





# “CEO attributes and the cost of debt: A study on service and manufacturing firms listed on the Amman Stock Exchange”

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# CEO ATTRIBUTES AND THE COST OF DEBT: A STUDY ON SERVICE AND MANUFACTURING FIRMS LISTED ON THE AMMAN STOCK EXCHANGE

**Abstract**

Interest paid by companies on the debt acquired to finance their operations is a major factor that influences their financial performance and long-term growth opportunities. This paper aims to examine whether Chief Executive Officers' (CEOs) personal and professional characteristics, including age, academic qualification, managerial experience, stock ownership, duality, and tenure, impact companies' cost of debt using a sample of service and manufacturing firms listed on the Amman Stock Exchange during the period 2015–2023. The cost of debt is represented by the effective interest rate paid by a company on its debts, which is determined by dividing the firm's interest expense at the end of the year by the firm's average total debts. Based on fixed effect regression analysis, the results indicate that firms' cost of debt exhibits significant negative relationships with both CEO academic qualifications and practical experience ( $p < 0.05$ ), while the relationships between the cost of debt and CEO age, stock ownership, duality, and tenure are insignificant ( $p > 0.10$ ). These results suggest that highly educated and experienced CEOs tend to make more efficient financial decisions, which enhances creditors' trust in the company and is reflected in a reduced cost of debt.

**Keywords**

firm performance, risk, qualifications, experience, Jordan

**JEL Classification**

M41, G32, G51

**INTRODUCTION**

Firms' cost of capital – both equity and debt – is a major factor that influences their capital structure decisions. The amount of interest incurred by a firm on debts obtained from external sources represents its cost of debt. These interests have a direct inverse effect on firms' financial performance and their future growth prospects (Nazir et al., 2021). In addition, a higher cost of debt can result in a lower firm value, as it reduces the present value in valuation models, such as the Discounted Cash Flow analysis. Therefore, the effective monitoring and management of the cost of debt is crucial for firms aiming to maintain sustainable financial performance and market value.

In this respect, the role of firms' CEOs in minimizing the cost of debt is of particular importance for a company, as they are primarily responsible for making decisions that determine financial policies and corporate financing. Their role is embodied in managing financial risks and building relationships with lenders, in addition to making financing decisions that contribute to reducing the cost of debt and enhancing the firm's ability to adapt to financial challenges. In this regard, their personal and professional attributes, such as age, academic qualifications, and professional experience, can significantly affect the way they deal with these challenges.

Although previous studies have addressed the effect of CEO attributes on firms' cost of debt and profitability in developed markets, the impact of these attributes on the cost of debt has not been examined in the Jordanian context. Due to structural challenges and a changing economic environment facing the Jordanian economy, as a developing economy, including unstable political and economic conditions, high interest rates, and market volatility, it becomes necessary for Jordanian companies to improve their financing strategies and reduce the cost of debt to ensure their financial sustainability.

Additionally, previous research provides mixed results on how some CEO attributes affect the cost of debt. For example, studies such as Amin et al. (2024) indicate that CEO gender, age, ownership, and tenure are negatively related to the cost of debt, while CEO duality has a positive relationship with the cost of debt. Others, such as Kim and Buchanan (2008), indicate that CEOs with dual positions tend to implement cautious financing decisions to lessen the firm's financial risks and reduce its cost of debt. Brickley et al. (1999) suggest that lengthy tenure could weaken the board's independence due to the CEO building up personal power and close relations with the board of directors, which may lead them to adopt more risky financing strategies that have the potential to increase the cost of debt. These conflicting results necessitate further investigation into the relationship between CEO attributes and firms' cost of debt.

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## 1. THEORETICAL BACKGROUND AND PREVIOUS RESEARCH

The two major sources of financing that firms use to finance their activities are equity (ownership rights) and debt (borrowing). The cost of financing is a major factor that affects firms' financing strategy, as they seek to achieve a balance between the cost and the expected return that can be obtained from this financing. Myers and Majluf's (1984) Pecking Order Theory suggests that managers should follow a hierarchy when considering sources of financing. According to this theory, retained earnings are the least expensive source of financing. However, when it comes to external sources, higher returns and thus cost of financing are usually required by creditors or investors because they have less information about the firm's prospects and risks than management. In terms of external financing, however, companies tend to use debt rather than equity as they have a lower cost.

Thus, a business can reduce its cost of debt by disclosing information. According to the signaling theory developed by Spence (1973), information disclosure is seen as a signal intended to reduce information asymmetry and explain capital market uncertainty. This ultimately improves a firm's performance and market value through lowering financing costs (Gallego-Alvarez et al., 2011).

The cost of debt represents the financial burden resulting from the borrower's obligation to repay the principal and interest (Van Binsbergen et al., 2010). The actual cost includes several elements, including loan fees such as management fees, bond issuance costs, and any fees associated with borrowing, in addition to the interest rates charged, which are paid periodically. Several factors can influence firms' cost of debt, such as the terms of the loans, the financial risks associated with the company, and the prevailing economic conditions. The cost of debt directly affects the net profitability of the company, as the returns achieved from the borrowed funds must exceed the cost of debt to ensure financial sustainability and achieve profits (Kenneth, 2011). Also, borrowing creates risks related to the creditworthiness of the borrower, since interest rates increase as the risk increases (Ali & Daly, 2010).

However, according to Jensen and Meckling's (1976) agency theory, there is a conflict of interest between firms' CEOs and shareholders. Instead of focusing on the larger interests of the shareholders, CEOs may prioritize their own interests (Bhagat et al., 2010). They might, for instance, manipulate earnings or choose financing options that increase their own wealth through greater bonuses and allowances. Therefore, to ensure that decisions are made in the firm's best interests, the agency theory stresses the necessity of effective oversight procedures through the board of directors' role.

Additionally, the upper echelons theory asserts that CEOs' traits can influence how they perceive situations they encounter, which in turn influences their strategic choices within organizations. This can explain how CEO traits influence debt financing decisions and the cost of debt. At the core of this theory, the organization reflects its CEO, where the characteristics of managers influence their strategic choices. This theory suggests that differences in managers' attributes lead to differences in personal values and thinking styles, which can lead them to make diverse decisions, especially in complex and uncertain situations that lack clear solutions (Plöckinger et al., 2016).

The age of CEOs, according to the upper echelons theory, is associated with their openness and risk tolerance. Additionally, in social science research, it serves as a proxy for several other traits like maturity and self-confidence. These traits can immensely shape the perception of CEOs regarding business growth opportunities both at the domestic and international level (Hsu et al., 2013). These perceptions, in turn, shape the leadership styles that they adopt, affecting the decision-making processes within their organizations (Osei Bonsu et al., 2024). The literature demonstrates that older CEOs exhibit greater caution in their financial decisions, which can reduce the cost of debt by avoiding excessive borrowing. This stands in contrast to younger executives who tend to take on more aggressive financing strategies with a higher cost of debt. In this context, Naseem et al. (2020) and Serfling (2014) indicate that older CEOs are often more conservative in their financing decisions. They tend to implement long-term stability measures that significantly reduce financial exposure to volatility. This gradual approach ultimately reduces the cost of debt over time. Conversely, younger executives may adopt more generous, innovative, and risky financing strategies that have the potential to increase the cost of debt.

Educational attainment is often seen as a reflection of knowledge and cognitive abilities. CEOs' capacity to lead and make decisions can be greatly impacted by their qualifications. According to Bhagat et al. (2010), measurable characteristics such as education are often crucial when selecting a CEO. Gottesman and Morey (2006) assert that CEOs' educational background is a critical deter-

minant of their intellectual capacity. They assert that higher educated CEOs are generally better at leading and innovating. Prior research has shown that CEO qualifications, particularly in management-related fields, improve the overall performance of the business through enhancing their decision-making skills (Naseem et al., 2020). A master's or doctorate in finance, for instance, has been demonstrated to enhance a CEO's capacity to evaluate financial information and make well-informed financing choices. This ability is associated with a reduction in the cost of debt. De Cesari et al. (2022), for example, indicate that CEOs with higher education are more capable of assessing financing risks, which helps them to negotiate for better terms on the company's debt and ultimately reduce the cost of debt. These results indicate that CEOs' academic background significantly improves their capacity to manage debt, which consequently reduces the cost of debt for the business. However, CEOs who lack specialized academic qualifications may struggle to determine the most advantageous financial arrangements.

A CEO's practical experience is considered a critical factor in assessing a company's ability to manage risk and make prudent financial decisions that directly affect its financial performance (Naseem et al., 2020). CEOs with extensive experience in business management are a reliable source for creditors because they can handle financial and strategic issues and base their decisions on professional knowledge and analysis. By reducing the likelihood of making high-risk investments or taking on more debt than necessary, this helps to reduce the cost of debt (Abu Foul et al., 2020; Custódio & Metzger, 2014). In contrast, because they may make decisions based on short-term objectives or without the necessary level of analysis, less experienced CEOs could be viewed as a potential source of increased risk. This makes creditors more concerned about the company's stability and solvency, which raises the cost of the debt imposed on it. Previous studies have shown that long-serving CEOs are often more cautious when it comes to borrowing because they want to use debt at a lower cost to balance risks and returns (Ha & Hiep, 2021). However, CEOs with less experience may opt for riskier financing options, which could result in higher costs of debt. Malmendier et al. (2011) show that managers' financing decisions are

significantly affected by their experience, and that more experienced managers avoid excessive risk, which reduces the cost of borrowing. Graham et al. (2013) indicate that CEO characteristics, including experience, are closely related to financing and borrowing decisions, reflecting the vital role of leadership in guiding the financial structure of companies.

Another factor that may affect business performance and the cost of debt is CEO ownership, which indicates the percentage of a company's outstanding shares held by the CEO. It is widely accepted as an incentive mechanism aiming to match management's interests with those of shareholders. Giving executives equity stakes in their companies can reduce the agency conflict and ensure that managerial choices align with the shareholders' goal of wealth maximization (Kenneth, 2011). These executive owners may become more inclined to boost company performance to increase firm value, especially if ownership directly links their interests to company outcomes. On the other hand, opportunistic behavior could result from high managerial ownership. CEOs may have more influence over business choices as their equity stake grows, possibly putting their own interests ahead of those of external shareholders. This issue is at the heart of agency theory, which highlights how managers and shareholders are inherently at odds because of asymmetric information and conflicting interests.

CEO duality, which represents the case where one individual occupies both positions as CEO and chairman of the board, is a basic problem in corporate governance. Elgammal et al. (2018) indicate that it results in a concentration of power since this duality gives the CEO more authority, including the ability to make strategic decisions and perform oversight duties. Due to this concentration of power, the board's independence may be diminished, and its oversight capabilities may be weakened, which will more likely lead the CEO to act opportunistically (Wang & Hussainey, 2013). On the other hand, by improving the CEO's capacity to make more balanced risk-return choices, duality may theoretically influence financing choices. This impact may direct financing policies toward more stable and sustainable practices, which would reduce the cost of debt by reducing lenders'

perception of the company as a source of high risk. The possible influence of dual positions on choosing financing structures has been highlighted in earlier studies. According to Kim and Buchanan (2008), CEOs who occupy both roles frequently implement cautious financing practices to lessen the company's financial risks. In this case, giving the CEO greater control over financial decisions may enable them to manage debt more effectively, including selecting the less expensive financing options that support the company's long-term strategic goals.

The term CEO tenure describes the period a CEO stays in this role within the organization. There are differing theoretical viewpoints on how this tenure affects companies' financing structure and ultimately the cost of debt. Long tenure, according to some researchers, may help a company perform better because CEOs with a long tenure have a better understanding of the firm's operations and culture, which makes them more effective at making strategic decisions and boosts the trust of outside parties like creditors, which may lower the cost of borrowing (Custódio & Metzger, 2014). In line with this contention, Owusu et al. (2022) indicate that companies with CEOs in their early years have a higher cost of debt than those with later tenures. However, concerns have been raised that a lengthy tenure could result in the buildup of personal power and the formation of close relations with the board members, which could weaken the board's independence and its capacity to impartially assess firm performance (Brickley et al., 1999).

In summary, the above discussion demonstrates that CEO attributes can play a vital role in firms' strategic decisions related to capital structure, which can directly affect their financial performance. Yet, their effect differs across various contexts. This necessitates more in-depth research that investigates this effect, specifically, in developing economies. For this reason, the purpose of this study is to examine the impact of CEO attributes – particularly, age, qualifications, experience, ownership, duality, and tenure – on the cost of debt in the Jordanian context.

To explore the association between CEOs' attributes and the cost of debt, the following hypotheses were developed:

- H1: *There is a significant relationship between CEO age and a firm's cost of debt.*
- H2: *There is a significant relationship between CEO qualifications and a firm's cost of debt.*
- H3: *There is a significant relationship between CEO experience and a firm's cost of debt.*
- H4: *There is a significant relationship between CEO ownership and a firm's cost of debt.*
- H5: *There is a significant relationship between CEO duality and a firm's cost of debt.*
- H6: *There is a significant relationship between CEO tenure and a firm's cost of debt.*

## 2. RESEARCH APPROACH

To achieve the objectives of this study, data for a sample of non-financial firms, particularly service and manufacturing, listed on the Amman Stock Exchange (ASE) during the period 2015–2023 will be analyzed. Financial firms are excluded because they have a different capital structure that may affect the results. A firm must be listed on ASE and have the full data available throughout the period to be included in the sample. The data for these firms were collected from their annual reports, which are available on the websites of the ASE and the Securities Depository Center. 90 firms with 900 firm-year observations make up the final sample.

Firms' cost of debt is the dependent variable. Following Moore (2016) and Li (2019), it is measured by dividing the actual interest expense by the average book value of total debt.

A set of CEO characteristics has been identified as independent variables that are expected to influence the CEO's behavior and strategic decisions within the company. These characteristics reflect personal and professional attributes, which can contribute to explaining performance variation across companies. These variables include: First, CEO age, which is determined as the difference between the CEO's year of birth and the company's financial reporting year. Age can be considered an indirect factor in explaining company perfor-

mance, as there is a potential relationship between age and accumulated experience, which may affect the quality of management decisions. Second, the CEO's academic qualifications, which are classified into four main categories (PhD, Master's, Bachelor's, and less than a university degree), with each category assigned a numerical value of 3, 2, 1, and 0, respectively. These categories aim to measure the CEOs' level of knowledge and analytical ability, which is reflected in the effectiveness of their management decisions. Third, the CEO's practical experience is determined by the number of years the CEO has worked in a leadership position, whether in the current company or in other companies. Experience is a fundamental factor that influences the ability to address strategic challenges and make complex decisions. Fourth, CEO stock ownership is measured by the percentage of shares of the company owned by the CEO. Stock ownership indicates the extent to which the CEO's interests align with those of shareholders, which may influence motivation and decision-making that serves the company's long-term interests. Fifth, CEO duality, which indicates whether the CEO is also the Chairman of the Board. It is expressed as a dummy variable, with a value of 1 if duality exists and 0 otherwise. This attribute is a factor that may influence the balance of power within the company and the effectiveness of governance. Finally, CEO tenure indicates the number of years that the CEO has held this position in the current company. It is an indicator of leadership stability and may be linked to the accumulation of organizational experience and internal relationships. This, in turn, can impact the company's financial and strategic performance.

Several control variables have been included in the analysis. These variables were selected based on previous studies that have proven their significant impact on firms' performance. These variables are firm size, profitability, and liquidity. Size is determined as the natural logarithm of the company's total assets. This transformation helps normalize the data and reduces the impact of extreme values, providing a more stable and comparable indicator of firm size across companies. Profitability is assessed through the Return on Assets ratio (ROA), which is measured by dividing net income by the firm's total assets. ROA shows how efficient the firm is in utilizing its assets to generate profits.

Finally, firm liquidity is measured by the current ratio. It is determined by dividing the firm's current assets by its current liabilities. It reflects the firm's ability to meet its short-term debts using the most liquid assets.

This study uses the random effect regression analysis to examine the relationship between each of the CEO attributes and a firm's cost of debt as follows:

$$\begin{aligned} \text{CofD}_{i,t} = & \alpha + \beta_1 \cdot \text{CEOAGE}_{i,t} \\ & + \beta_2 \cdot \text{CEOQUAL}_{i,t} + \beta_3 \cdot \text{CEOEXP}_{i,t} \\ & + \beta_4 \cdot \text{CEOOWN}_{i,t} + \beta_5 \cdot \text{CEODUAL}_{i,t} \quad (1) \\ & + \beta_6 \cdot \text{CEOTENR}_{i,t} + \beta_7 \cdot \text{SIZE}_{i,t} \\ & + \beta_8 \cdot \text{ROA}_{i,t} + \beta_9 \cdot \text{LIQ}_{i,t} + e, \end{aligned}$$

where  $\text{CofD}_{i,t}$  – firm  $i$  cost of debt in year  $t$ ,  $\text{CEOAGE}_{i,t}$  – firm  $i$  CEO age in year  $t$ ,  $\text{CEOQUAL}_{i,t}$  – firm  $i$  CEO qualifications in year  $t$ ,  $\text{CEOEXP}_{i,t}$  – firm  $i$  CEO experience in year  $t$ ,  $\text{CEOOWN}_{i,t}$  – firm  $i$  CEO stock ownership in year  $t$ ,  $\text{CEODUAL}_{i,t}$  – firm  $i$  CEO duality in year  $t$ ,  $\text{CEOTENR}_{i,t}$  – firm  $i$  CEO tenure in year  $t$ ,  $\text{SIZE}_{i,t}$  – firm  $i$  size in year  $t$ ,  $\text{ROA}_{i,t}$  – firm  $i$  profitability in year  $t$ ,  $\text{LIQ}_{i,t}$  – firm  $i$  liquidity in year  $t$ ,  $e$  – error term.

### 3. DATA ANALYSIS

Table 1 shows descriptive statistics, including the mean, standard deviation, lowest, and highest values, for each variable included in the analysis.

**Table 1.** Descriptive statistics

Variable	Mean	Std. Deviation	Min	Max
<i>CofD</i>	0.032	0.0340	0	0.4140
<i>CEOAGE</i>	62.23	9.673	42	85
<i>CEOQUAL</i>	1.540	0.759	1	3
<i>CEOEXP</i>	31.390	9.283	9	62
<i>CEOOWN</i>	0.010	0.024	0	0.091
<i>CEODUAL</i>	0.080	0.277	0	1
<i>CEOTENR</i>	6.60	4.740	1	22
<i>SIZE</i>	7.25022	651374	5.605	10.316
<i>ROA</i>	-0.158	11.737	-75.144	34.614
<i>LIQ</i>	3.144	4.380	0.150	38.117

The average cost of debt in the study sample was approximately 0.032, indicating that the com-

panies examined incurred an annual interest expense at an average rate of 3.2% of their average debt. The cost of debt ranged from 0 to 41%. Regarding the characteristics of CEOs, their average age was 62.23 years, which is six years higher than the average reported in Bhagat et al. (2010) and eight years higher than the average in Abu Foul et al. (2020). The CEOs' ages ranged from 42 to 85 years. Additionally, most CEOs hold bachelor's degrees with an average of 31.39 years of work experience. CEOs also own an average of 1% of the outstanding shares of their companies. It is worth noting that only 8% of the sample simultaneously serves as chairman of the board. Regarding the length of service, CEOs served an average of 6.5 years in their current position, ranging from 1 to 22 years.

In terms of the control variables, the average firm size was 7.250, with the highest value reported being 10.316, while the lowest value was 5.605, indicating significant variations in company size within the sample. Regarding the return on assets (ROA) variable, the mean was 0.157865, which is lower than the value reported by Abu Foul et al. (2020). The value of this variable ranged from -75.1440 to 34.6140, reflecting clear variations in companies' performance in terms of the efficiency with which they utilize their assets to generate profits. As for the liquidity variable, its average was 3.144, indicating a good ability of companies to cover their short-term obligations. The value of this variable ranged between 0.150 as a minimum and 38.117 as a maximum, which reflects a significant variation in liquidity levels among the sample firms.

Table 2 shows the Pearson correlation coefficients between all variables.

Table 2 shows that there is no strong, statistically significant correlation between the independent variables; none of the coefficients between the independent variables exceeded 0.7. This suggests the non-existence of the multicollinearity problem within the data (Gujarati, 2003). This strengthens the validity of the multiple regression model in subsequent analyses

It is worth noting that all the variables included in the study are negatively correlated with the cost of

**Table 2.** Pearson correlation coefficients

Variable	CofD	CEOAGE	CEOQUAL	CEOEXP	CEOOWN	CEODUAL	CEOTENR	SIZE	ROA	LIQ
CofD	1									
CEOAGE	-.135*	1								
CEOQUAL	-.136*	-.091	1							
CEOEXP	-.186**	.342**	-.187**	1						
CEOOWN	-.009	.028	.081	.096	1					
CEODUAL	-.152*	-.059	.118	.047	-.117	1				
CEOTENR	-.018	.532**	-.169*	.514**	-.136*	-.054	1			
SIZE	-.054	.083	.159*	-.061	-.042	.273**	-.086	1		
ROA	-.024	.049	-.070	.082	-.130	.147*	.145*	.227**	1	
LIQ	-.101	.044	-.090	.173*	-.096	.099	.167*	.000	.255**	1

Note: \* – Correlation is significant at the 0.05 level (2-tailed). \*\* – Correlation is significant at the 0.01 level (2-tailed).

debt. Thus, a higher level of these variables would result in a decrease in the firm's cost of debt. The results also show a positive association between experience and tenure, indicating that CEOs with more experience tend to retain their leadership positions for longer periods.

Table 3 presents the results of the multiple regression analysis based on the fixed-effect regression model.

**Table 3.** Regression results

Variable	Coef.	Std. Err.	Z	p-value
CEOAGE	-0.085	0.085	-1.010	0.314
CEOQUAL	-0.031	0.012	-2.670	0.008
CEOEXP	-0.027	0.013	-2.080	0.038
CEOOWN	0.432	0.299	1.440	0.149
CEODUAL	-0.065	0.042	-1.560	0.118
CEOTENR	0.024	0.023	1.040	0.299
SIZE	0.009	0.009	1.040	0.299
ROA	-0.001	0.000	-2.000	0.046
LIQ	-0.009	0.013	-0.700	0.482

Table 3 shows that the coefficient of *CEOAGE* is negative (-0.085) but statistically insignificant ( $p = 0.314$ ). As a result, hypothesis (H1) is rejected. Therefore, a significant relationship cannot be concluded between CEO age and the firm's cost of debt. The coefficient of *CEOQUAL* is negative (-0.031) and statistically significant ( $p = 0.008$ ). Thus, the second hypothesis (H2) is accepted, and a significant negative relationship between the CEO's academic qualifications and the cost of debt can be established. This means that the higher the CEO's academic qualifications, the lower the firm's cost of debt. The coefficient of *CEOEXP* is also negative (-0.027) and statistically significant ( $p = 0.038$ ). Therefore, the third hypothesis (H3) is also accepted, and a significant negative rela-

tionship between CEO experience and the cost of debt is confirmed, indicating that the more experienced the CEO, the lower the cost of debt for the firm. The coefficient of *CEOOWN* is positive (0.432) but statistically insignificant ( $p = 0.149$ ), which indicates that a significant relationship between CEO ownership and the cost of debt cannot be concluded. Therefore, the fourth hypothesis (H4) is rejected. Additionally, the coefficient of *CEODUAL* is negative (-0.065) but statistically insignificant ( $p = 0.118$ ), which indicates that a significant relationship between CEO duality and the cost of debt cannot be concluded. Accordingly, the fifth hypothesis (H5) is rejected. Finally, although the analysis shows a positive relationship between *CEOTENR* and *CofD* (0.024), this relationship is not statistically significant ( $p = 0.299$ ). Therefore, the sixth hypothesis (H6) is rejected.

Regarding the control variables, the analysis indicates that only ROA has a significant relationship with the cost of debt. The coefficient of ROA is negative (-0.001) and statistically significant ( $p = 0.046$ ). This suggests that higher firm profitability is associated with lower cost of debt. The coefficients on the other control variables, *SIZE* and *LIQ*, are insignificant. Therefore, a significant relationship between firm size and leverage and the cost of debt cannot be concluded.

## 4. DISCUSSION

The study examined the impact of CEO characteristics on the cost of debt in service and manufacturing firms listed on ASE during the period 2015–2023. The results showed that CEO age is not statistically significant, although the coefficient was negative. This finding contradicts some previ-

ous studies, such as Serfling (2014), that indicated that younger CEOs are more risk-taking, which is reflected in their financing decisions. However, the lack of significance may be due to variations in individual behavior among CEOs or to environmental and organizational constraints that limit the impact of age.

However, the results suggest a significant negative relationship between CEO academic qualifications and the cost of debt. This relationship suggests that higher CEO academic qualifications lead to greater ability to make informed and balanced financial decisions, which lowers the cost of debt faced by the company. This is consistent with Gottesman and Morey (2006) and Bhagat et al. (2010), who suggest that higher education reflects higher cognitive and analytical abilities that contribute to more efficient financial decision-making. This enhances creditors' trust in the company, which would be reflected in the lower cost of financing. Similarly, the results showed that the cost of debt is significantly negatively related to CEO experience. That is, the more experienced the CEO is, the lower the cost of debt. This result indicates that CEOs with greater experience tend to make more conservative and efficient financing decisions, which enhances the company's credibility in the eyes of creditors, resulting in a lower cost of debt for the company. This result is consistent with Custódio and Metzger (2014) and Malmendier et al. (2011), who emphasize the importance of experience in financial risk management.

In contrast, no statistically significant relationship between CEO ownership and the cost of debt has been observed, although the coefficient was positive. This may indicate that executives who own

a larger percentage of the company's shares may make decisions that are more prone to risk, which may be reflected in an increase in the cost of debt. Although Jensen and Meckling (1976) hypothesized that ownership reduces conflicts of interest, this result may reflect the opposing view that high director ownership may lead to opportunistic behavior and increased risk. The weak effect may also be attributed to the limited variation in ownership percentages within the sample or to the presence of control mechanisms that limit this effect. The results for the duality variable were also not statistically significant, despite the negative direction of the coefficient. The lack of significance may indicate that the impact of duality depends largely on the quality of corporate governance rather than the duality itself.

Finally, the results showed a positive, but statistically insignificant, relationship between tenure and the cost of debt. Although some studies (e.g., Custódio & Metzger, 2014) have suggested that longer tenure enhances CEO strategic effectiveness, the accumulation of power and long-term relationships may lead to poor governance. This finding reflects the inconsistency in the literature and suggests that the effect may be nonlinear and dependent on intervening factors not included in the model.

Regarding the control variables, the results showed that ROA was the only significant control variable, indicating that firms with higher profitability are rated lower for credit risk and, consequently, have lower costs of debt. Size and leverage were not statistically significant, suggesting that these firm attributes did not play a decisive role in explaining differences in the cost of debt in this sample.

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## CONCLUSIONS

This study investigates the effect of CEO attributes, including age, academic qualifications, practical experience, stock ownership, duality, and tenure, on firms' cost of debt. Data from 90 service and manufacturing companies listed on the Amman Stock Exchange during the period 2018–2023 were analyzed. Based on the statistical analysis, the results indicate that firms' cost of debt is significantly and negatively related to CEOs' academic qualifications and practical experience. However, the results suggest that the cost of debt is not significantly related to CEOs' attributes of age, ownership, duality, and tenure.

The significant negative relationship between CEOs' academic qualifications and practical experience with firms' cost of debt suggests that these two attributes play an important role in the efficiency of firms'

financing decisions, resulting in a reduced cost of debt. In addition, higher CEOs' academic qualifications and practical experience can enhance creditors' trust in the company and its management, which in turn can enable them to obtain external financing at a lower cost.

Based on the study's findings, when appointing CEOs, boards of directors are advised to select CEOs with high academic qualifications and practical experience, particularly in finance and risk management, as these traits are linked to lower debt costs. Boards should also enhance transparency around executive characteristics to build lender and investor confidence. Although CEO ownership and role duality did not show a significant impact, corporate governance policies should still be regularly reviewed to mitigate potential risks. For future research, it is recommended to conduct comparative studies across sectors and countries, examine the interaction between executive traits, and include broader governance variables such as board composition and audit committees. Additionally, examining the impact of CEOs' political and economic connections may provide further insights into factors influencing the cost of debt.

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