International Journal of Business and Society, Vol. 23 No. 1, 2022, 371-389

CEO CHARACTERISTICS, FIRM POLICY, AND FIRM PERFORMANCE

Rahmat Setiawan[♣]
Faculty of Economics and Business, Universitas Airlangga, Indonesia

Lila Gestanti
Faculty of Economics and Business, Universitas Airlangga, Indonesia

ABSTRACT

This research aims to investigate the effect of CEO characteristics (female gender, education, and age) on the financing policy (interest-bearing debt to total assets), investing policy (capital expenditure), and firm performance (return on assets) when it is controlled by firm size and firm age. Our research uses the data of the manufacturing companies listed on the Indonesia Stock Exchange (IDX) in the period 2010 - 2017. The results of our research show that female CEOs have a significant negative effect on financing policy. This has a significant positive effect on firm performance, but no significant effect on investing policy. We also found that CEO education negatively and significantly affects financing policy, but positively and significantly affects investing policy and performance. Meanwhile, CEO age has a significant negative influence on financing policy but no significant influence on investing policy and performance. Our research results support behavioral finance theory by providing empirical evidence that CEO behavioral aspects are correlated with the female gender, education, and age in terms of significantly affecting firm policies and performance. The implication of this research is that investors should know the CEO characteristics of the companies in which they invest their money because the CEO characteristics can be used as references to predict performance and CEO policy decision-making.

Keywords: Female CEO, CEO education, CEO age, financing policy, investing policy, firm performance.

Received: 9 October 2019
Accepted: 4 June 2021
https://doi.org/10.33736/ijbs.4620.2022

1. INTRODUCTION

This research aims to investigate the effect of CEO characteristics on firm policy and performance. The CEO characteristics include being of the female gender, education, and age. The issue of the female gender in the finance literature is one of the new issues addressed by scientists in the finance field (Liu et at., 2014; Faccio et al., 2016; Pasaribu, 2017; Terjesen et al., 2016; Frye & Pham, 2018; Kaur & Singh, 2019; Hoang et al., 2019; Ismail et al., 2019; Vu et al., 2019; Soewarno et., 2020; Dah et al., 2020; Bautista et al., 2020; Tran et al., 2021; Biswas, 2021; Shen et al., 2021). Recently, the female gender issue in business and management has become an interesting issue. The year 2017 was a female-friendly year (fortune.com, 2017). This is because in that year, the number of female CEOs was the highest among the Fortune 500 companies. Although it was the

♣ Corresponding author: Faculty of Economics and Business, Universitas Airlangga, Campus B, Jl. Airlangga 4-6, Surabaya 60285, Indonesia; Tel: +6281216574767; Email address: rahmatsetiawan@feb.unair.ac.id

highest, this value is still small. Only 32 female CEOs led Fortune 500 companies, and the remaining 468 companies were led by male CEOs. The number of female CEOs is small in Indonesia. Public Accountant Deloitte (2016) stated that out of 64 Indonesian companies, only 8 of them were led by female CEOs and the rest were led by male CEOs. The CEO position is dominated by male CEOs. Based on this phenomenon, the issue of the female CEO role in terms of how it affects firm policy and performance is interesting to investigate.

The previous research has focused on exploring the effect of having a female CEO on firm performance and risk. Based on the research results by Liu et at (2014), Lam et al. (2013), Khan and Vieito (2013), and Faccio et al. (2016), a female CEO can increase the profitability and probability of a company's survival. The increase in profitability and survival is caused by the power struggle and accuracy when it comes to calculating any financial decisions. On the other hand, according to Barber and Odean (2001), female CEOs tend to be risk averse. If women are risk-averse but can produce higher returns, the results of the previous empirical studies are different from the law of high-risk high return. According to Adams and Funk (2012), women are not always risk-averse, and their behavior will change based on the conditions. The previous studies above only focused on the effect of a female CEO on firm performance and risk but not firm policies like the financing policy and investing policy. Therefore, our research fills in the gap by exploring the effect of a female CEO not only on firm performance but also on the firm policies.

In addition to the female gender characteristics, the results of the previous empirical studies indicate that there are other CEO characteristics that can influence firm policy and firm performance. According to Custódio and Metzger (2014), CEO education and CEO age shows the CEO leadership style. The higher the level of education like an MBA, which is a professional master's business degree, the more sophisticated the firm management will be, and the more aggressive, and higher the tolerance to risk, resulting in a greater profitability (Lam et al., 2013). According to the phenomenon and condition of education in Indonesia, the master's business education degree is not only limited to an MBA. There is also the Magister Management (MM). Meanwhile, the older the CEO, the more experienced they will be. They also tend to be risk averse. The previous research addressing the issues of CEO education and CEO age are mostly focused on the effect of CEO education and CEO age on firm performance (Jalbert et al., 2002; Nelson, 2005; Gottesman & Morey, 2010; Manner, 2010; Peni, 2014; Amran et al., 2014; Vintilă et al., 2015; Afrifa & Tauringana, 2015; Eduardo & Poole, 2016; Olsen et al., 2016; Wang et al., 2016; Kalkhouran et al., 2017; Nguyen et al., 2018; Garcia-Blandon et al., 2019; Saidu, 2019; Belenzon et al., 2019; Vestal & Guidice, 2019; Soewarno et., 2020; Naseem et al., 2020; Altuwaijri & Kalyanaraman, 2020; Liu & Jiang, 2020; Gupta & Mahakud, 2020; Ahn, 2020; Chandren et al., 2021; Shen et al., 2021; Sumarta et al., 2021). However, rarely have studies examined the effect of CEO education and CEO age on firm policies like the financing policy and investing policy. We are motivated to fill in this gap by investigating the influence of CEO education and CEO age on firm performance and firm policies.

Based on the phenomenon and research gap indicated above, we are interested in examining the influence of CEO characteristics (female gender, master's business education, and age) on financing policy (debt), investing policy (capital expenditure) and firm performance (return on assets) among the manufacturing companies listed on the Indonesia Stock Exchange (IDX) during 2010-2017. We chose only manufacturing companies because we wanted to control for industrial

variations. According to Ozkan (2001), companies in the same industry of manufacturing companies tend to face the same conditions. Our research makes an important contribution to the development of behavioral finance theory because our research results provide empirical evidence about the effect of CEO behavioral aspects in correlation with the female gender, education, and age regarding firm policies and performance. Our research is the first study that explores comprehensively the effect of CEO characteristics (female gender, education, and age) on firm policies (financing policy and investing policy) and firm performance.

2. LITERATURE REVIEW

The influence of CEO characteristics on financing policy (interest-bearing debt), investing policy (capital expenditure), and firm performance (return on assets) is explained by several theories such as behavioral finance theory and social role theory.

2.1. CEO Characteristics

Female CEO shows that the gender of CEO is a woman. According to Franke et al. (1997), Eagly (1987) and social role theory, there are gender rational differences between men and women. Women tend to behave with a feminine character, and men tend to behave with a masculine character. This identity is unchanged. According to social role theory, females tend to act like mothers, such as being more communicative, being careful, taking care, and having more ethics than men. According to behavioral finance theory and the work of Barber and Odean (2001), the female gender tends to be risk averse. According to Donkers et al. (2001), the female gender will only take safer options. In contrast, Adams and Funk (2012) suggest that women are not entirely risk-averse, as this condition can change.

King et al. (2016) stated that education is one of the critical factors when selecting the person to fill the CEO position. Education can be a quality signal of a CEO (Gounopoulos et al., 2021). According to Custódio and Meztger (2014) and King et al. (2016), CEOs with an MBA education are more aggressive in terms of their strategies, such as making riskier decisions than CEOs without an MBA education. In terms of behavioral finance theory, CEOs with an MBA education will be overconfident because they feel that they understand because they have a better education. According to Beber and Fabbri (2012), they tend to be risk-takers.

CEO age shows the age range of the CEOs from birth to t research year. The higher the value of CEO age, the older the CEO. CEO age will affect their risk preference (Serfling, 2014; Faccio et al., 2016; Malm et al., 2021; Burney et al., 2021). Cline and Yore (2016) explained that older CEOs will experience neurophysiological decreases. This decrease in cognitive ability will happen from the age of 20 until the age of 60 years old, and the decline gets bigger above 60 years old. This includes decreased perceptual and numerical abilities, and a poorer verbal memory. CEOs who are older will be more careful and risk averse (Beber & Fabri, 2012; Serfling, 2013). Conversely, younger CEOs tend to be risk-takers (Serfling, 2013). They want to prove their ability and they have a higher competitive personality.

2.2. Firm Characteristics

Firm size shows the size of the company's wealth. A larger firm size means more wealth, and greater company capabilities. According to Huang (2006), large companies tend to have a more stable cash flow. According to Titman and Wessels (1988), Rajan and Zingales (1995) and Chen (2004), large companies tend to be diversified and can possibly bankrupt due to the assumption that they are "too big to fail". Large companies have an economy of scale which is the profit made by decreasing the production costs per unit as the production levels increase (Ross et al., 2010, p. 916). Firm size is measured by the natural logarithm (Ln) of total assets (Setiawan & Rachmansyah, 2019).

The age of the company shows how long the company has lasted for from the point when the company first stood until year t in the research. The company's age is used to control the life cycle stage of the company (Faccio et al., 2016). Newly established companies tend to have less cash, while more mature companies have a freer cash flow (Ross et al., 2010, p. 643). A freer cash flow creates agency problems if it is not distributed such as empire building and underinvestment. Firm age is measured by the natural logarithm (Ln) of firm age.

2.3. CEO Characteristics and Financing Policy

If the gender of the CEO is female, following Eagly's social role theory (1987) and its application in business as proposed by Franke et al. (1997), as they are accustomed to the role of a mother, female CEOs will have an increased sense of worry and tend to be risk-averse (Barber & Odean, 2001; García & Herrero, 2021; Muller-Kahle & Schiehll, 2013). When female CEOs tend to be risk-averse, their tolerance to the risk will be low, meaning that they avoid risky decisions. Debt will pose a risk of bankruptcy if it is used too often, therefore female CEOs will use lower debt levels as shown by the results of the research by Faccio et al. (2016), Huang and Kisgen (2013), and Wang et al. (2021).

H_1: Female CEO negatively affects the financing policy.

A higher level of CEO education will make them more motivated to make risky decisions to get a higher level of compensation. CEOs with a master's business degree get a higher compensation result (Lam et al., 2014). When faced with risky debt funding policies, they will increase the debt to finance the company’s assets. Not only that but they will also undertake more sophisticated strategies when managing the financial policy because they have an education. This gives them more credibility, and the debt capacity will increase (Custódio & Metzger, 2014; Chua et al., 2021). Frank and Goyal in King et al. (2016) demonstrated that CEOs with an MBA education can adjust the capital structure more quickly. CEOs with a higher education level have more knowledge, understand the benefits of debt, and formulate the optimal level of debt. Companies that are led by a CEO with a master’s level in business education will use a higher debt as part of the financing policy.

H_2: The education of the CEO positively affects the financing policy.

There are two different opinions regarding the CEO age. Faccio et al. (2016) found that the CEO age negatively affects debt. This is because an elderly CEO tends to be risk averse. Cline and Yore (2016) explained that an elderly CEO has a decreased level of cognitive function. Ferris et al.'s (2017) results show that CEO age positively affects debt. Older CEOs will increase the debt when the debt is not optimal. This is because older CEOs have more CEO experience, and they are more committed to the company. Faccio's result is more supportive of behavioral finance theory, as well as the work of Beber and Fabrri (2012). A company led by an older CEO will have a lower debt in connection to the financing policy.

H_3: CEO age negatively affects the financing policy.

2.7. CEO Characteristics and Investing Policy

Faccio et al. (2016) and Huang and Kisgen (2013) showed that female CEOs put a lower capital expenditure into the investing policy. This is because investments are a risky decision that will lead to fixed costs, while the resulting profits are uncertain. Companies led by female CEOs will put a lower capital expenditure into the investing policy.

H_4: Female CEO negatively affects the investing policy.

The higher the CEO's education, the more sophisticated and greater the CEO's skill will be at managing investments. CEOs with either an MBA or MM degrees get a master's level of business education so then they will be better at reading the conditions of the market and seeing the available business opportunities. The more aggressive the policy that they use is, and if they are faced with an investing policy, the higher the capital expenditure will be as put forward by Custódio and Metzger's (2014) results. Behavioral finance theory also explains that a higher education tends to result in overconfidence, and the tendency to speculate and invest (Beber & Fabbri, 2012; Gupta et al., 2020). They are motivated by the highest compensation possible (Lam et al., 2013).

H_5: The education of the CEO positively affects the investing policy.

The older the CEO is, the more cautious, conservative, and risk-averse they will be (Serfling, 2014; Malm et al., 2021). This cautious nature arises because an older CEO's cognitive abilities will be reduced (Cline & Yore, 2016). Their accuracy when estimating will be lower and from the legal side of things, they will be tied to caution. In contrast, younger CEOs engage in more open thinking and they tend to be more ambitious. Thus, younger CEOs will use the operating cash flow to generate more capital expenditure as shown in the work of Faccio et al. (2016) and Ferris et al. (2017).

H_6: CEO age negatively affects the investing policy.

2.8. CEO Characteristics and Firm Performance

If the gender of the CEO is female then they have a better communication ability and are better at controlling innovations and the company reputation. They can satisfy the consumers more and increase their sales because they have a communal character (Franke et al., 1997). Women will

improve the level of monitoring to improve the company's ability to generate a return (Liu et al., 2014; Lam et al., 2013; Amore et al., 2014; Tejedo-Romero et al., 2017; Frye & Pham, 2018; Naseem et al., 2020; De Masi et al., 2021).

H_7: Female CEO positively affects firm performance.

According to Custódio and Metzger (2014), a CEO with a master's business degree is more sophisticated at managing financial and investing policies, thus they are able to achieve higher returns. According to Bertrand and Schoar (2003) and King et al. (2016), in addition to behavioral finance theory, CEOs with a master's level business degree are more aggressive when implementing strategies and they tend to be risk-takers. According to the high risk-high return law, high risks will be compensated by higher returns. Therefore, companies led by a CEO with a master's level business degree education will have a higher return on assets as proposed by the work of Lam et al. (2013), Custódio and Metzger (2014), Green and Homroy (2018), and Naseem et al. (2020).

H_8: The education of the CEO positively affects firm performance.

There were two different opinions regarding CEO age. Older CEOs have more experience but they can also face a decreased cognitive function (Cline & Yore, 2016), thus decreasing the accuracy of their estimated conditions. According to behavioral finance theory, older CEOs will be more conservative. This causes the older CEOs to be more risk-averse, resulting in a smaller return on asset as shown in the results of the research by Lam et al. (2013) and Cline and Yore (2016).
H_9: CEO age negatively affects firm performance.

2.9. Model Analysis

In this research, we used the pooled OLS regression model because the model is commonly used in research using panel data. Our data consisted of panel data including cross-sectional data (65 manufacturing firms) and time-series data (period 2010-2017). By using only manufacturing companies in our research, we can control for industrial variations. According to Ozkan (2001), companies in the same industry as other manufacturing companies tend to face the same conditions. Using the pooled OLS regression model was therefore suitable in this research. There were three analysis models used in this research as follows:

$$\text{Model 1: } DEBT_{it} = \beta_0 + \beta_1 FCEO_{it} + \beta_2 EDU_{it} + \beta_3 CAGE_{it} + \beta_4 SIZE_{it} + \beta_5 FAGE_{it} + \varepsilon_{it} \quad (1)$$

$$\text{Model 2: } CPX_{it} = \gamma_0 + \gamma_1 FCEO_{it} + \gamma_2 EDU_{it} + \gamma_3 CAGE_{it} + \gamma_4 SIZE_{it} + \gamma_5 FAGE_{it} + \varepsilon_{it} \quad (2)$$

$$\text{Model 3: } ROA_{it} = \delta_0 + \delta_1 FCEO_{it} + \delta_2 EDU_{it} + \delta_3 CAGE_{it} + \delta_4 SIZE_{it} + \delta_5 FAGE_{it} + \varepsilon_{it} \quad (3)$$

Whereas, $\beta_0, \gamma_0, \delta_0$ are the regression constants; $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \gamma_1, \gamma_2, \gamma_3, \gamma_4, \gamma_5, \delta_1, \delta_2, \delta_3, \delta_4, \delta_5$ are the coefficients of regression; $DEBT_{it}$ is the interest-bearing debt ratio; CPX_{it} is the capital expenditure ratio; ROA_{it} is the return on assets ratio; $FCEO_{it}$ is a female CEO; EDU_{it} is the CEO's Education; $CAGE_{it}$ is CEO Age; $SIZE_{it}$ is firm size; $FAGE_{it}$ is firm age; and ε_{it} is the *error term.*

3. METHODOLOGY

This research used a quantitative causality approach. The quantitative approach was done using a hypothesis test with OLS regression, whereas the causality approach was the interpretation of the causality of the research results by quantitative analysts to confirm the existing theory. The researcher used 65 manufacturing listed companies on the Indonesia Stock exchange during the years 2010 - 2017 as the sample. The sampling technique used in this research was purposive sampling. The sample criteria were (1) a manufacturing company listed on the Indonesia Stock Exchange in the 2010-2017 period, (2) a company that has completed its financial reports during the 2010-2017 period, and (3) a company has the same reporting period, that is, up to 31 December.

There were three models used in this study because there were three dependent variables, specifically financing policy, investing policy, and firm performance. Financing policy was measured by the interest-bearing debt to total assets ratio. It shows the proportion of interest-bearing debt used to finance the company's assets. Investing policy was measured by the capital expenditure (Khaw et al., 2019). Capital expenditure shows the number of new fixed assets and it was measured by the fixed assets year t minus the fixed assets year t -1 plus the depreciation year t to fixed asset year t (Faccio et al., 2016; Hidayatulloh & Setiawan, 2020). Firm performance can be measured by the return on assets (ROA) (Peterson et al., 2012; Setiawan & Agustin, 2018; Ting et al., 2018; Mohammad & Bujang, 2019; Chancharat et al., 2019; Setiawan et al., 2020; Nazir et al., 2021; Singh et al., 2021; Wijaya et al., 2021; Kaur & Singh, 2021; Fariha et al., 2021). In this research, ROA was calculated by earnings before interest and tax to total assets.

The independent variables in this study consisted of the CEO characteristics controlled by firm characteristics. This study used the three main characteristics of a CEO. These were whether they were of the female gender, the master's level business education of a CEO, and CEO age. The female gender was measured by a dummy of one if the CEO was a woman and zero if the CEO was a man. The master's level business education of the CEO was measured by a dummy of one if the CEO held a Master of Business Administration (MBA) or a Magister Management (MM) qualification and zero if the CEO didn't have either. CEO age was measured by the natural logarithm of CEO age until year t. The control variables in this research were firm size and firm age. Firm size shows the company's wealth and it was measured by the natural logarithm of the total assets. Firm age was measured by the natural logarithm of firm age.

4. RESULTS AND DISCUSSION

Table 1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
DEBT	331	0.0000	0.7392	0.2162	0.1768
CPX	331	-0.6211	0.6713	0.1327	0.1180
ROA	331	-0.1591	0.4408	0.0946	0.0783
FCEO	331	0	1	0.0906	0.2875
EDU	331	0	1	0.2236	0.4172
Ln CAGE	331	3.4012	4.4067	3.9901	0.1719
CAGE (years)	331	30	82	54	1
SIZE	331	24.4199	33.3201	28.1343	1.6721

	N	Minimum	Maximum	Mean	Std. Deviation
Ln FAGE	331	0.6931	4.1588	3.4745	0.4339
FAGE (years)	331	2	64	32	2

Table 1 shows that 21.6% of the assets of manufacturing companies are funded using interest-bearing debt. The increasing investment of the new fixed assets is only 13.27% on average. The proportion of female CEOs in the manufacturing industry from 2010 - 2017 was 9.06% and the remaining 90.94% were male. There were 27.12% MM and MBA-educated CEOS in total, and the average CEO was 54 years old. Tables 2, 3, and 4 show the Pearson Correlation of each analysis model (model 1, 2 and 3). Based on table 2, the results of the Pearson Correlation analysis show that (1) there is a significant negative correlation between female CEO and interest-bearing debt at the 1% level, (2) there is a significant negative correlation between CEO education and interest-bearing debt at the 1% level, and (3) there is a significant negative correlation between CEO age and interest-bearing debt at the 5% level. Based on table 3, the results of the Pearson Correlation analysis show that (1) there is not a significant correlation between female CEO and capital expenditure, (2) there is a significant positive correlation between CEO education and capital expenditure at the 5% level, and (3) there is not a significant correlation between CEO age and capital expenditure. Meanwhile, based on table 4, the results of the Pearson Correlation analysis show that (1) there is a significant positive correlation between female CEO and firm performance at the 1% level, (2) there is a significant positive correlation between CEO education and firm performance at the 1% level, and (3) there is not a significant correlation between CEO age and firm performance.

Table 2: Pearson Correlation Model 1

		DEBT	FCEO	EDU	CAGE	SIZE	AGE
DEBT	Pearson Correlation	1					
	Sig. (2-tailed)						
FCEO	Pearson Correlation	-0.146***	1				
	Sig. (2-tailed)	0.008					
EDU	Pearson Correlation	-0.339***	0.058	1			
	Sig. (2-tailed)	0.000	0.293				
CAGE	Pearson Correlation	-0.110**	0.050	-0.086	1		
	Sig. (2-tailed)	0.046	0.369	0.120			
SIZE	Pearson Correlation	0.135**	0.048	-0.107	-0.001	1	
	Sig. (2-tailed)	0.014	0.385	0.051	0.989		
FAGE	Pearson Correlation	-0.160***	0.116**	0.050	-0.001	0.024	1
	Sig. (2-tailed)	0.004	0.035	0.366	0.986	0.659	

Note:** and *** indicate that correlation is significant at the 5% and 1% level (2-tailed).

Table 3: Pearson Correlation Model 2

		CPX	FCEO	EDU	CAGE	SIZE	AGE
CPX	Pearson Correlation	1					
	Sig. (2-tailed)						
FCEO	Pearson Correlation	0.046	1				
	Sig. (2-tailed)	0.405					
EDU	Pearson Correlation	0.114**	0.058	1			
	Sig. (2-tailed)	0.039	0.293				
CAGE	Pearson Correlation	-0.090	0.050	-0.086	1		
	Sig. (2-tailed)	0.104	0.369	0.120			

SIZE	Pearson Correlation	0.322***	0.048	-0.107	-0.001	1	
	Sig. (2-tailed)	0.000	0.385	0.051	0.989		
FAGE	Pearson Correlation	0.075	0.116**	0.050	-0.001	0.024	1
	Sig. (2-tailed)	0.175	0.035	0.366	0.986	0.659	

Note:** and *** indicate that correlation is significant at the 5% and 1% level (2-tailed).

Table 4: Pearson Correlation Model 3

		ROA	FCEO	EDU	CAGE	SIZE	AGE
ROA	Pearson Correlation	1					
	Sig. (2-tailed)						
FCEO	Pearson Correlation	0.143***	1				
	Sig. (2-tailed)	0.009					
EDU	Pearson Correlation	0.160***	0.058	1			
	Sig. (2-tailed)	0.004	0.293				
CAGE	Pearson Correlation	-0.039	0.050	-0.086	1		
	Sig. (2-tailed)	0.475	0.369	0.120			
SIZE	Pearson Correlation	0.261***	0.048	-0.107	-0.001	1	
	Sig. (2-tailed)	0.000	0.385	0.051	0.989		
FAGE	Pearson Correlation	0.147***	0.116**	0.050	-0.001	0.024	1
	Sig. (2-tailed)	0.007	0.035	0.366	0.986	0.659	

Note: ** and *** indicate that correlation is significant at the 5% and 1% level (2-tailed).

Table 5: Regression Results

Variable	1. Financing Policy (*Interest Bearing Debt to Total Assets*)		2. Investing Policy (*Capital Expenditure*)		3. Firm Performance (*Return on Assets*)	
	Coef.	**Sig.**	**Coef.**	**Sig.**	**Coef.**	**Sig.**
Constant	0.661 **	0.014	-0.382 **	0.038	- 0.295 **	0.016
FCEO	- 0.068 **	0.032	0.008	0.715	0.029 **	0.041
EDU	- 0.138 ***	0.000	0.039 ***	0.008	0.033 ***	0.001
CAGE	- 0.136 ***	0.009	-0.054	0.132	- 0.013	0.570
SIZE	0.012 **	0.032	0.024 ***	0.000	0.013 ***	0.000
FAGE	- 0.055 ***	0.009	0.016	0.270	0.022 **	0.023
R^2	17.7%		13.6%		13.3%	
F Stat	13.985 ***		10.213 ***		9.962 ***	
Observation	331 observations		331 observations		331 observations	

Notes: ** and *** indicate significance at 5% and 1% levels, respectively.

4.1. Female CEO and Financing Policy

Table 5 presents the multiple regression results showing that female CEOs (FCEO) negatively and significantly affect interest-bearing debt. This result shows that a company headed by a female CEO uses (6.8%) a significantly lower debt than companies headed by male CEOs. These results are consistent with our research hypothesis and the research results of Faccio et al. (2016). These results are consistent with the social role theory of Eagly (1987) and Franke et al. (1997) indicating that women have a cautious nature because they are accustomed to their social role as mothers. This is because it is riskier and raises the financial cost to do otherwise. Conversely, men like to violate the regulations while trying to avoid taxes (Franke et al., 1997), and having a higher debt will reduce said taxes. The results of this study also show that behavioral finance theory is still

relevant when it comes to explaining the gender behavior towards debt in financing policy. Companies led by male CEOs use a higher debt because men tend to be risk-takers.

4.2. Master of Business Education and Financing Policy

The results show that CEOs with a master's business degree (EDU) negatively and significantly affect debt. This shows that companies led by CEOs with a master's business degree have a 13.8% lower debt than companies led by CEOs without a master's business degree. This result does not follow the hypothesis of this research or behavioral finance theory, in addition to the results of the research by Beber and Fabbri (2012), Custódio and Meztger (2014), and King et al. (2016). This is because CEOs with a business master's education reduce the debt, therefore their decision is risk averse. In behavioral theory, CEOs with this characteristic are expected to be overconfident because they feel better than average, and because they are also motivated by the higher compensation (King et al., 2016). This means that their risk tolerance should be higher. There are several possible causes of CEOs with a master's business education lowering the debt. First, when an agency problem occurs between the manager and the owner, a CEO with a master's business education will avoid the bonding mechanism that arises because of a debt covenant. The bonding mechanism reduces the consumption of the perquisite manager and oversees the manager as well. Second, the main goal of the CEO is not to avoid bonding mechanisms but to avoid the risk of defaulting.

4.3. CEO Age and Financing Policy

The results show that CEO age negatively and significantly affects the debt in financing policy. This means that companies led by older CEOs have a lower debt in relation to the financing policy. These results are consistent with our research hypothesis and the research results of Beber and Fabbri (2012) and Serfling (2013). According to Serfling (2013) and Cline and Yore (2016), older CEOs tend to be more risk-averse and cautious because their cognitive abilities are decreasing.

4.4. Female CEO and Investing Policy

The results show that the female CEOs have no significant positive effect on capital expenditure. Female CEOs are therefore not a variable that affects the capital expenditure in investing policy. This result does not support our research hypothesis or behavioral finance theory. The results of Barber and Odean (2001) show that women tend to be risk-averse and reduce the capital expenditure (Faccio et al., 2016, Huang & Kisgen, 2013). This is presumably due to women being careful. Women tend to hesitate when things are still uncertain and they buy the time needed to execute investment decisions. Conversely, when there is enough evidence, they will increase their investments (Adams & Funk, 2012). The results of the study by Faccio et al. (2016) show that female CEOs have a significant positive effect on capital expenditure when the investment can significantly add value to the company.

4.5. Master of Business Education and Investing Policy

The results show a CEO with a master's in business positively and significantly affects the capital expenditure in relation to the investing policy. This result means that a company led by a CEO with

a master's business degree significantly has a (3.9%) higher capital expenditure than a company led by a CEO without a master's degree. These results are consistent with our research hypothesis, in addition to behavioral finance theory and the results of the research by Beber and Fabbri (2012) and Custódio and Metzger (2014). MBA CEOs have a higher level of compensation (Lam et al., 2013; Graham et al., 2012; King et al., 2016) than non-MBA CEOs. This can motivate the CEOs to make decisions about investing in fixed assets. Besides, CEOs with a business-focused education have higher cognitive abilities (King et al., 2016) and the appropriate knowledge (business) to analyze capital expenditure decision-making. The ability and motivation of the compensation makes the CEOs with this characteristic more confident. These results are consistent with the work of Barber and Odean (2001) as CEOs with a higher education tend to be risk-takers. However, behavioral finance theory does not prove that this behavior is the result of information processing errors and bias. Behavioral finance theory can be seen from the regression results of the influence of CEO education on firm performance and the return on assets in the last model.

4.6. CEO Age and Investing Policy

The result show that the CEO's age has no significant effect on capital expenditure. This result does not follow our research hypothesis, and the results of Faccio et al. (2016) and Ferris et al. (2017). The results indicate that both young and old CEOs do not affect the high and low state of the capital expenditure. This result is similar to the work of Custódio and Metzger (2014). This is because older CEOs experience a decline in their cognitive abilities because they are aging (Cline & Yore, 2016), meaning that that they process information incorrectly and produce losses. This requires the CEO to be more cautious and sufficiently assisted. As is previously known, a CEO as a manager is bound by law to prevent the continuation of losses. One way to go about this is to invest in increasing the assets when it is confirmed that the investment will be profitable for the company.

4.7. Female CEO and Firm Performance

The results show that female CEOs positively and significantly affect firm performance in the form of the return on assets. These results are consistent with the hypothesis of our research, and the research results of Amore et al. (2014) and Lam et al. (2013). However, they do not support the research results of Oldford et al. (2021). The results prove that even though companies led by female CEOs tend to be risk-averse, they can still efficiently manage the company assets and generate a 2.9% higher return on assets than companies led by male CEOs. The return on assets increases because female CEOs can increase their sales and reduce the costs of the company. According to social role theory, women have motherly qualities such as being careful, friendly, and giving a lot of attention, meaning that they can understand and build relationships with their customers (Eagly, 1987; Franke et al., 1997). Female CEOs can therefore increase the level of company sales. Second, female CEOs have a careful nature and better monitoring skills, meaning that they can reduce the possibility of loss and an increased cost (Jurkus et al., 2011; Frye & Pham, 2018). Reducing the costs and losses will increase the company profits. This study shows that behavioral finance theory is still relevant. This result shows that there is an error in the information process and bias by male CEOs which is shown by them taking higher risks but producing a lower return. These results are like those produced by Barber and Odean's (2001) research that men tend to overestimate and actively trade but underperform.

4.8. Master of Business Education and Firm Performance

The result shows CEOs with a master's level business education positively and significantly affect the return on assets. This means that companies led by CEOs with a master's in business education have a 3.3% higher return on assets than companies led by CEOs without a master's business education. The results of this study are consistent with our research hypothesis and the results of the work of King et al. (2016). This is because companies led by CEOs with a master's in business education have the ability to generate higher profits. They are more sophisticated when it comes to managing their financing and investing policies (Custódio & Metzger, 2014). Secondly, they are more aggressive when it comes to implementing strategies (King et al., 2016). They have a higher level of knowledge that they can use to read conditions and see opportunities that arise more precisely. This means that the company's ability to generate profits is greater as shown by the results of Lam et al. (2013), Custódio and Metzger (2014), and Green and Homroy (2018). The results of this study show that even though the masters-educated business CEOs avoid debt and invest in a higher capital expenditure, it can result in a higher return on assets. These results indicate that companies led by highly educated CEOs do not experience agency problems because of the indication of their avoidance of the bonding mechanism. They are neither overconfident nor do they overestimate because they successfully generate higher profits.

4.9. CEO Age and Firm Performance

The result shows that CEO age has no significant positive effect on return on assets. This indicates that the age of the CEO, both young and old, does not affect firm performance. This result supports neither our research hypothesis nor the results of Faccio et al. (2016). However, it does support the results of Lam et al. (2013). This is because the company's performance is more influenced by the CEO's cognitive abilities. Older CEOs have a memory of their experience of dealing with certain conditions which can then be used as a decision-making reference. This can improve the performance of the companies in a manner that is measured by the return on assets. Conversely, companies led by CEOs who are older can also produce a low ROA. CEOs who are older than 60 years old will experience a decline in their cognitive abilities, meaning that the accuracy of their estimations may decreases (Cline & Yore, 2016).

4.10. Company Characteristics and Financing Policy

The result shows that firm size positively and significantly affects the financing policy debt. The result shows that larger companies have a greater debt capacity. This result is consistent with the work of Titman and Wessels (1988), Rajan and Zingales (1995), Chen (2004), Faccio et al. (2016), and Rossi et al. (2017). According to Huang (2006), large companies tend to have a more stable cash flow. This means that the company is considered by banks to be better able to pay off any debt, therefore their debt capacity increases. According to Titman and Wessels (1988), Rajan and Zingales (1995), and Chen (2004), large companies tend to be "too big to fail" which then becomes a signal that is difficult to imitate by smaller companies. This signal will provide certainty to the creditor, and the creditor will provide a greater debt capacity in turn. Firm age negatively and significant affects debt. The longer the firm stands for, the lower the company debt will be. These results are in accordance with the results of the research by Faccio et al. (2016). New companies

tend to have less cash while long-established companies have a freer cash flow (Ross et al., 2010, p. 643), meaning that they have enough money to fund their operations.

4.11. Company Characteristics and Investing Policy

Firm size positively and significantly affects the investing policy of the capital expenditure. This means that larger companies have a greater level of investment in new fixed assets (capital expenditure). This result is in accordance with the work of Rossi et al. (2017) and Custódio and Metzger (2014). The bigger the company is, the richer and greater the ability to fund the investment in new fixed assets. Firm age has a non-significant positive effect on capital expenditure. This study shows that the companies' long-standing nature does not affect the capital expenditure. This result is not in accordance with the findings of Faccio et al. (2016). Long-established companies do not always have a lot of free cash flow to increase their investments and investment opportunities in turn.

4.12. Company Characteristics and Firm Performance

Firm size positively and significantly affects the return on assets. This result shows that the larger the company, the greater the ROA generated. This result supports the research results of Khan and Vieto (2013) and Lam et al. (2013). This result is because the larger the size of the company, the richer and bigger the assets that are managed. This creates an economy of scale. This reduces the production cost per unit due to the increased production levels (Ross et al., 2010, p.916), thus increasing the return on assets. Firm age positively and significant affects ROA. This result shows that the longer the company stands, the greater the profit generated. This is because the longer the company stands, the longer the products and brands of the company are known by the public, therefore it will have a greater number of sales because of the better brand image. In addition, they also have connections and business partners when it comes to their suppliers and the distribution of their products. This can produce lower costs. Finally, they have a lot of experience and data to deal with that involves various conditions, which means that the company can better predict the conditions and increase its return on assets.

5. CONCLUSION

Our research results show that female CEOs have a significant negative effect on interest-bearing debt, and a significant positive effect on firm performance. However, there is no significant effect of female CEOs on capital expenditure. We also found that CEO education negatively and significantly affects interest-bearing debt, but positively and significantly affects capital expenditure and performance. Meanwhile, CEO age has a significant negative influence on interest-bearing debt, but no significant influence on capital expenditure and performance.

The academic implication of our study is that the results of our study regarding the influence of female CEOs and CEO age on funding policies (interest-bearing debt) are still relevant and support behavioral finance theory. Conversely, the results of our study regarding the influence of a CEO's behavior when they have a business master's education such as an MM or MBA on funding policies (interest-bearing debt) are less relevant and not in accordance with behavioral finance theory. The

results of this study regarding the influence of the behavior of CEOs with a business master's education on investment policy (capital expenditure) is relevant and in accordance with behavioral finance theory, but not the results of our study about the influence of gender including female CEOs and CEO age. The results on the effect of a female CEO on firm performance in our research is consistent with behavioral finance theory, social role theory, and the results of the research by Barber and Odean (2001). The results of this study on the influence of the behavior of CEOs with the education of a business masters on company performance (return on assets) supports behavioral finance theory. The results of the work of Barber and Odean (2001) indicate that there is no overconfidence in CEOs with a business master's education such as an MM or MBA. This is where the CEOs with an MM or MBA can produce a higher return on assets than companies led by CEOs without an MM or MBA business master's education.

The managerial implications of the results of our study are that for the shareholders of manufacturing companies, our results can be used as a reference when they want to use shareholder voting rights at the GMS to elect CEOs. This will allow them to choose CEOs with a business master's education such as an MM or MBA. They can consider CEOs of the female gender. Likewise, for prospective investors, they may prefer to invest in a company with the same characteristics. For the managerial divisions of financial management inside manufacturing companies and financial advisors, they should pay attention to the CEO characteristics (female gender, master business education, and age) because there are differences when it comes to decision-making and the performance results. Certain characteristics can be used as references to predict performance and CEO decision-making.

Our study is limited by the total number of samples, specifically 65 manufacturing companies. It is expected that further research can increase the total sample of companies by adding to the research period or using company samples from other non-financial sectors, not only the manufacturing sector. Our study results show that the R-square value in model 1 is 17.7%, while it is 13.6% in model 2 and 13.3% in model 3. Further research is expected to be able to add other characteristic variables that may influence the decisions made in a company.

REFERENCES

Adams, R. B., & Funk, P. (2012). Beyond the glass ceiling: Does gender matter?. *Management Science*, *58*(2), 219-235.

Afrifa, G. A., & Tauringana, V. (2015). Corporate governance and performance of UK listed small and medium enterprises. *Corporate Governance*, *15*(5), 719-733.

Ahn, J. M. (2020). The hierarchical relationships between CEO characteristics, innovation strategy and firm performance in open innovation. *International Journal of Entrepreneurship and Innovation Management*, *24*(1), 31-52.

Altuwaijri, B. M., & Kalyanaraman, L. (2020). CEO education-performance relationship: Evidence from Saudi Arabia. *The Journal of Asian Finance, Economics, and Business*, *7*(8), 259-268.

Amore, M. D., Garofalo, O., & Minichilli, A. (2014). Gender interactions within the family firm. *Management Science*, *60*(5), 1083-1097.

Amran, N. A., Yusof, M. A. M., Ishak, R., & Aripin, N. (2014). Do characteristics of CEO and chairman influence government-linked companies performance?. *Procedia-Social and Behavioral Sciences*, *109*, 799-803.

Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *The quarterly journal of economics*, *116*(1), 261-292.

Bautista, M. C. G., De Leon, M. M., & Nano IV, R. J. R. (2020). Women on Boards of Philippine Corporations: Quantitative Explorations. *International Journal of Business and Society*, *21*(1), 369-386.

Beber, A., & Fabbri, D. (2012). Who times the foreign exchange market? Corporate speculation and CEO characteristics. *Journal of Corporate Finance*, *18*(5), 1065-1087.

Belenzon, S., Shamshur, A., & Zarutskie, R. (2019). CEO's age and the performance of closely held firms. *Strategic Management Journal*, *40*(6), 917-944.

Bertrand, M., & Schoar, A. (2003). Managing with style: The effect of managers on firm policies. *The Quarterly journal of economics*, *118*(4), 1169-1208.

Biswas, S. (2021). Female directors and risk-taking behavior of Indian firms. *Managerial Finance*, *47*(7), 1016-1037

Burney, R. B., James, H. L., & Wang, H. (2021). Working capital management and CEO age. *Journal of Behavioral and Experimental Finance*, *30*, 100496.

Chancharat, S., Detthamrong, U., & Chancharat, N. (2019). Board structure, political connection and firm performance: Evidence from Thailand. *International Journal of Business and Society*, *20*(3), 1096-1111.

Cline, B. N., & Yore, A. S. (2016). Silverback CEOs: Age, experience, and firm value. *Journal of Empirical Finance*, *35*, 169-188.

Chandren, S., Qaderi, S. A., & Ghaleb, B. A. A. (2021). The influence of the chairman and CEO effectiveness on operating performance: Evidence from Malaysia. *Cogent Business & Management*, *8*(1), 1935189.

Chen, J. J. (2004). Determinants of capital structure of Chinese-listed companies. *Journal of Business Research*, *57*(12), 1341-1351.

Chua, M., Ab Razak, N. H., Nassir, A. M., & Yahya, M. H. (2021). Dynamic capital structure in Indonesia: Does the education and experience of CEOs matter?. *Asia Pacific Management Review*. Article in press.

Custódio, C., & Metzger, D. (2014). Financial expert CEOs: CEO′ s work experience and firm′ s financial policies. *Journal of Financial Economics*, *114*(1), 125-154.

Dah, M. A., Jizi, M. I., & Kebbe, R. (2020). CEO gender and managerial entrenchment. *Research in International Business and Finance*, *54*, 101237.

De Masi, S., Słomka-Gołębiowska, A., & Paci, A. (2021). Women on boards and monitoring tasks: an empirical application of Kanter's theory. *Management Decision, 59*(13), 56-72.

Deloitte. (2016). *Woman in the boardroom: a global perspective* (5th ed). Global Center for corporate governance. https://www2.deloitte.com/content/dam/Deloitte/us/Documents/center-for-corporate-governance/us-women-in-the-boardroom-a-global-perspective-fifth-edition.pdf

Donkers, B., Melenberg, B., & Van Soest, A. (2001). Estimating risk attitudes using lotteries: A large sample approach. *Journal of Risk and uncertainty*, *22*(2), 165-195.

Eagly, A. H. (1987). *Sex differences in social behavior: A social-role interpretation.* New York: Psychology Press.

Eduardo, M., & Poole, B. (2016). CEO age and gender: Subsequent market performance. *Cogent Business & Management*, *3*(1), 1146389.

Faccio, M., Marchica, M. T., & Mura, R. (2016). CEO gender, corporate risk-taking, and the efficiency of capital allocation. *Journal of Corporate Finance*, *39*, 193-209.

Fariha, R., Hossain, M. M., & Ghosh, R. (2021). Board characteristics, audit committee attributes and firm performance: empirical evidence from emerging economy. *Asian Journal of Accounting Research*. Article in press.

Ferris, S. P., Javakhadze, D., & Rajkovic, T. (2017). CEO social capital, risk-taking and corporate policies. *Journal of Corporate Finance*, *47*, 46-71.

Franke, G. R., Crown, D. F., & Spake, D. F. (1997). Gender differences in ethical perceptions of business practices: a social role theory perspective. *Journal of applied psychology*, *82*(6), 920.

Frye, M. B., & Pham, D. T. (2018). CEO gender and corporate board structures. *The Quarterly Review of Economics and Finance, 69*, 110-124.

Fortune.com (2017). *The 2017 Fortune 500 Includes a Record Number of Women CEOs*. https://fortune.com/2017/06/07/fortune-women-ceos/

García, C. J., & Herrero, B. (2021). Female directors, capital structure, and financial distress. *Journal of Business Research, 136*, 592-601.

Garcia-Blandon, J., Argilés-Bosch, J. M., & Ravenda, D. (2019). Exploring the relationship between CEO characteristics and performance. *Journal of Business Economics and Management*, *20*(6), 1064-1082.

Gottesman, A. A., & Morey, M. R. (2010). CEO educational background and firm financial performance. *Journal of Applied Finance*, *20*(2), 70-83.

Gounopoulos, D., Loukopoulos, G., & Loukopoulos, P. (2021). CEO education and the ability to raise capital. *Corporate Governance: An International Review*, *29*(1), 67-99.

Graham, J. R., Li, S., & Qiu, J. (2012). Managerial attributes and executive compensation. *The Review of Financial Studies*, *25*(1), 144-186.

Green, C. P., & Homroy, S. (2018). Female directors, board committees and firm performance. *European Economic Review*, *102*, 19-38.

Gupta, N., & Mahakud, J. (2020). CEO characteristics and bank performance: evidence from India. *Managerial Auditing Journal*, *35*(8), 1057-1093.

Gupta, G., Mahakud, J., & Verma, V. (2020). CEO's education and investment–cash flow sensitivity: an empirical investigation. *International Journal of Managerial Finance*, *17*(4), 589-618.

Hidayatulloh, M. S., & Setiawan, R. (2020). Cash Flow, Investment, and Internationalisation Strategy. *International Journal of Innovation, Creativity and Change, 13*(4), 889–900.

Hoang, T. T., Nguyen, C. V., & Van Tran, H. T. (2019). Are female CEOs more risk averse than male counterparts? Evidence from Vietnam. *Economic Analysis and Policy, 63*, 57-74.

Huang, G. (2006). The determinants of capital structure: Evidence from China. *China Economic Review*, *17*(1), 14-36.

Huang, J. & Kisgen, D.J. (2013). Gender and corporate finance: Are male executives overconfident relative to female executives?. *Journal of Financial Economics*, *108*(3), 822-839.

Indonesia. (2007). *The Law of the Republic of Indonesia number 40: limited liability company*. http://www.flevin.com/id/lgso/translations/Laws/Law%20No.%2040%20of%202007%20on%20Limited%20Liability%20Companies%20(BKPM).pdf

Ismail, K. N. I. K., Mustapa, I. R., Abd, I. M., & Abdullah, S. N. (2019). Gender boardroom quotas: a survey of Malaysian corporate directors. *International Journal of Business and Society*, *20*(3), 968-968.

Jalbert, T., Rao, R. P., & Jalbert, M. (2002). Does school matter? An empirical analysis of CEO education, compensation, and firm performance. *International Business and Economics Research Journal*, *1*(1), 83-98.

Jurkus, A. F., Park, J. C., & Woodard, L. S. (2011). Women in top management and agency costs. *Journal of Business Research*, *64*(2), 180-186.

Kalkhouran, A. A. N., Nedaei, B. H. N., & Rasid, S. Z. A. (2017). The indirect effect of strategic management accounting in the relationship between CEO characteristics and their networking activities, and company performance. *Journal of Accounting & Organizational Change. 13*(4), 471-491.

Kaur, R., & Singh, B. (2019). Do CEO characteristics explain firm performance in India?. *Journal of Strategy and Management*, *12*(3), 409-426.

Kaur, N., & Singh, V. (2021). Empirically examining the impact of corporate social responsibility on financial performance: evidence from Indian steel industry. *Asian Journal of Accounting Research*, *6*(2), 134-151.

Khan, W. A., & Vieito, J. P. (2013). CEO gender and firm performance. *Journal of Economics and Business*, *67*, 55-66.

Khaw, K. L. H., Nordin, S., & Wong, W. C. (2019). Firm risk and corporate policies: From the Shariah certification perspective. *International Journal of Business and Society*, *20*(3), 1257-1275.

King, T., Srivastav, A. & Williams, J.(2016). What's in an education? Implications of CEO education for bank performance. *Journal of Corporate Finance*, *37*, 287-308.

Lam, K. C., McGuinness, P. B., & Vieito, J. P. (2013). CEO gender, executive compensation and firm performance in Chinese-listed enterprises. *Pacific-Basin Finance Journal*, *21*(1), 1136-1159.

Liu, C., & Jiang, H. (2020). Impact of CEO characteristics on firm performance: evidence from China listed firms. *Applied Economics Letters*, *27*(14), 1-5.

Liu, T., Wei, Z. & Xie, F. (2014). Do women directors improve firm performance in China? *Journal of Corporate Finance, 28*, 169-184.

Malm, J., Adhikari, H. P., Krolikowski, M. W., & Sah, N. B. (2021). The old guard: CEO age and corporate litigation. *Journal of Behavioral and Experimental Finance*, *31*, 100545.

Manner, M. H. (2010). The impact of CEO characteristics on corporate social performance. *Journal of business ethics*, *93*(1), 53-72.

Mohammad, H. S., & Bujang, I. (2019). Does Intellectual Capital Influence Firms' Financial Performance? A Comparative Analysis into Three Malaysian Industries. *International Journal of Business and Society*, *20*(1), 260-276.

Muller-Kahle, M. I., & Schiehll, E. (2013). Gaining the ultimate power edge: Women in the dual role of CEO and Chair. *The Leadership Quarterly*, *24*(5), 666-679.

Naseem, M. A., Lin, J., ur Rehman, R., Ahmad, M. I., & Ali, R. (2020). Does capital structure mediate the link between CEO characteristics and firm performance?. *Management Decision, 58*(1), 164-181.

Nazir, A., Azam, M., & Khalid, M. U. (2021). Debt financing and firm performance: empirical evidence from the Pakistan Stock Exchange. *Asian Journal of Accounting Research*, *6*(3), 324-334.

Nelson, J. (2005). Corporate governance practices, CEO characteristics and firm performance. *Journal of Corporate Finance*, *11*(1-2), 197-228.

Nguyen, P., Rahman, N., & Zhao, R. (2018). CEO characteristics and firm valuation: a quantile regression analysis. *Journal of Management & Governance*, *22*(1), 133-151.

Oldford, E., Ullah, S., & Hossain, A. T. (2021). A social capital view of women on boards and their impact on firm performance. *Managerial Finance, 47*(4), 570-592.

Olsen, B. C., Sisodiya, S. R., & Swisher, J. (2016). A note on assessing the relation between CEO characteristics and stock performance: A lpha A bove R eplacement. *Accounting & Finance*, *56*(3), 787-802.

Ozkan, A. (2001). Determinants of capital structure and adjustment to long run target: evidence from UK company panel data. *Journal of Business Finance and Accounting*, *28*(1-2), 175-198.

Pasaribu, P. (2017). Female directors and firm performance: Evidence from UK listed firms. *Gadjah Mada International Journal of Business*, *19*(2), 145-166.

Peni, E. (2014). CEO and Chairperson characteristics and firm performance. *Journal of Management & Governance*, *18*(1), 185-205.

Peterson, S. J., Galvin, B. M., & Lange, D. (2012). CEO servant leadership: Exploring executive characteristics and firm performance. *Personnel Psychology*, *65*(3), 565-596.

Rajan, R., & Zingales, L. (1995). What Do We Know about Capital Structure? Some Evidence from International Data. *Journal of Finance, 50,* 1421-1460.

Ross, S. A., Westerfield, R. W., & Jaffe, J. (2010). *Corporate Finance*. McGrawHill.

Rossi, F., Hu, C., & Foley, M. (2017). Women in the boardroom and corporate decisions of Italian listed companies: Does the "critical mass" matter?. *Management Decision*, *55*(7), 1578-1595.

Saidu, S. (2019). CEO characteristics and firm performance: focus on origin, education and ownership. *Journal of Global Entrepreneurship Research*, *9*(1), 1-15.

Serfling, M.A. (2014). CEO age and the riskiness of corporate policies. *Journal of Corporate Finance*, *25*, 251-273.

Setiawan, R., & Agustin, R. (2018). Industrial diversification and firm performance of manufacturing: Does efficiency matter? *Trikonomika*, *17*(2), 72–77.

Setiawan, R., Handiliastawan, I., & Jafar, R. (2020). Commissioner board characteristics, ownership concentration, and corporate performance. *Jurnal Keuangan dan Perbankan, 24*(2), 131-141.

Setiawan, R., & Rachmansyah, A. (2019). Firm Characteristics, Macroeconomic Variables and Cash Holdings in Indonesia and Singapore. *International Journal of Innovation, Creativity and Change*, *9*(8), 265–286.

Shen, Y., Wallace, D., Reddy, K., & Ramiah, V. (2021). An investigation of CEO characteristics on firm performance. *Accounting & Finance*. Article in press.

Singh, S. K., Basuki, B., & Setiawan, R. (2021). The Effect of Non-Performing Loan on Profitability: Empirical Evidence from Nepalese Commercial Banks. *Journal of Asian Finance, Economics and Business, 8*(4), pp. 709–716.

Soewarno, N., & Nugroho, D. A. (2020). Influence of CEO Characteristics to Firm Performance with CSR as A Mediation Variable. *Elementary Education Online*, *19*(4), 403-417.

Sumarta, N. H., Prabowo, M. A., Amidjaya, P. G., Supriyono, E., & Prameswari, A. P. (2021). CEO Characteristics and Environmental Performance: Evidence from Indonesian Banks. *International Journal of Business and Society*, *22*(2), 1015-1033.

Tejedo-Romero, F., Rodrigues, L. L., & Craig, R. (2017). Women directors and disclosure of intellectual capital information. *European Research on Management and Business Economics*, *23*(3), 123-131.

Terjesen, S., Couto, E. B., & Francisco, P. M. (2016). Does the presence of independent and female directors impact firm performance? A multi-country study of board diversity. *Journal of Management & Governance*, *20*(3), 447-483.

Ting, I. W. K., Kweh, Q. L., & Hoanh, L. T. H. (2018). Board meeting frequency and financial performance: A case of listed firms in Vietnam. *International Journal of Business and Society*, *19*(2), 464-472.

Titman, S., & Wessels, R. (1988). The Determinants of Capital Structure Choice. *Journal of Finance, 43*, 1-19.

Tran, C. D., Minh, L. P. T., & Wang, J. Y. (2021). The influence of female leadership towards performance: evidence from Western European financial firms. *International Journal of Business and Society*, *22*(2), 513-531.

Vestal, A., & Guidice, R. (2019). The determinants and performance consequences of CEO strategic advice seeking. *Journal of General Management*, *44*(4), 232-242.

Vintilă, G., Onofrei, M., & Gherghina, Ş. C. (2015). The effects of corporate board and CEO characteristics on firm value: Empirical evidence from listed companies on the Bucharest stock exchange. *Emerging Markets Finance and Trade*, *51*(6), 1244-1260.

Vu, T. H., Van-Duy, N., Ho, T., & Vuong, Q. H. (2019). Determinants of Vietnamese Listed Firm Performance: Competition, Wage, CEO, Firm Size, Age, and International Trade. *Journal of Risk and Financial Management*, *12*(2), 1-19.

Wang, G., Holmes Jr, R. M., Oh, I. S., & Zhu, W. (2016). Do CEOs matter to firm strategic actions and firm performance? A meta-analytic investigation based on upper echelons theory. Personnel Psychology, 69(4), 775-862.

Wang, X., Deng, S., & Alon, I. (2021). Women executives and financing pecking order of GEM-listed companies: Moderating roles of social capital and regional institutional environment. *Journal of Business Research, 136*, 466-478.

Wijaya, L. I., Narsa, I. M., Irwanto, A., & Setiawan, R. (2021). Are investors' desires for dividend increases stronger than dividend initiation?. *International Journal of Trade and Global Markets*, *14*(6), 559-579.