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Article

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The Moderating Role of CEO Age on the Relationship Between CEO Characteristics and Tobin's Q

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Abstract

This study aims to analyze the impact of chief executive officer (CEO) characteristics (including gender, ownership, duality, and tenure) on the Tobin's Q value of firms, while considering the moderating role of the CEO's age in this relationship. Tobin's Q is used as a variable to evaluate the market efficiency of listed companies. The data, comprising 380 listed companies on the Vietnam stock market from 2013-2022, were analyzed using pooled ordinary least squares (OLS), fixed effects model (FEM), and random effects model (REM) regressions. The results indicate that firms with male CEOs exhibit a negative effect on the Tobin's Q value. Interestingly, companies with CEOs owning less than 1% of the stock demonstrate higher market efficiency compared to those with CEOs owning 1% or more. Conversely, dual CEOs have a negative effect on firms' market performance. Furthermore, from a moderating perspective, CEO's age strengthens the impact of CEO tenure on Tobin's Q value but weakens the effect of CEO duality on market efficiency. The findings suggest that listed companies should separate the CEO and board chairperson positions. Investors should pay closer attention to firms' governance structure and carefully consider CEO-related issues when making investment decisions to minimize risks and maximize returns. Additionally, the State Securities Commission must rigorously regulate listed companies that violate information disclosure guidelines for the stock market.

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1. Introduction

According to Dierickx and Veneziano (2008), a CEO is a crucial and significant person with the highest executive management position in a firm. Indeed, the CEO is responsible for making all crucial decisions, setting strategic objectives, and controlling and monitoring the company's operations. One could say that the CEO may cause and be responsible for the success or failure of a company. The debate about the CEO's influence on a company's performance concerns not only their authority, but also a number of characteristics, such as the CEO's age, gender, and proportion of company ownership held (Buallay et al., 2017; Peng et al., 2007; Suriawinata & Nurmalita, 2022; Wang et al., 2022). Studies on the relationship between CEO characteristics and firm performance are quite diverse and yet reach consensus. In addition, they vary in terms of the performance metrics used to evaluate firm performance, measuring either financial performance based on return on equity (ROE) and return on assets (ROA) (Ahmed & Hamdan, 2015) or market performance based on Tobin's Q (Kramaric et al., 2016; Singh et al., 2018), or both (Buchdadi et al., 2019; Harvey Pamburai et al., 2015; Kiel & Nicholson, 2003).

The current study employs Tobin's Q as a measure of firm market performance, since it is a suitable proxy that reflects the market's expectation of a firm's future earnings (Kramaric et al., 2016). Further, adding to the few empirical studies conducted in the Vietnamese context, this study examines the impact of CEO characteristics on Tobin's Q. In addition, the moderating effect of CEOs' age in this relation is explored, which is a completely novel research endeavour. Moreover, this paper highlights some practical implications for stakeholders, such as listed companies, investors, and related government agencies. For instance, listed companies can perform better by separating the positions of the CEO and the chairman of the board and thus monitoring the board of director's activities more effectively. Investors, for their part, must pay more attention to firms' governance structure and carefully consider issues related to CEOs to choose the right companies to buy stocks from for maximizing returns and minimizing risks. Finally, the State Securities Commission must thoroughly grasp and strictly handle listed companies that violate information disclosure guidelines for the stock market.

The remainder of the paper is organized as follows: Section 2 briefly overviews previous research findings on CEO characteristics and their effect on firm performance; the study's hypotheses are developed accordingly. The research framework, definition of variables, and theoretical equations are then presented in Section 3. Descriptive statistics is given in Section 4, followed by model testing in Section 5. The discussion and limitations are presented in Section 6. The conclusion and recommendations are provided in the final section.

2. Literature Review

2.1 CEOs' Gender and Firm Performance

Gender is one of the crucial characteristics of CEOs which may significantly impact firms' performance. According to Smith et al. (2006), women CEOs bring more benefits to the company than male counterparts,

because they have experience in many different areas of work and life and can solve problems more calmly than men. Likewise, Vieito and Khan (2012) suggest that female CEOs perform better than male CEOs at boosting profitability, improving their companies' efficiency in the market, and reducing business risks; indeed, there is a difference in risk tolerance between female and male CEOs (Vandegrift & Brown, 2005). According to Vieito and Khan (2013), when the CEO is a female, the firm risk level is smaller than when the CEO is a male. Kramaric et al. (2016) too have found that female CEOs increase their companies' performance (measured through Tobin's Q).

However, other studies stated that female CEOs are less effective than males in managing companies (Amran, 2011). This is because female executives have less human capital and experience and fewer financial resources and relationships than men. Singhathep and Pholphirul (2015) even conclude that female CEOs negatively impact firm performance in terms of revenue and profit. Therefore, the first research hypothesis is proposed as follows:

Hypothesis H1: The CEO's gender affects the firm's Tobin's Q.

2.2 CEO Ownership and Firm Performance

Firms operating as joint stock listed companies have a separation between ownership and control, resulting in a distinction between shareholders and managers (He & Sommer, 2010). However, according to the agency theory, managers often act and decide based on their interests. They usually do not focus on maximizing shareholders' value and are less likely to invest in long-term development.

CEO ownership has a dominant influence on important board decisions (Zhang et al., 2016). For instance, using Tobin's Q, Onali et al. (2016) found that CEO ownership affects firm performance, which contradicts a prior finding by Fahlenbrach (2009). According to the authors, a CEO holding a controlling share significantly affects the company's dividend policy. While differences in governance frameworks across countries have led to heterogeneous research results. Nevertheless, based on previous research results, a correlation between CEO ownership and Tobin's Q value can be expected. The second hypothesis is thus formulated as follows.

Hypothesis H2: The level of CEO ownership influences Tobin's Q.

2.3. CEO Duality and Firm Performance

Two conflicting perspectives (based on the agency and stewardship theories) define the relationship between CEO duality and business firm performance (Mubeen et al., 2021; Singh et al., 2018). On the one hand, the argument based on agency theory is that a CEO with dual powers provides for a more robust decision-making structure that results in enhanced firm performance (Mubeen et al., 2021; Youn et al., 2015). On the other hand, the stewardship theory argument is that such a CEO could take advantage of the dual role to pursue personal gains rather than maintaining firm benefit as the top priority (Brammer & Millington, 2006; Mubeen et al., 2021).

Indeed, some studies assert that CEO duality can negatively impact firm performance (Moeller et al., 2004; Mubeen et al., 2021). According to Elsayed and Paton (2009), further, CEO duality reduces the effectiveness of the CEO's control and thus negatively impacts the company's performance. Bhatt and

Bhattacharya (2015) and Kapil and Mishra (2019) additionally show that a CEO concurrently serving as chairman of the BoD can reduce the profitability of their company; this result contradicts Moradi et al. (2012). However, other studies suggest no significant impact of CEO duality (Abbas et al., 2019).

Conversely, others have provided evidence of a positive association between CEO duality and firm performance (Javeed & Lefen, 2019; Kapil & Mishra, 2019). For instance, a CEO concurrently serving as the chairman of the board of directors (BoD) has an increased ability to monitor the company's operations, limiting potential conflicts of interest between the CEO and the BoD. Moreover, such a CEO will concentrate power on the company's top leadership so that they can make business decisions quickly.

In the current study, duality is expected to affect Tobin's Q; the following hypothesis is thus proposed.
Hypothesis H3: CEO duality has a negative effect on Tobin's Q.

2.4. CEO Tenure and Firm Performance

The advantage of a CEO with a long tenure is that they have significant work experience and life experience. Therefore, they can apply their experiences to direct the firm in the best manner to increase its value. According to Hu and Alon (2014), authorizing CEO duality and giving the CEO a long tenure positively affects firm market value in China; this finding supports the stewardship theory.

Indeed, the number of years in the office reflects the duration over which a CEO has managed their company. The longer the number of years in office, the more the CEO understands and the more significant their experience and skills to run the company. In addition, the number of years spent in the office is likely directly proportional to the CEO's confidence level. CEOs can expand business relationships and better understand the competitors in the market because they can make decisions that benefit the company. One can reasonably expect that the larger the number of years spent by a CEO in an office, the greater will be the improvement in their company's market value. The fourth hypothesis of the study is as follows.
Hypothesis H4: The CEO's tenure has a positive impact on the Tobin's Q.

2.5. The Moderating Role of the CEO's Age

The following hypotheses are proposed regarding the CEO's age.
Hypotheses H5–H8: The CEO's age moderates the impact of their gender (CEOgen), ownership (CEOown), duality (CEOdual), and tenure (CEOtenure) on the Tobin's Q value.

3. Research Model, Variables, and Theoretical Equations

3.1 Research Framework

Based on the literature review and hypotheses mentioned earlier, Figure 1 presents the research framework with the corresponding hypotheses, in which CEOage is employed as a moderating variable. The research variables are further explained in Table 1.
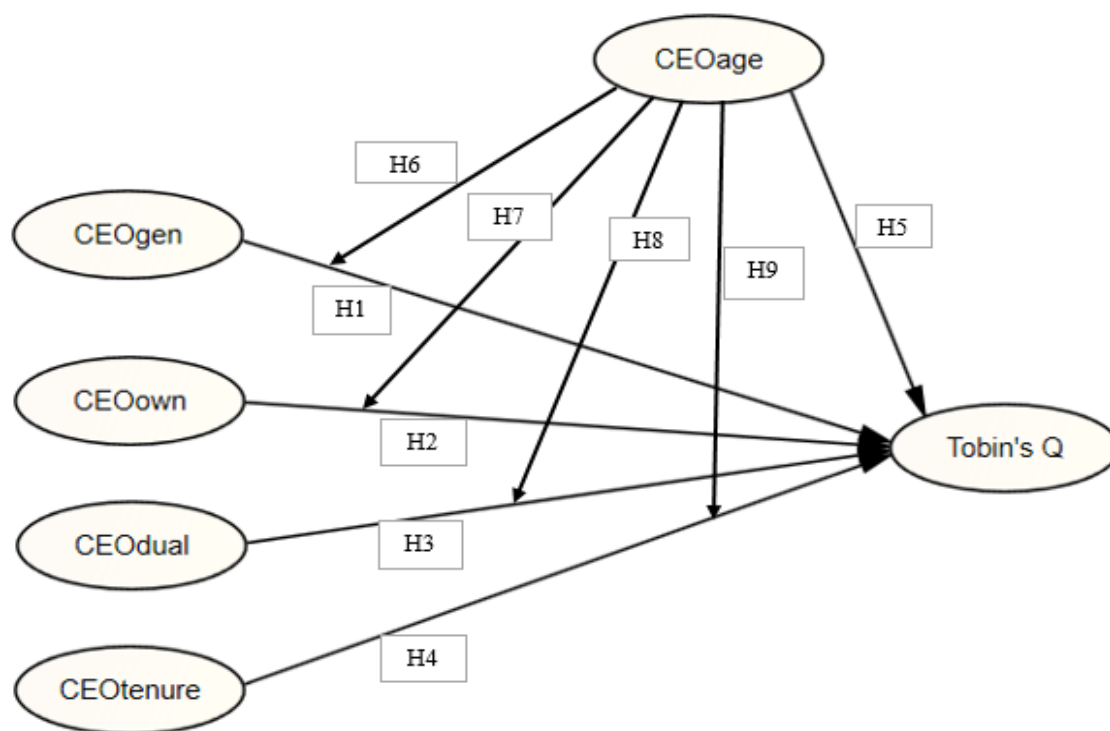
Figure 1: Research framework

Source: Author's illustration

3.2 Variables

Table 1 presents the definition and measurement of the research variables. Accordingly, the dependent, independent, and moderating variables are further clarified.

Table 1: Variable definition

Variable Code	Variable Explanation	Measurement	Sources
Dependent variable			
Tobin's Q	In this study, Tobin's Q is considered as a financial market-based measure of firm performance.	Calculated by dividing the market value of the firm by the replacement value of the firm's assets.	Tobin (1969), Singh et al. (2018), Harvey Pamburai et al. (2015), Almoneef & Samontaray (2019), Buallay et al. (2017)
Independence Variable			
CEOgen	Gender of CEO	Dummy variable: if the CEO is male, the value is 1; the value is 0 otherwise	Almoneef & Samontaray (2019)
CEOown	Percentage of CEO ownership	Dummy variable: equals 1 if the CEO owns >=1 % of company shares; it is 0 if the CEO owns less than 1% of the firm's shares	Peng et al. (2007), Azeez (2015), Bhatt & Bhattacharya (2015), Bhagat & Bolton (2019)

Variable Code	Variable Explanation	Measurement	Sources
CEOdual	CEO is concurrent a member of the BoD	Dummy variable: equals 1 if the CEO is also the chairman of the board, and 0 otherwise	Peng et al. (2007), Azeez (2015), Bhatt & Bhattacharya (2015), Bhagat & Bolton (2019), Buallay et al. (2017), Singh et al. (2018), Christensen et al. (2010).
CEOtenure	Duration (in years) spent in the CEO position	Dummy variable: equals 1 if the CEO tenure is over 5 years, and 0 otherwise if CEO tenure < = 5 years	Singh et al. (2018), Buallay et al. (2017)
Moderating Variable			
CEOage	The age of the CEO	Real age of CEO	Ling et al. (2007), Suriawinata & Nurmalita (2022).

3.3 Theoretical Equations

Table 2: Theoretical regression equations

Equation 1	$Tobin's\ Q_{i,t} = \beta_0 + \beta_1 CEOgen_{i,t} + \beta_2 CEOown_{i,t} + \beta_3 CEOdual_{i,t} + \beta_4 CEOtenure_{i,t} + \varepsilon_{i,t}$	(1)
Equation 2	$Tobin's\ Q_{i,t} = \beta_0 + \beta_1 CEOgen_{i,t} + \beta_2 CEOown_{i,t} + \beta_3 CEOdual_{i,t} + \beta_4 CEOtenure_{i,t} + \beta_5 CEOage_{i,t} + \varepsilon_{i,t}$	(2)
Equation 3	$Tobin's\ Q_{i,t} = \beta_0 + \beta_1 CEOgen_{i,t} + \beta_2 CEOown_{i,t} + \beta_3 CEOdual_{i,t} + \beta_4 CEOtenure_{i,t} + \beta_5 CEOage_{i,t} + \beta_6 CEOgen_{i,t} * CEOage_{i,t} + \beta_7 CEOown_{i,t} * CEOage_{i,t} + \beta_8 CEOdual_{i,t} * CEOage_{i,t} + \beta_9 CEOtenure_{i,t} * CEOage_{i,t} + \varepsilon_{i,t}$	(3)

4. Results and Discussion

Table 3 presents the descriptive statistics for the independent, dependent, and moderating variables. Tobin's Q has a mean value of 1.401 and a median value of 1.134, meaning that on average, the market value of the sample firms exceeds the value of the companies' recorded assets. CEOgen has a mean value of 0.951, indicating that most CEOs of the sample firms are male. CEOown has a mean value of 0.441, indicating that less than 50% of the firms' CEOs own at least 1% of company shares. For CEOdual, the mean value is 0.321, indicating that the CEO and board chairman positions are held by the same individual in less than 50% of the firms. Further, CEOtenure has a mean value is 0.424; this means that less than 50% of the firms' CEOs have served their companies over five years. With regard to CEOage, the oldest CEO is 74 years old, and the youngest is 33. In addition, CEOage has a mean value of 46.230, indicating that most CEOs are middle-aged.

Table 3: Descriptive statistics

Descriptions	CEOgen	CEOown	CEOdual	CEOtenure	CEOage	Tobin's Q
Mean	0.951	0.441	0.321	0.424	46.230	1.401
Median	1.000	0.000	0.000	0.000	48.000	1.134
Maximum	1.000	1.000	1.000	1.000	74.000	3.275
Minimum	0.000	0.000	0.000	0.000	33.000	0.128
Std. Dev.	0.214	0.496	0.467	0.494	13.568	0.893
No. of firms	380	380	380	380	380	380
No. of Obs.	3603	3603	3603	3603	3603	3603

Note: Table 3 - Sample: 2013-2022, - Periods included: 10

5. Hypotheses Testing

5.1. Pooled Model, Fixed Effects Model, and Random Effects Model

The pooled ordinary least squares (OLS) model, fixed-effects model (FEM), and random-effects model (REM) are outlined in this section. In addition, some suitable tests were conducted to select the best model for this study.

The pooled OLS model assumes that there are no unobservable entity-specific effects, meaning that all entities in the data set are considered to have the same underlying characteristics. Accordingly, it is assumed that this model is constant across individuals and there is no dependence within individual groups (firms). In other words, the pooled OLS model neglects heterogeneity.

FEM takes heterogeneity into consideration, meaning that the intercept of everyone would be time-variant. However, this model assumes that the slop coefficients are time-invariant, so the estimated coefficients of the model cannot be biased because of omitted time-invariant characteristics.

REM, also called an error components model (ECM) or generalized least squares (GLS) technique, assumes an intercept difference for everyone, and the intercept is a random variable. In this model, the difference between intercepts is compiled by the error terms of each firm.

The results of the three models are presented in Table 4.

Table 4: Results of the pooled model, FEM, and REM

Variables	OLS Pooled Model			Fixed-Effects Model (FEM)			Random-Effects Model (REM)		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
Constant	0.610428***	0.272391***	0.210823**	0.949792***	0.823626***	0.698979***	0.689028***	0.413676***	0.332504***
	(8.625304)	(2.877313)	(2.205394)	(8.852329)	(5.968662)	(4.920558	(8.489749)	(3.902943)	(3.094193)
CEOgen	-0.145578**	-0.139202**	-0.116969^{ns}	-0.335228***	-0.337736***	-0.350843***	-0.185469**	-0.180578**	-0.172344**
	(-2.058524)	(-1.975623)	(-1.642702)	(-3.132554)	(-3.156120)	(-3.272118)	(-2.317354)	(-2.280564)	(-2.161134)
CEOown	-0.020397^{ns}	0.021307^{ns}	-0.025651^{ns}	-0.163126***	-0.169321***	-0.165472***	-0.045025^{ns}	-0.046844^{ns}	-0.050594
	(-0.615163)	(0.6455090)	(-0.774604)	(-3.135766)	(-3244546)	(-3.181326)	(-1.184676)	(-1.246259)	(-1.345317**)**
CEOdual	-0.195398***	-0.219678***	-0.214404***	-0.449729***	-0.457750***	-0.436206***	-0.270625***	-0.284030***	-0.275854***
	(-5.582114)	(-6.247116)	(-5.895362	(-9.228374)	(-9.334912)	(-8.793037)	(-6.977350)	(-7.335208)	(-6.942623)

Variables	OLS Pooled Model			Fixed-Effects Model (FEM)			Random-Effects Model (REM)		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
CEOtunure	0.117129***	0.082558**	0.042867 ns	0.083382**	0.073034*	0.022641 ns	0.102877***	0.078267**	0.033214
	(3.648860)	(2.530628)	(1.286664)	(2.197186)	(1.891807)	(0.571923)	(3.071779)	(2.306212)	(0.957582)
CEOage		0.007426***	0.008257***		0.002895 ns	0.005649***		0.006001***	0.007514***
		(5.350412)	(5.871933)		(1.453559)	(2.648576)		(3.890551)	(4.746588)
CEOgen_CEOage			-0.010138*			0.002185 ns			-0.006136 ns
			(-1.725126)			(0.309299)			(-0.999937)
CEOown_CEOage			0.003961 ns			0.005486 ns			0.005328 ns
			(1.314785)			(1.363295)			(1.640038)
CEOdual_CEOage			-0.006193*			-0.009581**			-0.007344**
			(-1.859288)			(-2.273196)			(-2.064635)
CEOtunure_CEOage			0.015539***			0.017941***			0.017032***
			(5.050449)			(5.036063)			(5.374984)
Observation	3603	3603	3603	3603	3603	3603	3603	3603	3603
F-statistic	11.57201***	15.05407***	1209646***	2.392557***	2.395653***	2.466493***	16.46061***	15.89817***	12.89553***
R-square	0.012702	0.020497	0.029409	0.221589	0.222100	0.229441	0.017971	0.021621	0.031291

Note: Table 4 ***: $p < 0.01$; **: $p < 0.05$; *: $p < 0.1$;   ns: not statistically significant; Values in brackets: t-statistic; Dependent variable: Tobin's Q

5.2. Selection of the Appropriate Model

5.2.1. Redundant Fixed-Effects Tests: Choice of the Better Model Between Pooled OLS and FEM

Null hypothesis (Hn): The pooled OLS model (restricted model) is appropriate.

Alternative hypothesis (Ha): The fixed-effects model (unrestricted model) is appropriate. Since the p-value of the redundant fixed-effects tests was less than 0.05, Hn was rejected, and Ha was accepted. This means that FEM is better than pooled OLS.

Table 5: Redundant Fixed-Effects tests

Effects Test	Statistics	d.f.	Prob.
Cross-section F	2.201410	(379.3214)	0.0000
Cross-section Chi-square	831.533815	379	0.0000

Note: Table *5* - Dependent Variable: Tobin's Q, - Method: Panel least squares, - Sample: 2013-2022, - Periods included: 10, - Cross-sections included: 380, - Total panel (unbalanced) observations: 3603

5.2.2. Hausman Test: Choice of the Better Model Between FEM and REM

The Hausman test was applied to choose the more appropriate model between FEM and REM:

Null hypothesis (Hn): The random-effects model is appropriate.

Alternative hypothesis (Ha): The fixed-effects model is appropriate.

According to Table 6, chi-squared = 64.358899, p-value = 0.000 < 0.05; thus, the test is significant. Therefore, H0 is rejected, which means that FEM is the most appropriate model.

Table 6: Correlated Random Effects – Hausman test

Test Summary	Chi-Squared Statistics	Chi-Squared d.f.	Prob.
Cross-section random	64.358899	9	0.0000

Note: Table 6 - Dependent Variable: Tobin' Q, - Method: Panel Least Squares, - Sample: 2013-2022, - Periods included: 10,

- Cross-sections included: 380, - Total panel (unbalanced) observations: 3603

Table 7: Results of hypotheses testing (Based on FEM)

Hypothesis	Hypothesized Path	Negative (-)/positive (+) effect	Significance
H1	CEOgen -> Tobin's Q	-	***
H2	CEOown -> Tobin's Q	-	***
H3	CEOdual -> Tobin's Q	-	***
H4	CEOtenure -> Tobin's Q	+	ns
H5	CEOage -> Tobin's Q	+	***
H6	CEOage x CEOgen -> Tobin's Q	+	ns
H7	CEOage x CEOown -> Tobin's Q	+	ns
H8	CEOage x CEOdual -> Tobin's Q	-	**
H9	CEOage x CEOtenure -> Tobin's Q	+	***

Note: Table 7 ***: $p < 0.01$; **: $p < 0.05$; *: $p < 0.1$;   ns: not statistically significant;

6. Discussion and Limitations

6.1. Discussion

Table 7 shows that the gender variable has a statistically significant and negative impact on the Tobin's Q value. In addition, the interaction effect of gender and age on Tobin's Q has no statistical significance (coefficient = 0.002185, t = 0.309299). Indeed, male CEOs (CEOgen = 1) have a negative effect on companies' market performance compared to female CEOs. This result can be explained by female CEOs' general preference for caution in making decisions, which can be effective in asymmetric information environments such as the stock market, especially in the context of Vietnam. Moreover, in the Vietnamese business environment, female CEOs generally have an advantage over men in business relationships, as well as advantages in terms of communication and public influence in the market.

The results further indicate that the variable CEOown has a statistically significant and negative effect on the Tobin's Q value. This exciting outcome means that companies with CEOs owning shares of less than 1% are more market-efficient than companies with CEOs owning shares of more than or equal to 1%. This finding can be explained by the fact that when CEOs own substantial company shares, their power is concentrated in their hands, leading them to act for personal goals instead of those of the majority of the company's shareholders. In addition, a CEO with concentrated power influences most of the crucial decisions in the company, which affects business results.

Echoing research findings from other markets and countries, Table 7 indicates that CEO duality negatively affects company performance from the market perspective. This outcome can be easily explained: CEOs who are concurrently the chairman of the BoD often have a high workload due to their effect on efficiency in executive decision-making. However, part-time CEOs are also affected by personal subjectivity when making administrative decisions, especially in cases where the CEO's decisions are based on personal interests.

The variable of tenure of the CEO (CEOtunure) was found to show a positive relationship with the Tobin's Q value. However, this relationship is not statistically significant in this study.

Finally, as Table 7 indicates, the CEO's age strengthens the impact of their tenure on the Tobin's Q value, but it weakens the influence of the CEO-duality variable (CEOdual) on firm performance in terms of corporate performance from a market perspective.

6.2. Limitations and Future Research Directions

As with other studies in this field, this study has several limitations. First, while focusing on the effects of the CEO's characteristics on Tobin's Q, this study does not consider the impact of BoD characteristics on Tobin's Q. In addition, the author also ignored metrics of a firm's financial performance (such as ROE and ROA) to concentrate on those measuring market performance (Tobin's Q). Second, the current work only examines the moderating role of the CEO's age in the aforementioned relationships. However, other factors that were not controlled in this study might also play sensitively moderating roles on the relationships between independent and dependent variables in the model, such as firm size and firm age. Third, blockholding may also impact Tobin's Q, since blockholders, who own at least 5% of a firm's shares or bonds, have critical power to affect the CEO's decisions. Therefore, future research should explore more standardized variables to gain complete insights. Finally, this study was conducted in Vietnam, where the market structure and legal frameworks for the stock market have been inefficient so far. Thus, the models must be tested in other markets or countries for more universal findings.

7. Conclusions and Practical Recommendations

7.1. Conclusions

This study was conducted to (1) analyse the impact of CEO characteristics (including gender, ownership, duality, and tenure) on the Tobin's Q value of firms and (2) consider the moderating role of the CEO's age in this relationship. Based on the experimental results from the FEM model, the following conclusions can be drawn.

First, male CEOs (CEOgen = 1) negatively affect a company's performance from a market perspective (measured by Tobin's Q) than do female CEOs. In addition, firms with CEOs owning shares less than 1% are more efficient in the market than those whose CEOs own shares greater than or equal to 1%. Moreover, CEO duality has a negative effect on company performance from a market perspective. Finally, in terms of influence moderation, the age of a CEO strengthens the impact of their tenure on the Tobin's Q value, yet it weakens the influence of CEO duality (CEOdual) on the performance of the enterprise from a market perspective.

7.2. Recommendations

The findings of this study have some practical implications for different stakeholders. These are highlighted below in the form of recommendations for three groups: listed companies, investors, and government agencies.

For listed companies: The operational objective of listed companies is to maximize their market value. Therefore, listed companies need to make efforts in governance to improve their market efficiency, paying special attention to regulations for executives. Specifically, listed companies may choose women for the position of CEO to minimize business risks, based on women's low propensity to take risks. In addition, separating the positions of the CEO and the chairman of the board could help in more effectively monitoring the board of director's activities. Moreover, companies can issue internal regulations to limit executives' share ownership percentage.

For investors: Individual and institutional investors invest in the stock market with different goals. Some investors participate in the market to collect shares of target companies to increase their share ownership ratio, thereby increasing their control over these companies. Further, some investors participate in speculation in the market to seek profits through capturing price differences or dividends. However, investors should prioritize investments in companies that have growth potential, sustainable profitability, and low liquidity risk. Therefore, in addition to using technical analysis and basing their investment decisions on their financial knowledge, each investor also needs to pay attention to firms' governance structure. It is necessary for investors to carefully consider issues related to the BoD and CEOs to choose the right companies to buy stocks from. Through monitoring issues related to corporate governance structure, investors can maximize investment returns and minimize risks when participating in the stock market.

For government agencies: In Vietnam's stock market, some listed companies still do not report the CEO's tenure in office, the CEO's share ownership ratio, and the crucial stockholders' ownership rate. In addition, the BoDs of some companies do not include independent members. This situation makes it difficult for market investors and researchers interested in corporate governance to access information on corporate governance. Therefore, state management agencies, especially the State Securities Commission, must tighten monitoring and regulation and strictly handle listed companies that violate information disclosure guidelines, for instance, through taking measures such as suspending trading in the days following a serious violation and delisting companies with severe violations in information disclosure.

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