

Unveiling the Impact of Managerial Imperfect Knowledge on Corporate Financing: A Behavioral and Corporate Finance Perspective

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Abstract

This study delves into the impact of managers' imperfect knowledge on a firm's capital structure decisions, challenging the conventional assumption of perfect managerial insight. Fixed effects regressions are employed to estimate the relationships between a manager's imperfect knowledge and capital structure decisions. The empirical findings defy conventional predictions of pecking order theory and underscore the influence of bounded rationality in managerial decisions. The study reveals that managers prioritize funding reliability, urging adaptive strategies rather than adhering strictly to optimal capital structure principles. Additionally, the research sheds light on diverse influences, including funding access, agency costs, CEO overconfidence, and firm-specific variables.

Keywords- access to funding; capital structure decisions; debt-to-equity; debt-to-EBITDA; managers' imperfect knowledge.

JEL Classifications- G30, Z13

1. Introduction

This paper examines the effects of managers' imperfect knowledge regarding a firm's financing on capital structure decisions. Specifically, we investigate whether managers' imperfect knowledge influences leverage ratios and how it manifests in firms' financing decisions. The importance of these questions arises from behavioral finance research that highlights the emphasis on individual traits of executives and the influence of such traits on corporate decision-making. This study specifically focuses on the behavior of chief executive officers (CEOs). To be consistent with the literature, we use the term 'manager's imperfect knowledge'; however, in this context, the term refers to the behavior of CEOs. Prior studies document that CEO power (Chao et al., 2017), demographics (Farag & Mallin, 2016), social capital (Ferris et al., 2017), social network (Mundi, 2023), and overconfidence (Malmendier et al., 2011) influence corporate decision-making. We pursue this line of investigation by exploring the impact of a previously unexplored factor, specifically imperfect knowledge, on the firm's capital structure decisions.

DeAngelo (2022) stated in the seminal work that the pecking order theory (POT) is a one-shot financing model. POT theory is based on the premise of the costs of asymmetric information. This agrees with Bharath et al. (2009), who stated that POT provides only first-order approximation to the changes in leverage ratio. Nevertheless, several studies (Lemmon & Zender, 2010; Shyam-Sunder & C. Myers, 1999) document empirical support for the pecking order theory (POT). According to the Pecking Order Theory (POT), a firm's primary financing source is internal funds, often called 'retained earnings.' Debt is considered a secondary choice, and equity issuance is a last resort. Managers who consistently follow the pecking order theory are believed to have a rational approach to financing decisions. The term manager's 'imperfect knowledge' (MIK) is associated with deviation of choice from POT.

In DeAngelo's recent work (2022), a critical observation was made regarding the often-overlooked aspect of managers' imperfect knowledge in the context of capital structure decisions, as outlined by the Pecking order theory. In the real world of corporate finance, it is evident that managers lack the luxury of possessing perfect knowledge when making crucial financing choices. This inherent imperfection in their understanding of capital structure options significantly departs from the idealized predictions set forth by traditional capital structure frameworks.

Managers struggle to discern meaningful distinctions among various financing alternatives due to their imperfect knowledge. Consequently, they frequently rely on their judgment to determine capital structure, which deviates from the systematic expectations proposed by established theories. The paramount concern for these managers is securing a dependable source of funding (DeAngelo, 2022) rather than striving for an elusive optimal capital structure. This real-world dynamic underscores the practicality of DeAngelo's argument, shedding light on the pragmatic considerations that guide managerial decision-making in capital structure.

Demarzo et al. (2021) demonstrated that shareholders tend to be indifferent to debt maturity structure, even as investors anticipate future debt issuance and adjust credit spreads accordingly. This finding is intriguing, given the potential impact of debt financing on future investment and growth. Friewald et al., (2022) further contribute to this discussion by providing evidence that the maturity structure of financial leverage influences stock returns and investor behavior. DeAngelo (2022) emphasized in this analysis the significance of agency costs, behavioral biases, collateral benefits, and cultural norms regarding debt in comprehending the comprehensive landscape of capital structure decisions. A critical insight here is that firms prioritize securing dependable access to capital while recognizing that managers' incomplete knowledge regarding the optimal mix of capital structures plays a pivotal role. This underscores the importance of considering managers' incomplete knowledge when scrutinizing capital structure decisions. *“If real-world managers knew how to optimize capital structure with any real precision, it seems highly doubtful that participants in executive programs would not have set their professors straight after hearing capital structure lectures dominated by the flawed models that dominate the academic literature and textbooks”* (DeAngelo, 2022, pg 434).

This study makes notable contributions to behavioral and corporate finance on various fronts. Firstly, it introduces the concept of managerial imperfect knowledge into the corporate decision-making process, challenging the assumption that managers possess perfect knowledge. It contends that managers, in reality, engage in satisficing rather than optimizing financing decisions. The evaluation of imperfect knowledge involves scrutinizing the financing decisions of companies facing a financing deficit and contrasting the firm's actual financing choices with the anticipated outcomes of the pecking order theory throughout the sample period. Secondly, the research enriches the ongoing discourse on the limited applicability of existing capital structure theories to actual firm behavior. The study addresses a critical gap in understanding leverage behavior by acknowledging managerial knowledge's influence, particularly managers' imperfect knowledge. Lastly, by providing evidence from the context of

an emerging nation, this study becomes particularly valuable. Emerging economies operate in distinct macroeconomic environments, and this research takes into account the unique approach and philosophy of Indian CEOs, offering insights into capital structure decisions specific to the circumstances of an emerging nation.

The findings consistently reveal a substantial negative association between managers' imperfect knowledge (MIK) and debt-to-equity, as well as debt-to-EBITDA ratios, challenging traditional pecking order theory (POT) assumptions. This novel perspective enriches behavioral finance literature, underscoring the existence of bounded rationality in managerial decision-making. From a pragmatic standpoint, the study aligns with DeAngelo's (2022) assertion that managers prioritize dependable funding access over-optimizing capital structure. It emphasizes the importance of managers acknowledging knowledge limitations and embracing adaptive strategies in decision-making. Further, the study provides evidence on the role of access to funding, agency costs, CEO overconfidence, and firm-specific variables such as firm size, market-to-book ratio, profitability, dividends, volatility, and tangibility in explaining a firm's leverage behavior.

The structure of this paper is as follows: In Section 2, we provide a comprehensive literature review and formulate our hypotheses. Section 3 offers an overview of the data used in the study. Section 4 presents the main results and includes in-depth discussions. Section 5 presents the implications and limitations of the study. Section 6 draws the study to a close with concluding remarks.

2. Literature Review

More than six decades of capital structure research cannot provide conclusive evidence on firms' preference between various sources of financing. Modigliani and Miller (1958) initiated the debate on capital structure decisions. The existing studies provide mixed evidence on significant empirical determinants of capital structure (Frank & Goyal, 2003; Guizani & Ajmi, 2021; Rajan et al., 1995). Literature relates capital structure decisions of firms with the predictions of trade-off and pecking order theories. However, the literature provides mixed empirical support for both theories. The predictions of the trade-off theory are found to be inconsistent with firms' behavior (D'Amato, 2019; Ju et al., 2005).

The trade-Off Theory lacks empirical support because it does not consider liquidity risk (Wang et al., 2018). Additionally, it lacks a solid foundation for measuring the optimal tax benefits and bankruptcy costs. Pecking order theory (POT) has received much academic attention and supports firms with borrowing capacity and low information asymmetry. Compared to the trade-off theory, the pecking order theory is a widely recognized framework for understanding firms' leverage behavior (Power et al., 2022; Qureshi, 2009). It posits that firms do not have a predetermined, fixed target capital structure. Instead, it highlights the impact of asymmetric information between the firm and the market, resulting in a hierarchy of financing costs that applies to most firms. The choice between debt and external equity is influenced, in part, by management's perception of the firm's prospects. POT underscores capital structure decisions' dynamic and adaptive nature in response to information asymmetry and financial considerations.

There are variants of POT empirically tested in the literature. Lemmon & Zender (2010) extended the framework of Shyam-Sunder & C. Myers (1999) by considering the concave nature of financing deficit for large and small firms. They found that firms prefer debt over equity without debt capacity concerns. In contrast, Khieu et al. (2015) argued that firms prefer equity financing even with a large cash balance and debt capacity. The discrepancy in firms' behavior needs further research (Shah & Ilyas, 2014). Falato et al. (2022) provided one possible explanation for firms' tendency to retain more internal funds and issue less debt. This trend has emerged as firms increasingly shift toward intangible assets, reducing the availability of tangible assets that can be used as collateral. With the rise of intangible assets, firms are more inclined to hold higher cash reserves. Bharath et al. (2009) conducted an empirical test of a modified POT that posits the applicability of POT for firms with higher information asymmetry. The results support this modified POT, mainly when adverse selection costs related to the issuance of information-sensitive securities are substantial.

In an extension of this debate, Lee (2021) argued that information-asymmetry-driven pricing exerts a more pronounced influence on equity issuance than debt financing. This is primarily because when managers perceive undervaluation in the market, they tend to favor issuing debt to raise capital. This choice subsequently leads to an increase in leverage within the company. Ho & Gong (2022) provided empirical evidence supporting POT by analyzing Chinese firms and their relationship with information asymmetry in the context of POT. Fukui et al. (2023) supported the POT as a significant determinant of capital structure decisions. Interestingly, the

trade-off theory did not receive empirical support in their research, which aligns with prior findings in the existing literature.

In another study by Fama & French (2002), no empirical support for POT is found. Similarly, Chirinko et al. (2000) provided evidence of POT's inability to explain firms' financing behavior. Frank & Goyal (2003) provided evidence of deviations from POT predictions by large and mature firms, and one possible explanation for such variations is the less asymmetric information problems of large and mature firms. The small and young firms have more asymmetric information problems. However, expecting such small and young firms to follow POT is too ambitious as these firms face significant debt capacity constraints. Botta (2023) argued that POT is more effective in elucidating mature companies' behavior than high-growth enterprises. One possible explanation for this behavior is the low level of asymmetric information regarding firm quality and risk in mature firms.

Yıldırım & Çelik (2021) argued that the POT holds primarily for small firms and may not be applicable to firms with high leverage. This does not necessarily deviate from POT, as high-leverage firms may have already reached their debt borrowing capacity, making the application of POT less relevant in such cases. Su et al. (2022) supported the Pecking Order Theory (POT) in the context of long-term borrowing, but the theory fails to explain the preference for short-term borrowings. In contrast, Botta & Colombo (2022) offered empirical support for the POT in the context of short-term financing. They also highlighted how adverse selection costs and their interactions with macroeconomic conditions can help explain deviations from POT in firms' long-term capital structures.

3. Research Methods

3.1 Sample selection

The research centers on companies listed in the S&P BSE 200 index, part of India's Bombay Stock Exchange, a prominent stock exchange. The study encompasses data from 2011 to 2023. Notably, Indian companies commenced reporting debt financing information in 2010, marking the beginning of our dataset in 2011. We have collected financial data for these companies from the Centre for Monitoring Indian Economy (CMIE) prowess, a renowned database specializing in information about Indian firms. Consistent with prior research, we have excluded firms within the financial sector (comprising 45 firms categorized under industry types 2 and 3 in CMIE) from our sample. Furthermore, in line with the methodology used by

Hu & Chang (2022), we have addressed outliers by excluding the top and bottom 1% of the data, resulting in a final sample size of 1,989 firms.

3.2 Variables operationalisation

3.2.1 Capital Structure proxies- This study approximates capital structure decisions through debt-to-equity and debt-to-EBITDA ratios. The former, widely acknowledged, is a common measure for assessing these decisions. The latter, deemed highly favored by practitioners, is endorsed as the foremost metric for capital structure (Graham, 2022). These proxies further contribute to the ongoing discourse surrounding capital structure, enriching the debate.

3.2.2 Financing deficit- Equation 1 quantifies the financing deficit, a metric developed by Shyam-Sunder & C. Myers (1999), which has been previously employed in assessing its impact on capital structure. The financing deficit gauges managers' ability to draw lessons from past choices and apply them in future decision-making processes.

$$FD_t = DIV_t + I_t + \Delta W_t + R_t - C_t \quad (1)$$

Where FD_t is the financing deficit, DIV_t is the cash dividend, I_t is the capital expenditure (Capex + additions in investments + acquisitions – sale of PPE (plant, property, and equipment)), ΔW_t (change in operating working capital + change in cash + change in current debt) is the changes in working capital, and R_t is the current portion of the long-term debt. C_t is the cash balance (net income + depreciation amortization + deferred taxes + equity in net loss + other funds from operation + gain or loss from sale of investment).

3.2.3 Managers' imperfect knowledge of capital structure (MIK)- The managers are stated to lack correct knowledge of optimal capital structure (to be consistent with DeAngelo (2022), CEOs are referred to as managers). Practitioners satisfice rather than optimize. Based on the managers' imperfect knowledge premise, DeAngelo (2022) explains how managers' imperfect knowledge leads to capital structure decisions which deviate from predictions of POT. The calculation process commences after determining the financing deficit (FD). If the FD turns out to be positive in a given year (t), our investigation extends to the managers' decisions regarding debt, equity, and internal financing. We designate a numerical value to these choices, denoting 1 for internal funding, 2 for debt, and 3 for equity. It is worth noting that a company can opt for a combination of these sources, such as a mix of debt and equity, debt and internal funds, equity and internal funds, or even a combination of all three. However, we have chosen

to classify the mode of funding based on the source with the highest proportion. For instance, if the FD amounts to INR 150 million and the firm employs INR 20 million of internal financing along with the remainder being funded through debt, we label this as 2, given that most of the funding originates from debt financing. This variable is identified as ACTB, signifying the actual behavior of the manager in terms of financing choices.

This methodology is followed throughout $t+12$, considering the dataset spans 13 years. Given that the pecking order theory (POT) is essentially a one-time financing model (Graham, 2022), we explore the preference for different sources of financing on an annual basis. This approach assists in approximating the consistency of the managers' decisions in alignment with the POT. According to POT, firms tend to prioritize internal financing, followed by debt, and finally, equity as a last resort.

The second variable assigned to each firm is referred to as POTB. This variable is conferred a specific value in cases where FD is positive for the year t . The assignment of values is as follows: a value of 1 if the firm has sufficient internal funds to finance FD, a value of 2 if the firm has debt capacity for funding of FD, and a value of 3 for equity financing. Subsequently, we compute the deviation between the managers' ACTB and POTB, with a value of 1 assigned when this deviation equals 0 and 0 when the variation is non-zero. The manager's knowledge is termed imperfect if his funding choice is inconsistent. Managers' choice here means the deviation in POTB and ACTB. A manager with perfect knowledge will not have any difference in POTB and ACTB. To gauge a firm's access to debt financing, we employ the proxy recommended by Orlova et al. (2020). Altmans' Z-score, as described in equation 3, is calculated as a proxy for a firm's access to the debt market. This helped us to check if a particular firm did not raise debt to the risk of financial bankruptcy.

A manager's knowledge is considered imperfect (MIK) if-

Managers raises $Debt_{i,t} = FD_{i,t}$, if $FD_{i,t} \leq IF_{i,t}$

Managers raises $Equity_{i,t} = FD_{i,t}$, if $FD_{i,t} \leq IF_{i,t} + Debt^*_{i,t}$

Where $Debt_{i,t}$ is the amount of debt issued, $FD_{i,t}$ is the financing deficit, $IF_{i,t}$ is the available internal funds, $Equity_{i,t}$ is the amount of equity issued, and $Debt^*_{i,t}$ is the debt capacity.

$$Deviation_{i,t} = ACB_{i,t} - POTB_{i,t} \quad (2)$$

Altman's z-score = $3.3 * (\text{EBIT} / \text{Total Assets}) + 1.2 * (\text{NWC} / \text{Total Assets}) + 1.0 * (\text{Sales} / \text{Total Assets}) + .6 * (\text{MV Equity} / \text{BV Debt}) + 1.4 * (\text{Accumulated RE} / \text{Total Assets})$ (3)

3.2.4 Access to funding (AF)- Building on the concept of managers' imperfect knowledge, as DeAngelo (2022) suggested, this section outlines the approach for evaluating the firm's ability to secure dependable funding sources. It elucidates the methodology for calculating the firm's access to funding. Funding accessibility is assessed using the analytical framework introduced by Orlova et al. (2020), which delves into the intricacies of capital structure. The primary metric examines the potential for additional borrowing, gauged by over-leveraging calculation. In this context, over-leveraging is determined by computing the disparity in leverage among the sampled firms. This is achieved by computing leverage deviation, representing the difference between a firm's current and target leverage. Target leverage is estimated from firms' characteristics from t-1 from firms' size, tangibility, profitability, market-to-book ratio, research development (R&D), dividend, and industry median leverage (Orlova et al., 2020). Equation 4 elucidates the methodologies for calculating leverage deviation. Over-leveraging is ascribed to 1 when the leverage deviation is positive and 0 when it is non-positive.

$$\text{LevDeviation}_{i,t} = \text{Lev}_{i,t} - \text{Target Lev}_{i,t} \quad (4)$$

3.2.5 Agency costs (AC)- Recent studies (Li et al., 2021; Sdiq & Abdullah, 2022) in capital structure literature examine the impact of agency cost on leverage ratios. In line with Ain et al. (2020), agency costs are quantified through the expense ratio (ExpR1). This ratio is derived by dividing the combined selling and administrative expenses by total revenues. The connection between agency costs and capital structure has been extensively explored in academic works, as confirmed by Ahmed et al. (2023), with findings indicating that agency costs tend to decrease as the level of debt increases.¹

3.2.6 CEO overconfidence (CEO)- CEO overconfidence is a well-documented cognitive bias that significantly influences the decision-making processes within corporations (Mundi & Kaur, 2022). Malmendier & Tate (2005, 2008) pioneered the development of indicators or proxies aimed at quantifying CEO overconfidence. In line with this prior research, the Holder 67 proxy has been adopted to gauge CEO overconfidence. Various proxies (including Long holder, press coverage, and forecasting error) exist for assessing CEO overconfidence; substantial empirical evidence highlights Holder 67 as a robust and dependable choice to capture CEO overconfidence effectively and aligns with the overarching understanding of how

overconfidence impacts executive decision-making in corporate settings. Holder 67 is intricately linked to stock options granted to CEOs. Upon completing the vesting period, it hones in on the CEO's exercise of these stock options. The 67% threshold is a crucial component, stipulating that any stock option plan boasting a 67% in-the-money value should prompt either partial or complete exercise by the CEO. Failure to do so indicates the CEO's overconfidence. Based on the CEO's actions, they are assigned a binary value of 0 or 1. A value of 0 signifies that the CEO exercised the option, while a value of 1 conveys the CEO's choice not to exercise the option despite it being in the money.

3.2.7 Other firm-specific controls

The growth opportunities and profitability influence a firm's capital structure (Myers, 1977). In line with previous studies (Frank et al., 2009; Mundi & Gautam, 2021; Rajan et al., 1995), we have considered several firm-specific variables, namely firm size, market-to-book ratio, profitability, dividends, cash flow volatility, and tangibility, as determinants of capital structure decisions. There is contradicting empirical evidence regarding the impact of these variables (Colla et al., 2013; Orlova et al., 2020) on firm capital structure. Firm size is the natural logarithm of total assets (Matias et al., 2018). Profitability is the ratio of operating income before depreciation to total assets (Frank et al., 2009). Dividends are measured as an indicator variable, taking a value of 1 if a firm pays dividends in a year and 0 otherwise (Colla et al., 2013). Cash flow volatility is the 3-year rolling standard deviation of cash flow used to measure the predictability and stability of free cash flow (Li & Singal, 2019). Tangibility is the ratio of net fixed assets to total assets (Mundi & Gautam, 2021).

3.3 Model

To test the hypothesis, the following model is used-

$$CS_{i,t} = \beta_0 + \beta_1 MIK_{i,t} + \beta_2 AF_{i,t} + \beta_3 AC_{i,t} + \beta_4 CEOO_{i,t} + \beta_{5-10} Controls_{i,t} + IndustryFE + YearFE + \varepsilon_{i,t} \quad (5)$$

Where $CS_{i,t}$ is either the debt-to-equity or debt-to-EBITDA ratios. $MIK_{i,t}$ is the managers' imperfect knowledge of capital structure decisions. The study controls for ($Controls_{i,t}$) firm size, market-to-book ratio, profitability, dividends, cash flow volatility, and tangibility. The regression analysis presented in subsequent sections includes industry and year-fixed effects in the model and uses firm-level clustering.

4. Analysis and discussions

4.1 Descriptive statistics and bivariate analysis

Table 1 depicts the summary statistics. The mean value of managers' imperfect knowledge (MIK) is 0.151, while a variation is 0.179. This shows that most managers have imperfect knowledge of capital structure decisions. The mean value of access to funding (AF) and agency cost (AC) are 0.416 and 0.053, respectively. The average value of CEO overconfidence (CCEO) is 0.384. Table 2 shows that the MIK, AF, AC, CCEO, and others statistically differ for managers with perfect versus imperfect knowledge. Table 3 presents the bivariate analysis and shows that the debt-to-equity and debt-to-EBITDA have a negative relationship with MIK ($r(1,987) = -.216, p < .01$) and ($r(1,987) = -.274, p < .01$) respectively. Managers' imperfect knowledge is positively related to access to funding (AF), agency cost(AC), and CEO's overconfidence (CCEO). The correlation coefficients exhibit the anticipated signs; however, none of the correlations appear to be significantly large in absolute magnitude. The following section presents the results of the regression analysis.

Please insert Tables 1-3 here.

4.2 Empirical results and discussions

Across all models (1 to 4) in Tables 4 and 5, MIK has a consistently negative and statistically significant coefficient, ranging from -0.078 to -0.097. This suggests that as managers' imperfect knowledge increases, there is a corresponding decrease in debt-to-equity and debt-to-EBITDA. Several studies (Cronqvist et al., 2012; Kaur & Singh, 2020; Ting et al., 2015) contribute empirical findings that underscore the impact of CEOs' personal attributes on a company's leverage. Notably, our study stands as a pioneering effort, shedding light on a hitherto unexplored facet: the effect of a manager's imperfect knowledge on a firm's choices regarding leverage. By delving into this unique dimension of managerial characteristics, our research extends the understanding of factors shaping leverage decisions, emphasizing the nuanced role played by the manager's level of knowledge, which, until now, has been absent from the empirical discourse on this subject.

In models 2, 3, and 4, AF has a positive and statistically significant impact on the dependent variable. This indicates increased access to funding is associated with increased debt-to-equity and debt-to-EBITDA. Firms increase the relative proportion of debt as their access to funding improves, and one possible explanation for this firm behaviour is the associated tax shield with debt raising. Nabi (2016) states that firms find debt less financially constrained than equity, which agrees with our results that access to funding positively relates to a firm's leverage. Like AF, AC has a positive and statistically significant impact in models 2, 3, and 4. Elevated agency costs coincide with heightened leverage ratios within a firm. The association between agency costs and debt is affirmative, as indicated by Pandey Sahu (2019), owing to the role of debt as a disciplinary mechanism, as highlighted by Ugur et al. (2022).

CEO is positively and significantly associated with debt-to-equity and debt-to-EBITDA in models 3 and 4. This suggests that as CEO overconfidence increases, the leverage also increases. Our results agree with prior studies stating a positive association between CEO overconfidence and a firm's leverage (Malmendier et al., 2011b; Mundi & Kaur, 2022). However, our results contradict Yung & Long (2022), who reported a negative relationship between CEO overconfidence and a firm's leverage, and the possible explanation for this behaviour is that overconfident CEOs are determined individuals who prefer not to be closely supervised. Our study focuses on Indian executives. This might be one reason for empirical contradiction as Indian CEOs differ from Western CEOs regarding religious values (Tripathi et al., 2015) and business philosophy (Gutierrez et al., 2012).

The size, market-to-book ratio, profitability, and tangibility coefficients are positive and statistically significant in most models, suggesting a positive relationship between debt-to-equity and debt-to-EBITDA. However, not all of these relationships are statistically significant at the same level in all models. Dividends and volatility have negative coefficients in most models, indicating a negative relationship between debt-to-equity and debt-to-EBITDA. The negative relationship for dividends is statistically significant in all models. The Adjusted R-squared values increase from 0.06 in model 1 to 0.32 in model 4. The F-statistics are all statistically significant, suggesting that the models are significant. The results suggest that managers' imperfect knowledge, access to funding, agency costs, CEO's overconfidence, and certain control variables are associated with variations in debt-to-equity and debt-to-EBITDA.

The current study contributes to the ongoing discourse regarding the divergence of capital structure decisions from established corporate finance theories, notably the pecking order

theory. It reveals a disparity between managerial behavior and the predictions of prevalent capital structure theories, which presuppose that managers possess perfect knowledge of financing policies. This discrepancy aligns with the documented evidence in the behavioral finance literature, as articulated by Simon (1990, 2000), highlighting the prevalence of satisficing behavior among individuals. Satisficing involves opting for decisions deemed "good enough" rather than striving for an optimal outcome. The study substantiates the presence of bounded rationality in managers' capital structure decision-making processes, acknowledging the constraints they face regarding information and cognitive resources.

Our study corroborates DeAngelo's (2022) claims that managers are more concerned with ensuring dependable access to funding than achieving an optimal capital structure. The research reveals that managers operate with imperfect knowledge regarding their firm's financial behavior. This finding underscores the necessity for further exploration into executive awareness, suggesting using more direct measures such as questionnaires or simulations in future research endeavors. The emphasis on reliable funding access implies that considerations beyond the scope of traditional capital structure optimization models influence managerial decision-making. Recognizing this aspect adds depth to the understanding of managerial behavior in financial matters, encouraging a nuanced approach to studying the factors influencing executives and prompting a reevaluation of prevalent assumptions regarding their decision-making processes in corporate finance.

Current corporate finance theories, such as the pecking order theory (POT), often overlook the contextual factors influencing managerial decisions on financing. The environment in which managers operate significantly shapes their decisions and knowledge base. Managerial actions are frequently influenced by past experiences, highlighting the need for theories that integrate manager-specific traits, including their knowledge, with traditional capital structure theories. Lo (2018) emphasizes the necessity for theories that incorporate psychological biases, providing evidence that challenges existing theories. Similarly, Miendlarzewska et al. (2019) shed light on money as a secondary reward, highlighting the brain's limitations in optimizing decisions for such rewards. The brain's neural architecture, originally adapted for primary rewards, implies that managers may not possess perfect knowledge in decisions involving secondary rewards. In conclusion, there is a growing recognition of the need for theories that account for the psychological aspects and contextual influences on managerial decision-making in corporate finance.

Please insert Tables 4-5 here.

4.3 Endogeneity concerns

Table 6 presents the results of a two-stage least squares (2SLS) regression analysis. In agreement with Faleye et al. (2014), the instrumental variable used is the number of industries in which the CEO has previously worked (SCPastI). In the first stage, the instrumental variable MIK_predicted exhibits statistical significance ($b = 0.029$, $p < .001$), effectively addressing endogeneity concerns. The subsequent second-stage regressions yield notable insights. For Debt-to-Equity, MIK_predicted exerts a significant negative influence, suggesting a discernible impact on leverage. In summary, the findings underscore the significance of the instrumental variable (MIK_predicted) in the first stage. Moreover, the second-stage regression models indicate that MIK_predicted significantly affects both Debt-to-Equity and Debt-to-EBITDA, even after accounting for other pertinent variables. The diverse significance levels and impacts of the remaining independent variables on the dependent variables contribute to the richness of the analysis. This rigorous approach strengthens the validity of the results, providing a robust foundation for interpreting the relationships explored in the study.

Please insert Table 6 here.

5. Implications, limitations, and directions for future research

The persistently negative and statistically significant coefficients linked to the manager's imperfect knowledge (MIK) in all models present a theoretical challenge to established capital structure theories, particularly the pecking order theory. This finding implies that managers' choices regarding leverage are not exclusively guided by flawless knowledge but are subject to the influence of imperfect knowledge. In an academic context, this study enriches the behavioral finance literature by drawing attention to the existence of bounded rationality in managerial decision-making. The findings support the proposition that managers might exhibit satisficing behavior, prompting a reevaluation of prevailing assumptions within the theoretical framework of capital structure theories. This study advances the existing knowledge by revealing that managerial decision-making extends beyond the sole pursuit of optimizing

capital structure; factors beyond the scope of traditional models also shape it. This insight suggests that, in practice, managers prioritize the assurance of funding over attaining an ideal capital structure. These findings compel a reconsideration of assumptions regarding the determinants of managerial decision-making in corporate finance among academics.

For practitioners, this study emphasizes the importance of managers acknowledging the influence of their imperfect knowledge when making decisions about capital structure. To improve decision-making, managers should be aware of the boundaries of their knowledge and explore alternative strategies. This could mean seeking additional information, consulting with experts, or taking a more careful approach when faced with uncertainty when making leverage decisions. By recognizing the impact of imperfect knowledge and embracing adaptive strategies, managers can enhance the effectiveness of their decision-making processes in the ever-evolving corporate finance landscape. Practitioners should recognize the significant links between access to funding (AF), agency costs (AC), and leverage. Balancing optimal capital structure with consistent funding requires strategic decisions that acknowledge managerial complexities beyond traditional financial theories.

This study is not devoid of limitations. Given its reliance on data from an emerging nation, caution is warranted in generalizing the findings. To enhance the applicability of results, future research should extend the exploration of managers' imperfect knowledge and capital structure decisions across multiple countries. Additionally, a limitation lies in inferring the manager's imperfect knowledge solely from secondary data. Subsequent research efforts can bolster the study's robustness by employing alternative measures of imperfect knowledge, such as surveys or qualitative data. These endeavors would contribute to a more comprehensive understanding and address the present study's inherent constraints, fostering a nuanced and validated perspective on the relationship between imperfect managerial knowledge and capital structure decisions.

6. Concluding remarks

In summary, this study challenges established capital structure theories, particularly the pecking order theory (POT), by scrutinizing the impact of imperfect managerial knowledge on financing decisions. The empirical results consistently demonstrate a significant negative correlation between managers' imperfect knowledge (MIK) and debt-to-equity and debt-to-EBITDA ratios, highlighting the departure from conventional POT assumptions. This novel insight contributes to behavioral finance literature, emphasizing the presence of bounded

rationality in managerial decision-making. On a practical note, the study supports DeAngelo (2022) that managers prioritize reliable funding access over-optimizing capital structure, urging them to recognize knowledge limitations and adopt adaptive strategies in decision-making. While acknowledging limitations and the need for cautious generalization, the study encourages further research into managerial imperfect knowledge across diverse global contexts and alternative measures to enhance understanding.

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