/10.1002/bse.2652

Rizki, A., Nasih, M., & Putri, F. V. (2024). Working environmental quality and financial distress: evidence from Indonesia. *Cogent Business & Management*, *11*(1). https://doi.org/10.1080/23311975.2023.2292813

Safitri, M. G., & Yuliana, I. (2021). The Effect of Profitability and Leverage on Financial Distress with Inflation as Moderating. *Jurnal ASET (Akuntansi Riset)*, *13*(1), 134–143. https://doi.org/10.17509/jaset.v13i1.31368

Tong, Y., Tian, Y., & Cao, Z. (2023). No place like home: Do local CEOs invest in labor more efficiently? *Corporate Governance: An International Review*. https://doi.org/10.1111/corg.12553

Tong, Y., Tian, Y., & Cao, Z. (2024). The effect of CEO locality on the cost of debt financing: the role of regional heterogeneity. *Regional Studies*, *58*(5), 1124–1144. https://doi.org/10.1080/00343404.2023.2267585

Tripathi, V., Goodell, J. W., Madhavan, V., & Kumar, S. (2024). Moderating effect of capital structure on the relationship between corporate governance mechanisms and firm value: Evidence from India. *International Review of Economics & Finance*, *92*, 1336–1350. https://doi.org/10.1016/j.iref.2024.02.082

Umam, D. C., & Yusuf, Y. (2024). DETERMINANTS OF FINANCIAL DISTRESS: REVIEW OF THE ASPECTS OF PROFITABILITY, LIQUIDITY, LEVERAGE, AND ACTIVITY. *International Journal Multidisciplinary Science*, *3*(1), 36–44. https://doi.org/10.56127/ijml.v3i1.1218

Umar, U. H., Al-Faryan, M. A. S., & Osemy, A. Z. Z. (2025). Relationship between free cash flow and corporate financial distress: evidence from listed halal food and beverage companies in Malaysia. *Journal of Islamic Accounting and Business Research*. https://doi.org/10.1108/JIABR-01-2024-0001

Waqas, H., & Md-Rus, R. (2018). Predicting financial distress: Importance of accounting and firm-specific market variables for Pakistan's listed firms. *Cogent Economics & Finance*, *6*(1), 1545739. https://doi.org/10.1080/23322039.2018.1545739

Xie, X., Huo, J., & Zou, H. (2019). Green process innovation, green product innovation, and corporate financial performance: A content analysis method. *Journal of Business Research*, *101*, 697–706. https://doi.org/10.1016/j.jbusres.2019.01.010

Xuezhou, W., Hussain, R. Y., Akhtar, S., Herzallah, A. M., & Tariq, M. Z. (2021). Moderating role of leverage maturity on the relationship between CEO duality and asset tangibility in textile firms: evidence from Pakistan. *International Journal of Management (IJM)* , *12*(4), 314–321.

Yadav, A., & Asongu, S. A. (2025). The Role of ESG Performance in Moderating the Impact of Financial Distress on Company Value: Evidence of Wavelet-Enhanced Quantile Regression With Indian Companies. *Business Strategy and the Environment*, *34*(3), 2782–2798. https://doi.org/10.1002/bse.4118

Yao, S. (2021). "Who Should Be the Next CEO?" Desirable Successor Characteristics in Recovery from Financial Distress. *Emerging Markets Finance and Trade*, *57*(15), 4461–4472. https://doi.org/10.1080/1540496X.2020.1828857