ELSEVIER

Contents lists available at ScienceDirect

# Finance Research Letters

journal homepage: www.elsevier.com/locate/frl



# CEO financial background and corporate financialization

Dan Kang <sup>a</sup>, Jiahao Xu <sup>b</sup>, Qiye Tong <sup>c</sup>, Jiayan Li <sup>d,\*</sup>

- <sup>a</sup> Department of Finance, Dongbei University of Finance and Economics, Dalian 116025, China
- <sup>b</sup> School of Finance, Jiangxi Normal University, Nanchang 330022, China
- <sup>c</sup> School of Business, Nankai University, Tianjin 300000, China
- <sup>d</sup> School of Accounting, Guangdong University of Foreign Studies, Guangzhou 510006, China

#### ARTICLE INFO

#### IFI Codes

G32

G34

M12

016

Keywords: CEO'S financial background

Corporate financialization Overconfidence

Overconfidence

Financing constraint Chinese listed company

#### ABSTRACT

Corporate financialization has become increasingly predominant; however, the impact of chief executive officers' (CEOs') characteristics on this trend remains underexplored. Although past studies have examined executive backgrounds, the effect of CEOs' financial expertise on entity enterprises' financialization levels is unclear. This study examined how CEOs' financial backgrounds affect corporate financialization in Chinese A-share listed companies from 2008 to 2022. Using panel data and statistical techniques, we found that CEOs with financial backgrounds significantly promote corporate financialization. This effect is primarily mediated through increased managerial overconfidence and mitigated corporate financing constraints. The impact is more pronounced in non-state-owned and low-cash-flow firms. Our findings contribute to understanding how executive characteristics shape corporate financial strategies and offer insights for optimizing corporate governance and decision-making processes in an increasingly financialized business environment.

#### 1. Introduction

The proliferation of financial market engagement among non-financial corporations represents a paradigmatic shift in contemporary business operations (Bose et al., 2017; Carpenter et al., 2004; Tan et al., 2024; Wang et al., 2024). This phenomenon, termed corporate financialization, manifests through entities' increasing prioritization of financial investments over traditional productive activities. While extant literature has extensively examined the macroeconomic implications of this transformation, the microeconomic determinants, particularly the role of executive characteristics, remain inadequately explored.

This study investigates the nexus between chief executive officers' (CEOs') financial expertise and corporate financialization patterns within Chinese A-share listed companies. Drawing upon upper echelons theory (Hambrick and Mason, 1984), we posit that executives' educational and professional backgrounds significantly influence organizational strategies and outcomes. The financial expertise of CEOs can fundamentally shape corporate financial strategies through their risk perception and decision-making processes. While studies have documented the increasing trend of non-financial firms engaging in financial activities (Li et al., 2024; Dai et al., 2024) and the importance of executive characteristics (Hambrick, 2007; Yu et al., 2024), the specific relationship between CEO financial backgrounds and corporate financialization remains empirically unexamined.

Previous research on CEOs' backgrounds suggests that executives' educational and professional experiences influence corporate policies and performance. Our investigation employs a comprehensive panel dataset encompassing 3919 Chinese A-share listed

E-mail address: 202210010@oamail.gdufs.edu.cn (J. Li).

<sup>\*</sup> Corresponding author.

companies from 2008 to 2022. Through rigorous econometric analysis, including fixed-effects models and propensity score matching, we examine both the direct relationship between CEO financial expertise and corporate financialization and the mediating mechanisms of managerial overconfidence and financing constraints. Furthermore, we explore the heterogeneous effects across varying ownership structures and cash flow levels.

This research contributes to the literature in several distinct ways. First, it extends upper echelons theory by establishing a novel linkage between executive characteristics and corporate financialization. Second, it illuminates the cognitive and organizational mechanisms through which CEO attributes influence financial strategy. Third, it provides nuanced insights into the contextual factors moderating this relationship. Finally, it offers valuable empirical evidence from an emerging market context, enhancing our understanding of corporate financialization in non-Western economies.

#### 2. Literature review and research hypothesis

### 2.1. Corporate financialization: trends and implications

Corporate financialization has gained significant attention in recent years, reflecting a fundamental shift in non-financial firms' engagement with financial markets. Krippner (2005) defines financialization as a pattern of accumulation where profits accrue primarily through financial channels rather than through trade and commodity production. This trend has been observed across various economies, with significant implications for corporate behavior and economic outcomes.

Stockhammer (2010) underscores the increasing share of financial assets in non-financial corporations' balance sheets, indicating a shift away from traditional productive investments. Moreover, reallocation of resources has raised concerns regarding its impact on long-term economic growth and stability. Davis and Kim (2015) argues that financialization has fundamentally altered the relationship between corporations and financial markets, leading to increased volatility and short-termism in corporate decision-making. However, the drivers behind this trend remain a subject of debate. While macroeconomic factors such as financial deregulation and globalization have been identified as contributing factors (Wagner, 2005), firm-level decisions and strategies are crucial. This underscores the importance of examining the role of corporate leadership in shaping financialization trends. The existing literature on corporate financialization provides a solid foundation for understanding its prevalence and implications. However, a gap remains in our understanding of how firm-specific factors, especially the characteristics of top executives, influence the degree and nature of financialization within individual companies.

#### 2.2. COEs' characteristics and corporate decision-making

Proposed by Hambrick and Mason (1984) and developed by Hambrick (2007), upper echelons theory posits that the characteristics and experiences of top executives significantly affect organizational outcomes. This has resulted in a rich body of research examining how COEs' attributes affect corporate policies and performance. Bertrand et al. (2007) provide empirical evidence that individual managers significantly impact corporate behavior, including investment, financial, and organizational practices. Their findings indicate that manager fixed effects can explain a significant portion of the variation in these practices across firms.

Subsequent studies have investigated the impact of specific COEs' characteristics on corporate outcomes. Malmendier and Tate (2008) demonstrate that overconfident CEOs are likelier to engage in value-destroying mergers and acquisitions. Benmelech and Frydman (2015) indicate that CEOs with military experience pursue increasingly conservative corporate policies and perform better during industry downturns. While these studies offer insights into the role of COEs' characteristics in shaping corporate behavior, they have primarily focused on general managerial attributes or specific non-financial backgrounds. The impact of CEOs' financial expertise on corporate financialization remains largely unexplored, representing a significant gap in the literature. Thus, based on the upper echelons theory and existing evidence on COEs' characteristics, we propose the first hypothesis.

H1. CEOs with financial backgrounds significantly influence the level of corporate financialization in entity enterprises.

#### 2.3. Financial expertise and corporate financial strategies

The role of financial expertise in corporate decision-making has gained increasing attention. Custódio and Metzger (2014) found that CEOs with financial expertise manage external financing costs more efficiently, holding less cash on their balance sheets. This finding suggests that a firm's financial background can significantly affect its financial policies. Guo et al. (2021) indicate that CFOs with financial expertise are associated with higher quality financial reporting and lower incidence of accounting restatements, underscoring the importance of financial knowledge in improving corporate governance and transparency.

The relationship between financial expertise and corporate financialization is complex. CEOs with financial backgrounds may be better equipped to navigate complex financial markets, leading to increased financialization. However, their expertise might enable them to balance financial and operational priorities more effectively, potentially moderating excessive financialization. Existing literature on financial expertise and corporate strategies provides valuable insights. However, its specific impact on corporate financialization is underexplored, which motivated the second and third hypotheses.

- H2. The influence of CEOs' financial backgrounds on corporate financialization is mediated by increased managerial overconfidence.
- H3. The influence of CEOs' financial backgrounds on corporate financialization is mediated by alleviated corporate financing constraints.

#### 2.4. Contextual factors in corporate financialization

Various contextual factors likely moderate the impact of COEs' characteristics on corporate outcomes. Crossland and Hambrick (2007) highlight that the degree of managerial discretion, which varies across national contexts, impacts the extent to which COEs' characteristics affect firm performance.

The distinction between state-owned enterprises (SOEs) and non-SOEs is particularly relevant in China. He et al. (2015) found that SOEs and non-SOEs in China differ significantly in corporate governance structure and decision-making processes. This finding suggests that the impact of COEs' characteristics varies across ownership types. Furthermore, firm-specific factors, such as cash flow levels, can influence the relationship between COEs' characteristics and corporate strategies. Almeida et al. (2004) indicate that financially constrained firms are more sensitive to cash flow in their investment decisions. These contextual considerations lead us to our final hypothesis.

## H4. CEOs' financial backgrounds affect corporate financialization more significantly in non-SOEs and firms with low cash flows.

The literature review has identified several key themes relevant to our study, namely, the growing trend of corporate financialization, influence of COEs' characteristics on corporate decision-making, role of financial expertise in shaping corporate strategies, and role of contextual factors. Although existing research provides valuable insights into these areas, a gap remains regarding how CEOs' financial backgrounds influence corporate financialization, specifically in the context of emerging economies such as China. This study addresses this gap by examining the relationship between CEOs' financial backgrounds and corporate financialization, exploring the mediating mechanisms, and investigating the moderating effects of firm characteristics. This approach provides a more comprehensive understanding of corporate financialization drivers and executive characteristics' role in influencing corporate financial strategies.

#### 3. Research design

#### 3.1. Model specifications

This study constructed the following double fixed-effects model as the benchmark (C. Chen et al., 2024); subsequent empirical tests are performed based on this model.

$$FINRATIO_{it} = \alpha_0 + \alpha_1 CEOFIN_{it} + \alpha_2 Controls_{it} + \theta_i + \sigma_t + \varepsilon_{it}$$

$$\tag{1}$$

where i denotes the ith bank and t denotes the ith year.  $FINRATIO_{it}$  the core explanatory variable that serves as a proxy for the financialization of entity enterprises, i.e., the loan size and risk of the ith commercial bank in year t.  $\alpha_0$  is the constant term.  $CEOFIN_{it}$  is the core explanatory variable, serving as a proxy variable for the financial background of CEOs.  $\alpha_1$  is the  $CEOFIN_{it}$  as the corresponding coefficients to be estimated.  $Controls_{it}$  indicate a set of control variables. We incorporated firm-level individual fixed effects  $\theta_i$  and year-level time fixed effects  $\sigma_t$ .  $\varepsilon_{it}$  indicates the unobservable random disturbance term. While  $\alpha_1$  is the core estimated coefficient of interest, the expected  $\alpha_1$  direction is positive, i.e., the CEO's financial background promotes the enterprises' financialization level.

This study draws on the mediation effect model of Baron and Kenny (1986) to propose a three-step mediation effect model. First, we tested the impact of the CEO's financial background on the financialization of entity enterprises in (1). Second, we tested the effect of CEO's financial background on the intermediary variable in (2). Third, we put the CEO's financial background and the intermediary variable into the model simultaneously as the independent variable and financialization of entity enterprises as dependent variables, focusing on the effect of mediating variables on financialization of entity enterprises, tested in (3). If  $\gamma_1$  and  $\delta_2$  are significant simultaneously, a mediating effect exists.

$$M_{it} = \gamma_0 + \gamma_1 CEOFIN_{it} + \gamma_2 Controls_{it} + \theta_i + \sigma_t + \varepsilon_{it}$$
(2)

$$FINRATIO_{it} = \delta_0 + \delta_1 CEOFIN_{it} + \delta_2 M_{it} + \delta_3 Controls_{it} + \theta_i + \sigma_t + \varepsilon_{it}$$
(3)

#### 3.2. Variable definition

**Dependent variable.** This study examined the financialization of entity enterprises, a trend where non-financial firms increasingly engage in financial activities. We measured this phenomenon using the ratio of financial assets to total assets (Qi et al., 2021). This allowed us to quantify how much companies prioritize financial investments over traditional productive activities. While financialization can offer new revenue streams, it exposes firms to greater market risks and may contribute to economic instability (Xu and Guo, 2023; Song and Wu, 2022). By exploring the drivers of a CEO's impact on corporate financial strategies, we provide insights into the changing nature of corporate finance and its broader economic implications.

*Independent variable.* We considered the CEO's financial background as the primary independent variable, capturing the executive's experience in financial institutions or related fields (Lun, 2022). Furthermore, we considered a CEO to have a financial

background if they have held positions in various financial sector roles, including banks, investment firms, regulatory bodies, and other financial institutions (Oradi et al., 2020). We used a binary indicator to measure 1 if the CEO had a financial background and 0 otherwise (X. Jiang et al., 2022). This approach allowed us to examine how a CEO's financial expertise might influence corporate financialization strategies, providing insights into the relationship between executive experience and company financial decisions.

We adopted two mediating variables, namely, managerial overconfidence and financing constraints. Overconfidence refers to managers' excessive optimism regarding their abilities, company prospects, and risk assessment (Russo and Schoemaker, 1992). This can lead to potentially irrational or high-risk decisions in strategic planning and investments (). Following Kramer and Liao (2016), we measured overconfidence by regressing total asset growth on operating income growth. Firms with residuals above the industry median were classified as having overconfident management (coded as 1, otherwise 0). This approach allowed us to quantify the potential impact of managerial overconfidence on corporate financialization decisions.

$$GORWTH\_ROA_{it} = \theta_0 + \theta_1 GROWTH\_REVE_{it} + \theta_i + \sigma_t + \varepsilon_{it}$$
(5)

Financing constraints refer to the various limitations and constraints that enterprises are subjected to in the process of financing, i. e., channels, methods, costs, and amounts (Hadlock and Pierce, 2010). These constraints challenge enterprises to raise the required funds, which may increase financing costs and lead to a financial crisis. We used the SA index as a proxy variable for corporate financing constraints (Xu et al., 2023).

Referring to Gao et al. (2023) and Qi et al. (2021), we selected firm size, gearing ratio, return on net assets, current ratio, intangible assets ratio, capital accumulation ratio, financial leverage, board of directors' size, percentage of independent directors, and two-vocations-at-one-place as the control variables. This enabled us to exclude the interference of other factors and mitigate endogeneity issues. Variable descriptions are presented in Table 1.

#### 3.3. Data sources

Firm-level data was elicited from the Cathay Pacific database. After excluding financial firms, ST, PT, non-delisted, and insolvent firms during the sample period, 24,004 valid samples were obtained, comprising 3919 listed firms from 2008 to 2022.

The raw data were processed as follows. (1) Absolute value data with large magnitudes were logarithmically processed to mitigate heteroskedasticity that significant differences in magnitude might elicit (e.g., enterprise size). (2) Samples with missing data were filled in using linear interpolation. (3) Bilateral tail reduction at 1 % was performed for continuous variables to mitigate the interference owing to extreme values. The final descriptive statistics of the full-sample variables were obtained (Table 2).

#### 4. Empirical results and analysis

#### 4.1. Benchmark regression

This study used STATA17 software to conduct subsequent regression and correlation tests to empirically test the impact of a CEO's financial background on the financialization of entity enterprises. Covariance refers to the high degree of correlation between variables due to common trends or similar characteristics, etc., which can considerably affect the regression results (Basagaña and Barrera-Gómez, 2022). We calculated the variance inflation factor of each variable to avoid multiple covariances interfering with the regression results. Table 3 shows that the variable VIF in all models was less than the empirical value of 10, indicating that the model does not have the problem of covariance.

Table 4 presents the regression results, accounting for individual firm and year-time effects. The coefficient for the CEO's financial

**Table 1**Variable definitions.

Variable		Symbol	Definition	
Explanatory variable	Financialization of entity enterprises	FINRATIO	See model (4)	
Explanatory variable	CEO's financial background	CEOFIN	1 if the CEO has a financial background and 0 if the CEO does not have a financial background	
Intermediary	Overconfidence	OC	See model (5)	
variables	Financing constraints	SA	SA index	
Control variables	Enterprise size	Size	Logarithmic value of total assets	
	Ratio of debt to asset	Lev	Total liabilities/total assets	
	Return on net assets	ROE	Profit after tax/net assets	
	Current ratio	Liquid	Total current assets/total current liabilities	
	Intangible assets as a percentage	Intangible	Total intangible assets/total assets	
	Rate of capital accumulation	RCA	Increase in owners' equity for the year/owners' equity at the beginning of the year	
	Financial leverage	FL	Change in earnings per ordinary share/change in EBITDA	
	Board size	Board	Logarithmic value of the number of board members	
	Percentage of independent	Indep	Number of independent directors/total number of board members	
	directors			
	Duality	Dual	Chair and general manager of both positions is 1, otherwise 0	

**Table 2** Descriptive statistics.

Variable	Obs	Mean	SD	Min	Median	Max.
FINRATIO	24,004	0.06	0.09	0.000	0.016	0.483
CEOFIN	24,004	0.05	0.22	0.000	0.000	1.000
OC	24,004	0.50	0.50	0.000	0.000	1.000
SA	24,004	-3.77	0.26	-4.370	-3.764	-3.153
Size	24,004	22.20	1.30	19.872	21.996	26.000
Lev	24,004	0.42	0.20	0.053	0.419	0.867
ROE	24,004	0.07	0.11	-0.414	0.077	0.348
Liquid	24,004	2.52	2.61	0.355	1.670	16.744
Intangible	24,004	0.05	0.05	0.000	0.033	0.285
RCA	24,004	0.16	0.36	-0.353	0.068	2.206
FL	24,004	1.29	0.92	-0.382	1.049	6.528
Board	24,004	2.14	0.20	1.609	2.197	2.639
Indep	24,004	0.37	0.05	0.333	0.333	0.571
Dual	24,004	0.26	0.44	0.000	0.000	1.000

**Table 3**Multiple covariance test.

Variable	VIF	1/VIF
Lev	2.47	0.40
Liquid	1.91	0.52
Board	1.67	0.60
Size	1.55	0.64
Indep	1.53	0.65
ROE	1.43	0.70
RCA	1.24	0.80
FL	1.07	0.93
Dual	1.07	0.94
Intangible	1.04	0.96
CEOFIN	1.00	1.00
Mean VIF	1.45	

background on corporate financialization was 0.0060 without control variables (Column 1), which was significant at 1 %. This indicates that a CEO's financial background significantly increased the firm's financialization level. The model's goodness of fit (0.152) suggests that the variables effectively explain variations in corporate financialization.

After incorporating control variables (Column 2), the coefficient increased to 0.0074, remaining significant at 1 %. This robust positive relationship between the CEO's financial background and corporate financialization persisted, confirming H1. The consistency of these results, with and without controls, underscores the significant influence of COEs' financial expertise on a firm's financial strategies and activities.

These findings augment the upper echelons theory (Hambrick and Mason, 1984). Moreover, the significant positive relationship between a CEO's financial background and corporate financialization indicates that executive characteristics significantly influence organizational outcomes. Thus, CEOs with financial expertise are more inclined to steer their firms toward increased financial activities, possibly due to their familiarity and comfort with complex financial instruments and markets.

This trend can be interpreted through the lens of human capital theory (Becker, 2009). CEOs with financial backgrounds possess specialized knowledge and skills that may lead them to perceive greater opportunities in financial markets. Therefore, they might be increasingly prone to allocate corporate resources toward financial activities, leveraging their expertise to navigate these complex landscapes. Thus, these findings align with Custódio and Metzger (2014), who found that financial expert CEOs manage external financing more efficiently. The increased financialization could be a manifestation of CEOs actively seeking to optimize their firms' financial positions, potentially at the expense of traditional operational focus.

This finding raises important questions regarding the long-term implications of such strategies. While increased financialization may offer short-term financial gains, it could lead to a shift from a "retain and reinvest" to a "downsize and distribute" approach (Lazonick and O'sullivan, 2000). Furthermore, this shift might have broader economic implications, as highlighted by Stockhammer (2010) regarding the impact of financialization on capital accumulation.

Our results can be contextualized within the growing literature on financialization of non-financial firms (Davis and Kim, 2015; Krippner, 2005). The significant influence of a CEO's financial background on corporate financialization suggests that this trend is not only a response to external economic factors but also driven by internal strategic choices shaped by executive expertise. These findings provide new avenues for research regarding the interplay between executive characteristics, corporate strategy, and broader economic trends. Hence, future studies can explore whether the increased financialization led by financially expert CEOs translates into superior firm performance or increased vulnerability to financial market volatility.

**Table 4**Benchmark regression results.

	(1)	(2)
	FINRATIO	FINRATIO
CEOFIN	0.0060***	0.0074***
	(2.7237)	(3.3608)
Size		-0.0097***
		(-9.4252)
Lev		-0.0586***
		(-12.2632)
ROE		-0.0185***
		(-4.0076)
Liquid		-0.0015***
		(-5.5128)
Intangible		-0.1562***
		(-10.5712)
RCA		0.0024**
		(2.0381)
FL		0.0012***
		(2.6505)
Board		-0.0023
		(-0.5302)
Indep		0.0130
		(1.0215)
Dual		-0.0009
		(-0.6652)
Firm FE	YES	YES
Year FE	YES	YES
_cons	0.0290***	0.2682***
	(17.1609)	(11.4484)
N	24,004	24,004
R <sup>2</sup>	0.152	0.172

# 4.2. Robustness tests

This study conducted robustness tests by replacing the explanatory variables to ensure validity. We adjusted the research window, lagging the dependent variable by one period, and conducted PSM-DID. We adopted a dummy variable of whether entity enterprises have made financial investments (*FINRATIO2*) as a proxy for the financialization of entity enterprises, as shown in Column (1) of Table 5. The study window period was adjusted to 2008–2019 to exclude the interference of the new crown epidemic, as shown in Column (2) of Table 5. The dependent variable was lagged by one period to capture the impact of the CEO's financial background on the financialization of entity enterprises, as shown in Column (3) of Table 5. We performed four tight–neighbor matching with the CEO's financial background as the treatment variable. Then, we conducted a PSM-DID regression analysis, shown in Column (4) of Table 5. The robustness test results align with the benchmark regression.

#### 4.3. Intermediation mechanism test

Table 6 presents the mediation analysis results, examining the roles of overconfidence and financing constraints in the relationship between COEs' financial background and corporate financialization. CEO's financial background significantly increases managerial overconfidence (coefficient = 0.0455, p < 0.01), positively affecting corporate financialization (coefficient = 0.0023, p < 0.01). These findings support H2, suggesting that overconfidence partially mediates the relationship between COEs' financial expertise and increased corporate financialization.

Meanwhile, CEO's financial background significantly reduces financing constraints (coefficient = -0.0076, p < 0.01). Reduced financing constraints are associated with higher levels of corporate financialization (coefficient = -0.0724, p < 0.01), confirming H3. This indicates that alleviated financing constraints mediate the relationship between the CEO's financial background and corporate financialization, revealing a dual pathway through which COEs' financial expertise influences corporate financialization. In other words, fostering managerial overconfidence and mitigating financing constraints. This nuanced understanding enriches our perspective on the mechanisms driving corporate financialization trends.

### 4.4. Heterogeneity analysis

The heterogeneity analysis in Table 7 exhibits significant differences regarding the impact of the CEO's financial background on corporate financialization across firm types. In SOEs, the CEO's financial background's effect on financialization was insignificant (coefficient = 0.0049, p > 0.10, Column 1). For non-SOEs, the impact was positive and significant (coefficient = 0.0100, p < 0.01, Column 2). This supports H4, which posited a more pronounced effect in non-state-owned firms.

**Table 5**Robustness tests.

	(1) Substitution of explanatory variables FINRATIO2	(2) Adjusting the research window FINRATIO	(3) Dependent variable lagged one period FINRATIO	(4) PSM-DID FINRATIO
CEOFIN	0.0186*	0.0070***		0.0057
	(1.6603)	(2.9574)		(1.5048)
LCEOFIN			0.0088***	
			(3.4274)	
Size	0.0411***	-0.0073***	-0.0107***	-0.0114***
	(7.8341)	(-6.4039)	(-8.6108)	(-4.0159)
Lev	0.0407*	-0.0442***	-0.0561***	-0.0297**
	(1.6684)	(-8.8359)	(-9.9127)	(-2.2286)
ROE	-0.0100	-0.0121**	-0.0238***	-0.0088
	(-0.4251)	(-2.4918)	(-4.4150)	(-0.6884)
Liquid	-0.0201***	-0.0019***	-0.0017***	0.0008
	(-14.0007)	(-6.9107)	(-4.8449)	(1.0429)
Intangible	-0.1055	-0.1462***	-0.1704***	-0.2145***
	(-1.3978)	(-9.5869)	(-9.7347)	(-5.0994)
RCA	-0.0021	0.0014	0.0049***	0.0022
	(-0.3503)	(1.2251)	(3.3013)	(0.6444)
FL	0.0042*	0.0001	0.0010*	0.0011
	(1.7874)	(0.2684)	(1.8783)	(0.7326)
Board	0.0197	0.0015	-0.0074	0.0087
	(0.9028)	(0.3350)	(-1.5099)	(0.7474)
Indep	0.0573	0.0197	0.0096	0.0500
	(0.8779)	(1.5017)	(0.6723)	(1.4490)
Dual	-0.0172**	-0.0000	-0.0002	-0.0074**
	(-2.4842)	(-0.0128)	(-0.1030)	(-2.1092)
Firm FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
_cons	-0.3044**	0.1999***	0.3112***	0.2595***
	(-2.5433)	(7.7228)	(11.0975)	(3.9651)
N	24,004	17,139	18,179	5466
$\mathbb{R}^2$	0.277	0.153	0.172	0.148

Examining firms based on their cash flow levels revealed that a CEO's financial background had no significant effect on financialization in high-cash-flow firms (coefficient = 0.0049, p > 0.10, Column 3). For low-cash-flow firms, the effect was positive and significant (coefficient = 0.0054, p < 0.01, Column 4). This finding further supports H4, indicating a stronger influence of a CEO's financial background on financialization in firms with lower cash flows.

These findings augment research on corporate finance and governance. Furthermore, the differential impact observed between SOEs and non-SOEs can be understood through the lens of institutional theory and the concept of managerial discretion. Lin et al. (2020) argue that SOEs are subject to greater government intervention and policy guidance, thus constraining CEOs' decision-making autonomy, particularly in financial investments and capital operations. This finding aligns with Helmich and Gilroy's (2012) observations on limited managerial discretion in SOEs. The reduced impact of COEs' financial background in SOEs suggests that institutional constraints can override individual executive characteristics, adding nuance to the upper echelons theory in varied institutional contexts.

Conversely, the significant impact of COEs' financial background in non-SOEs aligns with Zhou et al.'s (2017) assertion that CEOs of these firms have greater decision-making power and are more focused on maximizing economic benefits. This finding supports the idea that executive characteristics play a more substantial role in shaping corporate strategies, including financialization, in environments with limited institutional constraints.

Heterogeneity based on cash flow levels indicates how firm-specific financial conditions moderate the influence of COEs' characteristics. The stronger effect of a CEO's financial background in low-cash-flow firms resonates with Das et al. (2013), who noted that firms facing capital shortages are more constrained in financial decisions. Similarly, our findings indicate that CEOs with financial expertise become particularly influential, leveraging their knowledge to navigate financial constraints through increased financialization.

This interpretation aligns with Sheikh's (2022) assertion that financially expert CEOs in resource-constrained environments can more effectively assess capital situations and market conditions, leading to more tailored financialization strategies. The increased impact of a CEO's financial background in low-cash-flow firms aligns with resource dependence theory, suggesting that specialized human capital becomes more critical when firms face resource constraints.

These findings contribute to a more nuanced understanding of how executive characteristics interact with firm-specific and institutional factors to shape corporate financialization strategies. They underscore the importance of considering contextual factors when examining the influence of executive backgrounds on corporate policies, providing a more comprehensive picture of the drivers of financialization in differing corporate environments.

Table 6 Mechanism tests.

	(1) <i>OC</i>	(2) FINRATIO	(3)	(4) FINRATIO
	OC .	FINKATIO	SA	FINKATIO
CEOFIN	0.0455***	0.0073***	-0.0076***	0.0068***
	(2.5798)	(3.3133)	(-3.1272)	(3.1186)
OC		0.0023***		
		(2.6036)		
SA				-0.0724***
				(-11.4295)
Size	0.0529***	-0.0098***	0.0049***	-0.0093***
	(6.4180)	(-9.5347)	(4.2652)	(-9.1073)
Lev	0.6801***	-0.0601***	-0.0097*	-0.0593***
	(17.7297)	(-12.4934)	(-1.8268)	(-12.4491)
ROE	0.8655***	-0.0205***	-0.0065	-0.0190***
	(23.3432)	(-4.3782)	(-1.2745)	(-4.1232)
Liquid	-0.0130***	-0.0015***	0.0051***	-0.0012***
	(-5.7425)	(-5.4036)	(16.2518)	(-4.1917)
Intangible	-0.4300***	-0.1552***	0.0890***	-0.1497***
	(-3.6248)	(-10.5027)	(5.4190)	(-10.1606)
RCA	0.3955***	0.0015	-0.0107***	0.0016
	(41.6788)	(1.2206)	(-8.1571)	(1.3842)
FL	-0.0323***	0.0013***	0.0007	0.0013***
	(-8.6741)	(2.8051)	(1.3383)	(2.7669)
Board	0.0792**	-0.0024	0.0010	-0.0022
	(2.3108)	(-0.5726)	(0.2174)	(-0.5143)
Indep	0.0619	0.0129	0.0277*	0.0150
	(0.6040)	(1.0105)	(1.9519)	(1.1822)
Dual	0.0122	-0.0009	0.0076***	-0.0004
	(1.1160)	(-0.6857)	(5.0146)	(-0.2625)
Firm FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
_cons	-1.0988***	0.2707***	-3.6009***	0.0077
	(-5.8398)	(11.5476)	(-138.2695)	(0.2353)
N	24,004	24,004	24,004	24,004
$R^2$	0.173	0.172	0.853	0.177

# 5. Conclusions

This study investigates the impact of CEOs' financial background on corporate financialization using panel data from 3919 A-share listed Chinese enterprises from 2008 to 2022. The findings indicate three key insights. First, CEOs with financial backgrounds significantly increased corporate financialization. This relationship remained robust across multiple sensitivity tests (alternative variable specifications, adjusted research windows, lagged dependent variables, and PSM-DID). Second, we identified two primary mechanisms through which COEs' financial expertise influences corporate financialization, namely, increased managerial overconfidence and alleviated financing constraints. These mechanisms emphasize the complex interplay between executive characteristics and corporate financial strategies.

Third, the effect of the CEO's financial background on financialization was more pronounced in non-SOE firms and those with low cash flows, underscoring the importance of institutional and financial contexts in moderating this relationship. These findings have implications for corporate governance and policy. Although COEs' financial expertise can enhance a firm's ability to navigate complex financial landscapes, it poses risks of excessive financialization. Firms should prioritize balanced leadership when selecting CEOs to mitigate these risks, emphasizing financial acumen and commitment to core business development. Moreover, implementing robust decision-making mechanisms, such as advisory committees and external consultations, can curb potential overconfidence-driven risky investments.

Enterprises should leverage a CEO's financial expertise to optimize financing structures and broaden funding channels while focusing on operational efficiency. Establishing comprehensive credit rating systems and improving information disclosure can further enhance access to financing. For non-SOEs, it is essential to maintain a strong focus on core business activities while rationally approaching financialization. Furthermore, enhancing overall financial literacy within management teams can promote more balanced decision-making. Low-cash-flow firms should prioritize operational efficiency improvements and explore strategic partnerships to bolster their financial positions. In conclusion, CEOs' financial background can drive corporate financialization; however, firms must strike a delicate balance between financial opportunism and sustainable business growth. Companies can harness the benefits of financial expertise while mitigating associated risks by implementing thoughtful governance structures and maintaining a clear strategic focus.

**Table 7** Heterogeneity analysis.

	(1) SOEs FINRATIO	(2) Non-SOEs FINRATIO	(3) High cash flow FINRATIO	(4) Low cash flow FINRATIO
CEOFIN	0.0049	0.0100***	0.0049	0.0054**
	(1.6326)	(3.2910)	(0.9392)	(2.4182)
Size	-0.0051***	-0.0129***	-0.0089***	-0.0071***
	(-3.5331)	(-8.7775)	(-3.0401)	(-6.8521)
Lev	-0.0767***	-0.0456***	-0.0654***	-0.0559***
	(-11.4166)	(-6.8179)	(-4.7322)	(-11.2870)
ROE	-0.0325***	-0.0070	-0.0012	-0.0272***
	(-5.2043)	(-1.0668)	(-0.0946)	(-6.0338)
Liquid	-0.0010	-0.0010***	-0.0003	-0.0033***
_	(-1.6266)	(-2.8788)	(-0.4972)	(-6.4801)
Intangible	-0.1183***	-0.1683***	-0.1908***	-0.1550***
· ·	(-6.1782)	(-7.7882)	(-4.2951)	(-10.6298)
RCA	0.0054***	0.0013	-0.0008	0.0051***
	(3.2026)	(0.8171)	(-0.3264)	(3.8537)
FL	0.0010*	0.0015*	0.0059***	0.0008**
	(1.9283)	(1.9333)	(2.7784)	(2.0516)
Board	0.0001	-0.0073	-0.0227**	0.0058
	(0.0185)	(-1.1636)	(-2.0705)	(1.3694)
Indep	0.0105	0.0232	-0.0594*	0.0219*
•	(0.6713)	(1.1888)	(-1.8092)	(1.7364)
Dual	0.0003	-0.0016	0.0015	-0.0017
	(0.1344)	(-0.9299)	(0.4423)	(-1.2071)
Firm FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
_cons	0.1840***	0.3208***	0.3065***	0.1946***
	(5.5625)	(9.6537)	(4.7234)	(8.2064)
N	9406	14,598	7821	16,183
$\mathbb{R}^2$	0.146	0.193	0.298	0.107

#### CRediT authorship contribution statement

Dan Kang: Writing – review & editing, Writing – original draft, Methodology, Investigation, Formal analysis, Conceptualization. Jiahao Xu: Writing – review & editing, Validation, Methodology, Formal analysis, Data curation. Qiye Tong: Writing – review & editing, Validation, Methodology, Formal analysis. Jiayan Li: Writing – review & editing, Supervision, Resources, Methodology, Formal analysis, Conceptualization.

#### Data availability

Data will be made available on request.

#### References

Almeida, H., Campello, M., Weisbach, M.S., 2004. The cash flow sensitivity of cash. J. Finance. 59, 1777-1804.

Baron, R.M., Kenny, D.A., 1986. The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. J. Pers. Soc. Psychol. 51, 1173.

Basagaña, X., Barrera-Gómez, J., 2022. Reflection on modern methods: visualizing the effects of collinearity in distributed lag models. Int. J. Epidemiol. 51, 334–344. Becker, G.S., 2009. Human capital: a theoretical and empirical analysis, with special reference to education. University of Chicago press. Benmelech, E., Frydman, C., 2015. Military ceos. J. Finance. Econ. 117 (1), 43–59.

Bertrand, M., Kramarz, F., Schoar, A., Thesmar, D., 2007. Politicians, firms and the political business cycle: evidence from France. Unpublished working paper. University of Chicago, pp. 1–40.

Bose, S., Saha, A., Khan, H.Z., Islam, S., 2017. Non-financial disclosure and market-based firm performance: the initiation of financial inclusion. J. Contemp. Account. Econ. 13 (3), 263–281.

Carpenter, M.A., Geletkanycz, M.A., Sanders, W.G., 2004. Upper echelons research revisited: antecedents, elements, and consequences of top management team composition. J. Manag. 30, 749–778.

Chen, C., Gu, J., Lobo, G.J., 2024. Power needs knowledge: CEO knowledge background and goodwill impairment. Account. Forum. 1-45.

Custódio, C., Metzger, D., 2014. Financial expert CEOs: CEO's work experience and firm's financial policies. J. Financ. Econ. 114 (1), 125-154.

Das, S., Hong, K., Kim, K., 2013. Earnings smoothing, cash flow volatility, and CEO cash bonus. Financ. Rev. 48, 123-150.

Dai, J., Farooq, U., Alam, M.M., 2024. Navigating energy policy uncertainty: effects on fossil fuel and renewable energy consumption in G7 economies. Int. J. Green Energy 1–14.

Davis, G.F., Kim, S., 2015. Financialization of the economy. Ann. Rev. Sociol. 41 (1), 203-221.

Gao, Y., Wang, Z., Wang, K., Zhang, R., Lu, Y., 2023. Effect of big data on enterprise financialization: evidence from China's SMEs. Technol. Soc. 75, 102351. Guo, J., Kim, S., Yu, Y., Kim, J.Y., 2021. Does CFO accounting expertise matter to corporate social responsibility disclosure in 10-Ks? J. Appl. Account. Res. Hadlock, C.J., Pierce, J.R., 2010. New evidence on measuring financial constraints: moving beyond the KZ index. Rev. Financ. Stud. 23, 1909–1940.

Hambrick, D.C., 2007. Upper echelons theory: an update. Acad. Manag. Rev. 32, 334-343.

Hambrick, D.C., Mason, P.A., 1984. Upper echelons: the organization as a reflection of its top managers. Acad. Manag. Rev. 9, 193-206.

He, Y., Chiu, Y.H., Zhang, B., 2015. The impact of corporate governance on state-owned and non-state-owned firms efficiency in China. N. Am. J. Econ. Financ. 33, 252–277

Helmich, D.L., Gilroy, K.R., 2012. CEO succession and organizational transitions; case of state-owned enterprises, Chin. Manag. Stud. 6, 568-581.

Jiang, X., Zhu, J., Akbar, A., Hou, Z., Bao, X., 2022. The dark side of executives' professional background: evidence from Chinese firm's stock price crash risk. Manag. Decis. Econ. 43, 3771–3784.

Kramer, L.A., Liao, C.M., 2016. The spillover effects of management overconfidence on analyst forecasts, J. Behav, Exp. Finance, 12, 79-92.

Krippner, G.R., 2005. The financialization of the American economy. Socio-econ. Rev. 3 (2), 173–208.

Lazonick, W., O'sullivan, M., 2000. Maximizing shareholder value: a new ideology for corporate governance. Econ. Soc. 29 (1), 13–35.

Li, L., Zhou, S., Xu, W., Dai, J., 2024. Green innovation's impact on corporate financing: new insights from BRICS economies. Finan. Res. Lett. 105172.

Lin, K.J., Lu, X., Zhang, J., Zheng, Y., 2020. State-owned enterprises in China: a review of 40 years of research and practice. Chin. J. Account. Res. 13, 31-55.

Lun, B., 2022. Research on CEO's financial background, corporate performance and financialization of entity enterprises. In: Taosheng, W., Srikanta, P., Wu, C.H.J., Maria, L.R.V. (Eds.), Applications of Decision Science in Management: Proceedings of International Conference on Decision Science and Management (ICDSM 2022). Springer Nature, Singapore, pp. 431–443.

Malmendier, U., Tate, G., 2008. Who makes acquisitions? CEO overconfidence and the market's reaction. J. Financ. Econ. 89 (1), 20-43.

Oradi, J., Asiaei, K., Rezaee, Z., 2020. CEO's financial background and internal control weaknesses. Corp. Gov.: Int. Rev. 28, 119-140.

Qi, Y., Yang, Y., Yang, S., Lyu, S., 2021. Does government funding promote or inhibit the financialization of manufacturing enterprises? Evidence from listed Chinese enterprises. Am. J. Econ. Finance. 58, 101463.

Russo, J.E., Schoemaker, P.J., 1992. Managing overconfidence. Sloan Manag. Rev. 33, 7–17.

Sheikh, S., 2022. CEO power and the likelihood of paying dividends: effect of profitability and cash flow volatility. J. Corp. Finance. 73, 102186.

Song, Y., Wu, R., 2022. The impact of financial enterprises' excessive financialization risk assessment for risk control based on data mining and machine. Comput. Econ. 60, 1245–1267.

Stockhammer, E., 2010. Financialization and the global economy. Pol. Econ. Res. Inst. Work. Paper 242 (40), 1-17.

Tan, C., Mo, L., Wu, X., Zhou, P., 2024. Fintech development and corporate credit risk: evidence from an emerging market. Int. Rev. Financ. Anal. 92, 103084. Wagner, H., 2005. Globalization and financial instability: challenges for exchange rate and monetary policy. Int. J. Soc. Econ. 32 (7), 616–638.

Wang, Z., Chu, E., Hao, Y., 2024. Towards sustainable development: how does ESG performance promotes corporate green transformation. Int. Rev. Financ. Anal. 91, 102982.

Xu, G., Li, G., Sun, P., Peng, D., 2023. Inefficient investment and digital transformation: what is the role of financing constraints? Fin. Res. Lett. 51, 103429.

Xu, S., Guo, L., 2023. Financialization and corporate performance in China: promotion or inhibition? Abacus 59, 776-817.

Yu, Z., Farooq, U., Alam, M.M., Dai, J., 2024. How does environmental, social, and governance (ESG) performance determine investment mix? New empirical evidence from BRICS. Borsa Istanbul Review 24 (3), 520–529.

Zhou, F., Fan, Y., An, Y., Zhong, L., 2017. Independent directors, non-controlling directors, and executive pay-for-performance sensitivity: evidence from Chinese non-state owned enterprises. Pac.-Basin Financ. J. 43, 55–71.