



## Does Capital Structure Mediates the Link between CEO Characteristics and Firm Performance?

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### **Abstract**

**Purpose:** The purpose of this research was to investigate the relationship of a CEO's organizational and personal characteristics and firm performance. This study also examines how debt-to-equity ratio (capital structure) mediates the impact of CEO's characteristics toward firm performance. Manufacturing companies listed on Bursa Efek Indonesia (BEI) between 2016 and 2019 are the focus of this study.

**Design/methodology/approach:** The research sample is chosen using the purposive sampling approach. The SmartPLS software was used to evaluate the data in this investigation. This study uses Tobin's Q as measurement of firm performance. The tenure, age, gender, and education of a CEO are all factors to CEO's characteristics. Debt to equity ratio will be used as capital structure.

**Findings:** The results of this study show that CEO's tenure has significant positive impact on firm performance. CEO's characteristics (age, gender, education) show a positive but insignificant impact on firm performance. Finally, the debt-to-equity ratio does not serve as a mediating factor in the link between CEO's characteristics and firm performance.

**Practical implications:** These findings will be extremely beneficial to management in terms of improving a firm's performance by controlling the qualities of a CEO.

**Originality/value:** This article adds to the body of knowledge in the field of firm performance research which explored the function of capital structure in mediating the influence of CEO's characteristics on firm performance.

## **1. Introduction**

The notion of corporate governance arose in recent decades, requiring the Chief Executive Officer (hence referred to as the CEO) to participate in the company's process of decision-making, particularly in financial problems (Boal & Hooijberg, 2000). In some firms, the CEOs are the most powerful member of developing businesses (Wei, 2019) and an important role in making financial decisions (Lin et al., 2020), while in others, senior executives approve financial decisions and to deal with ambiguity in the key strategic and decision-making roles in the corporation (Hirshleifer et al., 2012), despite the fact that reaching consensus is difficult due to the range of executive perspectives. However, if a CEO controls a significant portion of the firm, the CEO can influence the appointment of other CEOs, providing the CEO a leg up on the rest of the board. The CEO will be able to influence board member pay, reverse their termination if necessary, and control the majority of board decisions if the CEO has enough ownership. (Zhang et al., 2016)

Corporate governance structures in developing countries are being rebuilt, with corporate governance codes growing ever more thorough over the last few decades. Surprisingly, the current state of corporate governance comprises not just financial considerations, but also ethical principles that influence decision making (Cuomo et al., 2016). Issues of Good Corporate Governance are always at the forefront of discussion in both large and small businesses. This topic has piqued the interest of the Indonesian government and investors, particularly since the country's lengthy monetary crisis in 1998. The company's internal factors, mainly human resources, are one of the significant factors that might affect the company's sustainability or performance. The CEO plays a crucial role in human resource management, as evidenced by PT. Garuda Indonesia's human resource management.

As reported by Kompas.com (28/07/2011) with the title "The Garuda Problem is like a Snowball". According to Tomy Tampatty, the PT Garuda Indonesia Employee Union's Head of Public Relations, the company's difficulties have snowballed as a result of its sloppy human resource management. As a show of concern for the company, several workers (pilots) voiced their aspirations to management. The pilots even founded the Garuda Pilots Association (APG) to express their aspirations. Unfortunately, the management and APG were never able to reach an agreement. As a result of the management issues, a number of

APG pilots have gone on strike. The APGs assume that management makes all business policy choices unilaterally, without consulting all employees first. This will undoubtedly have an impact on the effectiveness of personnel management and leadership, resulting in a drop in firm performance.

In recent research, the roles of corporate governance practices and capital structure decisions in developing economies have been explored. (Chang et al., 2014; Mokhova & Zinecker, 2014). A study by Ahmed Sheikh and Wang (2013), on the other hand, solely looked at the direct links between a few corporate governance factors and capital structure decisions. Furthermore, only a few researches have investigated CEO's characteristics as a corporate governance variable and their impact on capital structure decisions. Developed nations have conducted more studies on corporate governance practices and capital structure decisions, despite the fact that developing countries are more exposed to agency problems due to inadequate corporate governance frameworks. (Friedman, 1999). As a result, it's essential to look into the role of CEOs in strategic financial decision making and their influence on a company's success in a developing country.

This study is expected to provide information and advice to company management on the importance of capital structure in mediating the relationship between the CEO's character and company performance, as well as an overview of the practice of the influence of the CEO's character on company performance mediated by capital structure for investors, allowing investors to make more informed decisions. As well as serving as a reference and source of more information for future researchers performing similar study.

## **2. Literature Review and Hypothesis Development**

### **2.1 Firm Performance**

Firm performance is significant information from financial statements, it is one of the primary variables in making investment decisions (Harjono, 2010). There are two methods to define a company's performance: subjective and objective. Market share, overall customer, product awareness, customer loyalty, and a trustworthy reputation in the market are all subjective measures of firm performance (Delaney & Huselid, 1996). The objective performance, on the other hand, is determined by the company's financial metrics, such as

return on assets, return on equity, price-to-earnings ratio, and earnings per share (Hantrakul et al., 2012). It may be concluded that firm performance is the consequence of a number of business procedures that sacrifice a variety of resources, including both human and financial resources (Moerdiyanto, 2015). It is critical for a company to understand and analyze its performance in order to expand and compete with other businesses. This allows the company to make necessary modifications.

The term "governance" refers to a collection of rules that govern the rights and duties of shareholders, board members, corporate executives, creditors, the government, workers, and other internal and external stakeholders, as well as the system that controls the company. (Rashid et al., 2018). Companies that practice good governance will boost their market value while also protecting their shareholders (Aggarwal, 2013). Good governance is a key aspect in raising the value of a company (Gill & Obradovich, 2012). Good governance gives shareholders confidence in investing their money because they know their money will be well managed by the company. Therefore, good firm performance is created from good governance and vice versa.

The importance of corporate governance in a firm's decision making is further highlighted by agency theory. Executives frequently make judgments based on their own self interest. CEOs, for example, may not always choose to make debt decisions that maximize shareholder value, as pecking order theory suggests. Instead, they prefer to keep debt usage to a minimum for their own profit. This dispute raises agency costs and, as a result, lowers firm performance. (Ahmed Sheikh & Wang, 2013)

## **2.2 CEO's Tenure**

The term "CEO's tenure" refers to how long a CEO held that job before resigning. (Mulyati et al., 2021). The CEO's term of office is specified under Article 3 paragraph 3 of POJK Number 33 of 2014, which stipulates that a member of the board of directors may serve for no more than 5 years or until the end of the annual GMS period. Members of the board of directors are appointed for a set length of time and can be re-elected (UUPT Number 40 of 2007 Article 94). In this study, the CEO's tenure is measured on a year scale by the length of the CEO's contract with the company.

### **2.3 CEO's Age**

The age of a CEO is one of several relevant demographic indicators of firm performance. In this study, the CEO's age in the current year obtained from companies' annual report is used as an independent variable.

### **2.4 CEO's Gender**

Another key demographic variable to consider while investigating the impact of CEO traits on firm's success is CEO gender. The gender of the CEO will be measured in this study using a dummy variable with a value of "1" if the CEO is male and "0" if the CEO is female.

### **2.5 CEO's Education**

The CEO's educational background was also used in this research to examine the influence of CEO demographic features on their financing decisions and firm performance. The CEO's educational qualification will be evaluated in this study as "1" if the CEO has a history of economics education and "0" if the CEO does not.

### **2.6 Capital Structure**

Capital structure is a term used in corporate finance to describe how a company funds its assets through a combination of equity, debt, and mixed securities. It is a blend of several long-term sources of funding such as stock shares, preference shares, long-term debt, retained earnings, and so on that is used to increase a company's capitalization. The debt-to-equity ratio will be employed in this study as it is commonly used as a measure of capital structure (Kumar, 2015), which is calculated as follows:

$$\text{Debt to Equity Ratio} = \frac{\text{Total Liabilities}}{\text{Total Shareholders' Equity}}$$

### **2.7 CEO's Tenure and Firm Performance**

Long-serving CEOs are supposed to have a better awareness of the company's resources and how they interact with their surroundings. This will aid the organization in achieving more operational efficiency and, as a result, faster growth. According to Audia et al. (2000), on the other hand, CEOs with longer tenures get complacent and tend to stick to old paradigms. As a result, they become less receptive to change, less prepared to innovate, and less capable of controlling their company's growth. These two impacts appear to counterbalance one other in general.

However, the company's context must also be considered. Efficiency isn't a priority in a fast-growing company when it comes to the ability to create and produce new items. CEOs with shorter tenures are more likely to benefit in this instance because they are more open to fresh ideas. In a slow-growing corporation, on the other hand, efficiency is vital to its success, because growth is more likely to harm competitors. By virtue of their knowledge power, a longer tenured CEOs in an organization have significant social networking links with various financial sources, which are likely to grow with time, with a diminishing marginal beneficial impact on firm performance. (Luo et al., 2013). With a full understanding of the company's operations, and the capacity to spot possibilities for improvement has its obvious advantages. From the statement above, the hypothesis was concluded as below:

$H_1$  = CEO's tenure has significant positive effect on firm performance

## **2.8 CEO's Age and Firm Performance**

CEO's age is used by numerous academics as a proxy for various variables such as maturity and self-confidence (Serfling, 2014). Age can have a beneficial or detrimental impact on a CEO's financial decisions. Younger CEOs are more likely to utilize debt, but older CEOs are less likely to use debt. Given their preference for riskier financial strategies, this implies that younger CEOs are not hesitant to make innovative and risky funding decisions. (Serfling, 2014). Older CEOs, on the other hand were shown to be more conservative in their financing decisions. (Bertrand & Schoar, 2003)

Young CEOs are more motivated and willing to attain specific personal and organizational objectives (Bertrand & Schoar, 2003). The age of the CEO may also have an impact on his willingness to take risks. Older CEOs put less money into research and development and adopt riskier investing methods. As a result, a younger CEO has a greater power to steer the company toward a more profit oriented direction. According to Serfling (2014), risk-taking behavior reduces as CEOs age and their investment plans grow more cautious. As a result, it is possible to conclude that the age of the CEO has a considerable favorable impact on the company's financial performance. When it comes to funding decisions, older CEOs have been shown to be more conservative (Bertrand & Schoar, 2003). From the statement above, the hypothesis was concluded as below:

$H_2$  = CEO's age has significant positive effect on firm performance.

## **2.9 CEO's Gender and Firm Performance**

When examining the impact of CEO traits on firm success, the gender of the CEO is an essential demographic factor to examine (Frank & Goyal, 2011). Gender is researched from a variety of angles in numerous disciplines. Psychological research focuses on social disparities in gender more than management research, which focuses on leadership styles. Gender has been studied in the context of financial decision-making and its impact on firm performance in the corporate finance literature, including the current study. Men and women have different risk-taking capacities and levels of trust due to biological and social variances (Sapienza et al., 2009). The gender of the CEO and the financial performance of the company are linked. According to studies on the relationship between CEO gender and firm performance (Jadiyappa et al., 2019; Kaur & Singh, 2019), firms led by female CEOs are negatively related to firm performance, which means firms led by male CEOs outperform those that are led by female CEOs. Gender has an impact on financial decisions and corporate success, according to previous empirical investigations. The following hypothesis was derived from the above statement:

H<sub>3</sub> = Male CEOs outperform female CEOs in terms of financial performance.

## **2.10 CEO's Education and Firm Performance**

The CEO's capacity to make solid financial and investment decisions is heavily influenced by his or her education. Relevant education is essential for a successful job in any field. CEOs benefit from financial education because it helps them understand financial issues and respond effectively to guarantee strong company performance. According to Arano et al. (2010), Kokeno and Muturi (2016), organizations with CEOs who have a special business education background perform well financially.

The formal education of CEOs has an influence on their investing behavior as well as their firms' financial health. CEOs with formal education are more likely to adopt more innovative and creative business methods in order to retain a strong financial position in the market, according to King et al. (2016). Many studies over the year show a link between a CEO's financial education and the financial performance of their company (Barber & Odean, 2001; Buyl et al., 2011). The financial education of the CEO aids in their understanding of

financial concerns and their ability to act in the best interests of the company. The following hypothesis was derived from the above statement:

H<sub>4</sub> = CEO's education has significant positive effect on firm performance.

### **2.11 CEO's Tenure and Firm Performance with Capital Structure as Mediator**

According to Hartnell et al. (2016), as a CEO's tenure grows, the CEO is better able to convey and disperse information about the organization. Through their information power, CEOs with longer tenures in a firm have significant social network relationships with various financial sources, which influences their capital structure decision. Longer tenure, according to Naseem et al. (2020), allows CEOs to demonstrate their expertise in macroeconomics during downturns and sustain the firm's capital structure. The length of a CEO's tenure can have an impact on decision-making and, as a result, shareholder wealth. CEOs approaching retirement, for example, may be judged on current performance measures because this indicator has historically been a popular choice among shareholders, whereas CEOs throughout the early years of their contract may be critiqued on market-based performance measures and their impact on the firm's prospects. From the statement above, the hypothesis was concluded as below:

H<sub>5</sub> = Capital structure mediates the relationship between CEO's tenure and firm performance

### **2.12 CEO's Age and Firm Performance with Capital Structure as Mediator**

The CEO's age may have an impact on his willingness to take risks, which can affect strategic decisions like the firm's capital structure. Because they were only a few years away from retirement, older CEOs were presumably more risk averse/less risk tolerant. As a result, they would try to avoid any decision that did not benefit them directly or entailed a long-term payoff (i.e. shorter career horizon). Ting et al. (2016) discovered an inverse association between CEO age and company leverage choice in Malaysian enterprises, owing to their preference for internal rather than external funding. They were more cautious in their business decisions than the younger CEOs. (Bertrand & Schoar, 2003; Chen et al., 2014; Farag & Mallin, 2018; Graham et al., 2013)

Nguyen et al. (2018) argued that, based on their experience, older CEOs may be able to assist in improving the firm's success. As older CEOs had better ethics and transparency, which helped cut the firm's cost of capital and increase performance. (H. W. Huang et al., 2012).

Younger CEOs are more conservative according to Thijssen (2017), since they have a shorter track record, less achievement, are more scrutinized by the labor market, and are more concerned about their career as well as overall firm performance. The following hypothesis was derived from the preceding statement:

H<sub>6</sub> = Capital structure mediates the relationship between CEO's age and firm performance.

### **2.13 CEO's Gender and Firm Performance with Capital Structure as Mediator**

It has been proven, according to Graham et al. (2013), that gender are one of the crucial inherent CEO traits that influence the capital structure. While psychology studies often focus further into societal gender inequalities, management and finance research focuses on whether gender has a significant impact on corporate decision making. Taking risks is usually regarded as a masculine trait. These biological and cultural variables have definitely created a gender gap, resulting in different degrees of risk tolerance and confidence in men and women. Women, for example, are already significantly less likely than men to pursue a high-risk career in finance. (Thijssen, 2017).

Faccio et al. (2016) looked at 21 nations and found that having a female CEO has a substantial impact on debt utilization. They also found that firms with female CEOs are less volatile and perform better in the short term than their competitors. Female CEOs utilize lesser debt than male CEOs, according to Graham et al. (2013) and comparable researches have been provided by Graham and Leary (2012) Meanwhile, Frank and Goyal (2011) claim that gender has little bearing on debt use because finance decisions are decided together rather than individually.

Risk aversion, as well as other demographic variables, differs across male and female CEOs (Bertrand & Schoar, 2003). Female CEOs are considered to do more than male CEOs, and others say that they are provided more assistance and support. In actuality, active investor activists provide extra hurdles and hazards to female CEOs (Gupta et al., 2018). Because female CEOs are more risk averse than male CEOs, gender plays a key role in reducing risky conduct (Palvia et al., 2014). As a result, according to the reviewed literature, gender appears to be primarily a proxy for risk aversion and confidence (Faccio et al., 2016; J. Huang & Kisgen, 2013). Males, it is claimed, are overconfident and risk-tolerant, whilst females, on the

other hand, are more traditional or conservative and risk-averse (J. Huang & Kisgen, 2013).

The following hypothesis was derived from the preceding statement:

H<sub>7</sub> = Capital structure mediates the relationship between CEO's gender and firm performance

#### **2.14 CEO's Education and Firm Performance with Capital Structure as Mediator**

A person's educational attainment reveals their base of knowledge, learning capability, logical and analytical abilities, and capacity to adjust to environmental changes. A CEO with a higher levels of educational attainment is more flexible and confident, has a larger social connection, has a better capacity to digest information, and is therefore more likely to respond to changes and difficulties. (Shipilov & Danis, 2006) They may have more risk preferences, resulting in a larger asset-liability ratio. (Lin et al., 2020). In the literature, several studies have shown a relationship between a CEO's economic education and their funding decisions. (Barber & Odean, 2001; Buyl et al., 2011). Furthermore, the CEO's financial knowledge has a good impact on the organization's financial performance.

Despite the fact that CEOs with advanced education are regarded as a desired asset in corporate management, often they can occasionally have the opposite effect on the firm's success. According to Zhou and Wang (2014), education is an investment that CEOs make for themselves. As a result, they would anticipate a bigger return in proportion to their degree of education. Thus, they are bolder when it comes to high risk financial methods. In such circumstances, highly educated CEOs may demonstrate overconfidence and end up taking too many unneeded risks, which can be harmful to a company's overall profitability (Sitthipongpanich & Polsiri, 2015).

Furthermore, according to the Pecking Order Theory, this overconfidence behavior resulted in a disparity capital structure preference in a firm. These CEOs favored internal funding over external funding, according to Ting et al. (2015), whereas Purhanudin (2015) discovered that they preferred short term debt over long term debt to decrease financial risks. Derived from statement above, the hypothesis was concluded as below:

H<sub>8</sub> = Capital structure mediates the relationship between CEO's education and firm performance

### 3. Research Methodology

The emphasis of this study is on manufacturing businesses that are listed on the Indonesia Stock Exchange (BEI) from 2016 to 2019. The manufacturing sector was chosen as the focus of the study because it is the industry with the largest number, making manufacturing businesses one of the most competitive. Due to the state of emerging countries and the propensity of high-risk high-return investments, it is possible that the manufacturing industry would draw a large amount of investment in Indonesia. (Setiawan & Gestanti, 2018). This phenomenon necessitates the CEO's ability to better oversee the management of manufacturing enterprises in Indonesia in order for them to compete in this industry. This study used a purposeful sampling method, which means that the sample drawn must fit a number of criteria based on the study's goals.

### 4. Research Finding

**Table 1:** Descriptive Statistics Result

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Tobin's Q	420	-166.7489	786.9311	2.7042	40.1707
CEO's Tenure	420	1	53	13.3500	11.9850
CEO's Age	420	34	80	57.2900	9.3810
Financial Leverage	420	-166.7489	786.9311	2.7042	40.1707
Shares (LN)	420	16.8718	25.4796	21.4711	1.5377
Total Assets (LN)	420	11.4000	19.6790	14.8296	1.5521
Capital Expenditure Ratio	420	-77.6664	0.7191	-0.1597	3.8064

*Source:* Authors' calculations (2021)

**Table 2:** Descriptive Statistics Result

		Frequency	Percentage
CEO's Gender	1 = Male	393	93.6
	0 = Female	27	6.4
	Total	420	100.0
CEO's Education	1 = if CEO has financial education	208	49.5
	0 = if CEO doesn't have financial education	212	50.5
	Total	420	100.0
Ownership	1 = if state-owned enterprise	24	5.7
	0 = if not a state-owned enterprise	396	94.3
	Total	420	100.0

*Source:* Authors' calculations (2021)

**Table 3:** P Value Result & Summary of Hypothesis

No.	IV		DV	Original Sample	P value	Criteria	Description
H1	<i>CEO's Tenure</i>	→	<i>Firm Performance</i>	-0.105	0.000	< 0.05	Significant
H2	<i>CEO's Age</i>	→	<i>Firm Performance</i>	0.035	0.332	< 0.05	Not Significant
H3	<i>CEO's Gender</i>	→	<i>Firm Performance</i>	0.036	0.102	< 0.05	Not Significant
H4	<i>CEO's Education</i>	→	<i>Firm Performance</i>	0.167	0.000	< 0.05	Significant
H5	<i>CEO's Tenure*Capital Structure</i>	→	<i>Firm Performance</i>	-0.000	0.902	< 0.05	Not Significant
H6	<i>CEO's Age *Capital Structure</i>	→	<i>Firm Performance</i>	0.000	0.972	< 0.05	Not Significant
H7	<i>CEO's Gender*Capital Structure</i>	→	<i>Firm Performance</i>	0.000	0.998	< 0.05	Not Significant
H8	<i>CEO's Education*Capital Structure</i>	→	<i>Firm Performance</i>	0.000	0.983	< 0.05	Not Significant

*Source:* Authors' calculations (2021)

The characteristics of the CEO have a significant beneficial influence on the firm performance, according to this study. As shown in Table 3, the outcomes of the PLS regression reveal a positive and statistically significant correlation between CEO tenure and firm success. This indicates that the longer a CEO works for a company, the better the company performs. This is consistent with Saleh et al. (2020), who conducted an empirical investigation of the effects of several board directorships as well as the CEO's character on firm performance in non-financial companies in Palestine. According to Wang et al. (2016), a favorable correlation between CEO tenure and the firm performance was found. This finding support the hypothesis and are in line with studies by Al-Matari et al. (2014) and Carnahan et al. (2010)

While the age of the CEO has a favorable influence on company performance, the second hypothesis was shown to be rejected. Most likely given to that a CEO rarely makes decisions on his or her own, but rather as part of a team, the decisions made by other senior executives may have an impact on the company's overall performance. If an executive's age has an impact on performance, executives in the same age group as the CEO should reinforce the CEO's decision-making style. However, if the age range of the executives varies, age becomes a less important driver of performance. (Serfling, 2014). This finding support the hypothesis and in line with research done by Liu and Jiang (2020) and Wang et al. (2016)

Companies with male CEOs outperform those with female CEOs, according to this research, which treats gender as a binary variable. Despite this, only a small percentage of firms are led by a woman as CEO. This result support Jادیyappa et al. (2019) findings, in which a negative impact of female CEO was found on firm performance in India. Kaur and Singh (2019) in their research also stated the same, which support the third hypothesis. However, this finding contradicts the empirical evidence in the literature, which shows that female CEOs outperform male CEOs (J. Huang & Kisgen, 2013; Khan & Vieito, 2013; Peni, 2014; Pucheta-Martínez & Gallego-Álvarez, 2020). In developing countries, social gender discrimination may be the main cause of this result. Females have typically had fewer possibilities to flourish in their careers in nations like Indonesia, especially in the corporate sector, as evidenced by the percentage of female CEOs in manufacturing industry.

The result also stated that CEO's education has significant positive effect on firm performance. This means that companies with CEOs who have a financial educational experience outperform companies with CEOs who do not have a financial educational background. CEOs' formal education can improve their ability to make higher standard of financial judgments, which also lead to improving firm performance. This finding support the fourth hypothesis and in line with study by Barber & Odean (2001), Buyl et al. (2011), King et al. (2016), Naseem et al. (2020), Saidu (2019), and Wang et al. (2016).

The findings showed that the object debt to equity ratio cannot mediate the relationship between CEO's tenure and firm performance. The fifth hypothesis is therefore rejected. The CEO tenure-firm performance link is unaffected by the firm's capital structure. Meaning that

the CEO's confidence and capacity to make financial decisions that help raise the firm performance grows with his or her tenure (Hartnell et al., 2016), instead of the opposite.

This study also looked into how capital structure mediated the link across CEO age and firm performance. The result showed that the sixth hypothesis is rejected as capital structure cannot mediate the relationship between CEO's age and firm performance. This finding contradicts a study by Serfling (2014), which stated that when they are compared to their younger counterparts, older CEOs are more risk averse. When it comes to financial strategies, they are more conservative and take less chances, therefore, lessen the ability to achieve a better firm performance. However, according to a study conducted by Baker et al. (2010) and Chao et al. (2017), older CEOs are more likely to take on greater debt. Senior CEOs may be able to help improve the firm's success based on their experience. (Nguyen et al., 2018) It is likely because senior CEOs had greater ethics and openness, the firm's cost of capital was reduced, and performance was improved. (H. W. Huang et al., 2012)

This study indicates that capital structure does not mediate the relationship between CEO's gender and firm performance. As stated before, male CEOs outperform female CEOs (Jadiyappa et al., 2019; Kaur & Singh, 2019). It is claimed that male CEOs, are overconfident and risk-tolerant. (J. Huang & Kisgen, 2013). Companies led by male CEOs, for example, have earnings forecast ranges that are smaller (i.e. they have higher confidence in their future earnings) and that males take longer to take use of their compensation package choices than females do, both of which confirm the theory that men are more overconfident. In line with a study by Thijssen (2017), a female CEO, is usually unable to fully impose her will and, as a result, is unable to freely modify leverage. Because the female CEO is unable to modify leverage, debt levels may be high in order to, for example, restrict empire building impulses, limiting efforts to increase earnings or firm performance.

This study showed that debt-to-equity ratio is unable to mediate the relationship between the education of a CEO and firm performance. This is most likely owing to a strong and significant link between a CEO's education and his or her capacity to improve company success. (Barber & Odean, 2001; Buyl et al., 2011; King et al., 2016; Naseem et al., 2020; Saidu, 2019; Wang et al., 2016). Which means that CEOs' formal education can improve

their ability to make and have better financial judgments, which can in fact lead to improved company performance.

## **5. Conclusion**

The impact of the CEO's characteristics and capital structure on firm performance is examined in this study. The research model additionally includes capital structure as a mediating variable to be tested in understanding the influence of CEO's characteristics on firm performance. This study showed that tenure and education of the CEO has a considerable positive impact on firm performance. The findings revealed that longer tenured CEOs are better able to convey and disperse information about the organization and have significant social networking links with various financial sources, which are likely to grow with time, with a diminishing marginal beneficial impact on firm performance. Supported by a study from Luo et al. (2013). The findings also revealed that CEOs' formal education can improve their ability to make better financial judgments, which can lead to improving firm performance. In line with study by Barber & Odean (2001), Buyl et al. (2011), King et al. (2016), Naseem et al. (2020), Saidu (2019), and Wang et al. (2016).

The managerial implications of this research suggest that the management of Indonesian manufacturing enterprises should standardized CEO tenure and education to improve firm performance. This finding also showed and positive but insignificant impact of CEO's age and gender. This study revealed that age becomes a less important driver of performance if the age range within the executives varies and because it has little bearing on the firm's overall performance. This is in line with research by Liu and Jiang (2020) and Wang et al. (2016). According to this research, the percentage of enterprises with female CEOs is relatively low. In Indonesian manufacturing companies, however, the gender of the CEO has no significant impact on the firm's performance. The capital structure has no effect on the influence of the CEO's characteristics on firm performance, as most CEO rarely makes decisions (i.e. optimal capital structure) on his or her own, but rather as part of a team.

The study's limitation is that we can only determine the characteristics of CEOs based on their tenure, age, gender, and level of education, which is only a fraction of a CEO's overall characteristics. Further study can also try to utilize a more thorough indication of qualities such as the reputation and power of the CEO in detail. Future research could also investigate

the role of independent directors as a mediator in determining the link between CEO traits and firm performance. Furthermore, the research is carried out for four years in the Indonesian manufacturing sector. It can be applied to other industries as well as other developing countries with corporate governance regulations in the same stage of development.

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