

# IMPACT OF CEO'S CHARACTERISTICS ON FIRM PERFORMANCE: THE CASE OF VIETNAM\*

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## **Abstract:**

*Using a sample of 248 firms on Hanoi and Ho Chi Minh City stock exchanges, we shows that education level and tenure of the CEOs do not have any impact on the performance of Vietnamese firms. However, when the CEOs hold the undergraduate degree, tenure has a positive impact on the performance of Vietnamese firms. Firms with female CEOs realize a significantly lower operation efficiency compared to that of firms with male CEOs. Moreover, splitting CEO and chairperson roles has a positive impact on the performance of Vietnamese firms.*

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## **1. Introduction**

In corporations, chief executive officers (CEOs), who are responsible for maximizing the organizations' value, play a core role. They commonly have broad authority within the corporations and are in charge of the overarching leadership, strategy, and direction of their firm. CEOs are the leader and occupying the highest position in the power structure of corporations. Given the responsibility and power of CEOs, they are solely responsible for the success or failure of the organizations.

CEOs have a huge impact on firm performance. Specifically, CEOs' characteristics affect firm performance. In the modern economy, CEOs have 3 essential roles, including leadership, management, and entrepreneurship. Whether in life or business, characteristics of CEOs influence their behavior and decision making process in all the three essential roles. Thus, investigating the impact of CEOs' characteristics on firm performance is important for corporations in particular and the economies in general.

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To gain their positions, the CEOs need to have some certain characteristics, both observable and unobservable characteristics. As mentioned by Bhagat et al. (2010), it is, however, hard to identify and expensive to measure the potentially non-quantifiable characteristics such as leadership and team-building skills. As the result, the former ones which are objective and easily measurable are considered to be good proxies in assessing the top managers. This study aims to investigate the impact of CEOs' observable characteristics on Vietnamese firm performance.

Economic development is among Vietnam's top priorities. Along with the international economic integration, Vietnamese corporations face an increasingly competition. With the unique condition in Vietnam, the role and importance of CEOs are increasingly mentioned. In 2004, the Vietnamese Prime Minister signed a decision to select October 13 is the day to honor Vietnam entrepreneurs - the heroes and soldiers in the fiercely competitive market. Since 2005, when the first transaction on the Vietnam stock market was implemented and companies gradually approach international standards, the role of management team, especially the CEO, gained much attention. During the last 10 years, the term CEO became a popular phenomenon. In Vietnam, CEO has become a socially recognized and appreciated profession. Recently, studying about leadership styles of CEOs becomes one of the important areas that many domestic scholars are pursuing, especially the impact of CEO's characteristics on performance of firms.

Given the fact that CEOs are the most visible and powerful executive in

corporations, prior literature often ignores the power of CEOs in consideration. Particularly, prior literature often neglects the ability to freely make decision of CEOs on the performance of firms. Peni (2012) argues that "board chairs are often very experienced, highly educated long-term members of the company's administration, and they may have vast authority within their firm". Thus, it is easy to realize that CEOs are even more powerful if they are also the chair persons in corporations. "Should the roles of chairperson and CEO be separate?" is an important question that many members of the boards of directors are debating as they search for the optimal structure for corporate governance. Therefore, investigating the impact of the combination or splitting roles of chairperson and CEO on performance of firms might shed light on the issue.

By employing panel regression models on a sample of 248 firms on Hanoi and Ho Chi Minh City stock exchanges, this study shows that, in general, education level and tenure of the CEOs do not have any impact on the performance of Vietnamese firms. However, when the CEOs hold the undergraduate degree, tenure has a positive impact on the performance of Vietnamese firms. Firms with female CEOs realize a significantly lower operation efficiency compared to that of firms with male CEOs. Moreover, splitting CEO and chairperson roles has a positive impact on the performance of Vietnamese firms.

The paper is organized as follows. Section 1 is the introduction which briefly introduces the issue and the reason choosing this topic. Section 2 is literature review section. Section 3 presents hypotheses and methodology. The following section analyzes the findings. Section 5 concludes the paper.

## 2. Literature Review

In general, previous literature shows that the existence of female CEO significantly improve corporate governance and firm performance. According to Dallas (2002), Eagly and Carli (2003), and Schubert (2006), female CEO is likely to show superior leadership skills, owing to having better communication as well as listening skills. In addition, under contemporary conditions, women tend to show a leadership style which is more effective. As a result, differences in these features possibly help female-controlled firms outperform male-controlled firms. Earlier studies also suggest that as the business world is led by men, women have to demonstrate special talent in order to strive to achieve managerial positions. For that reason, women is likely to have to work harder than other to be nominated as a CEO, and thus, as being in these positions, women are more talented and devoted compared to the male executives. Consequently, it may lead to an improvement in firm performance (Fondas and Sassalos, 2000).

In many cases, a woman's reach to CEO position is depend on the achievement of high-level professional and academic qualifications (Adams et al., 2007) as well as an extensive array of business networks (Burress and Zucca, 2004). Moreover, women who gain the top positions appear to be younger, on average, than their male counterparts (Bures and Zucca, 2004). Krishnan and Parsons (2008) state that firms with high gender diversity in senior management are positively and significantly correlated with high earnings quality. After the IPO process, firms with more females in senior management are found to be more profitable and have higher stock returns than those with fewer females in senior management team.

On the other hand, several other studies show that the relationship between women executives and firm performance is not significant or even negative. Campbell and Vera (2008) find that female board members and firm value have no clear relationship. By investigating 4540 Korean firms in 2002, Lee and Marvel (2014) also conclude that gender of CEOs is not a valid determinant of firm performance. Dwyera et al. (2003) show that the impact of gender diversity on firm performance is dependent on the organizational context in which it resides and suggest that gender diversity in management should enhance performance for firms seeking growth.

There are three mutually non-exclusive ways that CEOs' education potentially impacts CEO ability. First, education could be a good implication of CEO's knowledge, perspective and ability to understand technical and abstract concepts. Second, the ones with better education tend to have the ability to persevere on challenging intellectual activities. Finally, the social networks acquired previously inside schools can be quite helpful professionally in the future. Kimberly and Evansiko (1981), Bantel and Jackson (1989), Hitt and Tyler (1991), and Wally and Baum (1994) find that CEOs with graduate degrees are more accomplished to process information and more flexible to change than those with lower educational attainment. They do implicitly argue that firms with highly educated CEOs have more likelihood to perform better than other firms.

On the other hand, Gottesman and Morey (2006) conclude that there is no evidence that firms with CEOs from more prestigious schools, which are measured by average SAT and GMAT scores, outperform those from less prestigious schools. In addition, a CEO with a

law degree or an MBA is likely to be irrelevant with better firm performance, although there is limited evidence that firms managed by a non-MBA degree have superior operating performance. Palia (2001) also conduct a research by identifying the top engineering and business schools, and set a dummy variable whether the CEO has a degree from any of these programs. The results showed an insignificant relationship between a high quality degree and the performance of firms.

CEOs' tenure seems to have significant impact on firm performance. Several previous studies suggest a positive relationship between CEO's tenure and firm performance. For instant, Baysinger and Hoskisson (1990) recommend that by the time a CEO hold his/her position, the executive is likely to have more firm-specific knowledge as well as a better ability to control and generate valuable resources, which may improve the financial performance of the firm. In contrast, researchers also document that a new hiring executive, however, may have a positive impact on firm performance (Huson et al., 2001). Additionally, Ryan and Wiggins (2001) indicate that CEOs with longer tenures tend to have entrenched positions, which then enable them to pursue personal interests, while probably harming firm performance. Simsek (2007) conducts a study to examine the intervening mechanisms that govern the influence of CEO tenure on firm performance. As individuals in the firm who are most significantly influenced by the CEO are members of the top management team, the CEO - Top management team interface is considered as one important intervening mechanism. To be specified, the author argues that CEO tenure indirectly influences performance through its direct influences on top management team risk-taking propensity

and the firm's pursuit of entrepreneurial initiatives. The final result from his test model is consistent with his argument.

There is mixed evidence on the relation between dual leadership and firm performance. Rechner and Dalton (1991) find a positive correlation between firm performance and separate leadership. Pi and Timme (1993) find a higher return on assets for those with separate titles. On the other hand, Brickley et al. (1997) show that firms with separate leadership do not perform better. Iyengar and Zampelli (2009) report no evidence that firms purposefully choose duality structures to optimize firm performance. Moreover, prior literature also analyze the performance consequences of a change in the board leadership structure. Baliga et al. (1996) find no evidence of changes in operating performance around changes in the board leadership structure. Dey et al. (2011) find that firms combining (splitting) the titles have better (worse) post-announcement performance.

### 3. Hypotheses and Methodology

#### 3.1. Hypotheses

According to Bhagat et al. (2010), educational background is defined according to the level of education qualification. The higher the education level is, the higher level of knowledge and intellectual ability a CEO is considered to possess. For that reason, we expect that the higher academic degree a CEO achieve results in better firm performance. In this paper, the educational level of CEOs is divided into two categories, postgraduate and undergraduate degrees. In order to test the hypotheses, two dummy variables are used. EDUDUM1 equals 1 if the CEO has postgraduate degrees and 0 otherwise. EDUDUM2 equals 1 if the CEO only has bachelor degrees and 0 otherwise.



*Hypothesis 1: CEO with postgraduate degree has a positive impact on firm performance.*

*Hypothesis 2: CEO with undergraduate degree has a positive impact on firm performance.*

Moreover, female CEOs tend to show unique skills, experience and networks which enable them to contribute to the functional decision making capability. Female executives are also likely to counterbalance potentially excessive risk-taking behavior by their male colleagues. Thus, we also expect that female CEO has a positive impact on firm performance. We use a dummy variable, CEOGENDER which equals one if the CEO is female and 0 otherwise, to test our expectation.

*Hypothesis 3: Female CEO has a positive impact on firm performance.*

Following Baysinger and Hoskisson (1990) who argue that CEOs are likely to have more firm-specific knowledge as well as a better ability to control and generate valuable resources, which may improve the financial performance of the firm, through time, we expect that CEO tenure has a positive impact on firm performance. We use TENURE which equals the natural logarithm of the number of year appointed as CEO to test the hypothesis.

*Hypothesis 4: CEO tenure has a negative impact on firm performance.*

The literature shows mixed evidence about the impact of duality (CEO and chairperson) on the performance of firms. For example, Rechner and Dalton (1991) find a positive correlation between firm performance and separate leadership. However, Brickley et al. (1997) show that firms with separate leadership do not perform better. In case of Vietnam market, this is a very young economy and at

a very early stage of development. Thus, the agency cost in Vietnam market is still at a high level. A splitting role of CEO and chairman should improve performance of firms since it decreases agency costs. We expect that splitting roles of CEO and chairman should have a positive impact on performance of Vietnamese firms. We use a dummy variable, SAME which equals one if the CEO is also the chairman and 0 otherwise, to test our expectation.

*Hypothesis 5: Splitting roles of CEO and chairman has a positive impact on firm performance.*

### 3.2. Data

For a 5 year period from 2011 to 2015, the initial sample was collected from FiinPro platform, a database of StoxPlus Corporation. The final sample consists of all firms listed on Hanoi Stock Exchange (HNX) and Ho Chi Minh City Stock Exchange (HOSE) which have total assets in 2015 exceed 500 billion Vietnamese dong. Also, companies without sufficient information are also excluded from the analysis. The final sample has 248 firms.

### 3.3. Methodology

The following fixed effect regression models are used to examine the relationship between CEOs' characteristics and firm performance:

$$PERF_{j,t} = \alpha_0 + \beta (\text{CHARACTERISTICS})_j + \gamma (\text{CONTROLS})_j + \epsilon_{j,t}$$

In which,

$PERF_{j,t}$  is the ROA of firm j in year t

$(\text{CHARACTERISTICS})_j$  is the vector of CEO's characteristics of firm j

$(\text{CONTROL})_j$  is the vector of control variables of firm j

$\epsilon_{j,t}$  is the error term

The variables are defined in the following table:

**Table 1: Variable Definition**

Variables	Definition
ROA	equals net income divided by total assets
CEOGENDER	equals 1 if the CEO is female and 0 otherwise
EDUDUM1	equals 1 if the CEO has postgraduate degrees and 0 otherwise
EDUDUM2	equals 1 if the CEO only has bachelor degrees and 0 otherwise
TENURE	equals the natural logarithm of the number of year appointed as CEO
SAME	equals one if a person servers as CEO and chairperson; 0 otherwise
SIZE	equals the natural logarithm of total assets
LEV	equals the total liabilities divided by total assets
SGROWTH	equals the sales growth rate
QRATIO	equals the quick ratio
INDDUM1	equals 1 if the company is in real estate sector and 0 otherwise
INDDUM2	equals 1 if the company is in financial sector and 0 otherwise
INDDUM3	equals 1 if the company is in high technology sector and 0 otherwise
INDDUM4	equals 1 if the company is in real estate, financial, and high technology sectors; 0 otherwise

## 4. Results

### 4.1. Univariate Results

Table 2 reports the descriptive statistics of the sample. The mean and median values for EDUDUM1 are 0.367 and 0, respectively. This result indicates that about one-third of the CEOs hold a postgraduate degree. Moreover, the majority of observed CEOs has undergraduate as the variable EDUDUM2 has mean and median value of 0.978 and 1, respectively. Among the CEOs, female CEOs account for only 7 percent as the variable CEOGENDER has mean and median value of 0.067 and 0, respectively. TENURE has mean of 1.725 and median of 1.609.

### 4.2. Multivariate Results

Table 3 reports the results for the first two regression models. The coefficients for

EDUDUM1 and TENURE do not significant at any convenient level. These results indicate that holding a postgraduate degree and tenure length do not have any impact on performance of firms. On the other hand, the coefficient for CEOGENDER is significant at 1 percent level and has a value of -0.032 and -0.029 in model 1 and model 2, respectively. This result shows that, despite many positive attributions, female CEOs do not improve firm performance. In fact, firms which have female CEO realize significant lower ROA in comparison with firms which have male CEOs.

Regarding control variables, SIZE and SGROWTH have positive impact on firm performance. Firms which have higher size and growth in sales tend to outperform other firms. However, leverage has a negative impact on performance, indicating that firms with

**Table 2: Descriptive statistics**

	Mean	Median	Standard Deviation
ROA	0.049	0.031	0.074
EDUDUM1	0.367	0	0.482
EDUDUM2	0.978	1	0.15
CEOGENDER	0.067	0	0.25
TENURE	1.725	1.609	1.495
SIZE	6.463	6.328	0.548
LEV	0.598	0.610	0.262
SGROWTH	0.289	0.081	1.645
QRATIO	1.319	0.832	2.083
INDDUM1	0.174	0	0.37
INDDUM2	0.109	0	0.3
INDDUM3	0.032	0	0.1
INDDUM4	0.315	0	0.4

higher debt ratio have significant lower ROA in comparison with other firms. During the sample period, real estate and financial firms have significant lower performance compared to other firms. High technology firms have significant higher performance compared to other firms. These results are consistent with the economic situation in Vietnam during the 2011-2015 period. Furthermore, the overall positive impact of high technology firms is not enough to cover the negative impact of real estate and financial firms since the coefficient for INDDUM4 is negatively significant.

Table 4 reports the results for the other two regression models. The coefficient for EDUDUM2 is insignificant, indicating that undergraduate education level does not have any impact on performance of firms. However, the coefficient for TENURE is positive and significant. These results show that, when CEOs only hold bachelor degrees, tenure has a positive influence on performance of firms. Similar to results in model 1 and 2, the

coefficient for CEOGENDER is significant at 1 percent level and has a value of -0.031 and -0.028 in model 3 and model 4, respectively. These results strengthen the conclusion that, in Vietnam, firms with female CEO have significant lower ROA in comparison with firms with male CEOs.

Regarding control variables, LEV has negative impact on firm performance. On the other hand, SIZE and SGROWTH have positive impact on firm performance. Firms which have lower leverage, bigger size and higher growth in sales tend to outperform other firms. Similar to the results in model 1 and 2, real estate and financial firms have significant lower performance compared to other firms. High technology firms have significant higher performance compared to other firms. The overall positive impact of high technology firms is not enough to cover the negative impact of real estate and financial firms since the coefficient for INDDUM4 is negatively significant.

**Table 3: Impact of Post-Graduate Education, Gender, and Tenure on Firm performance**

Variables	Model 1		Model 2	
	Coefficient	z-statistic	Coefficient	z-statistic
C	0.01	1.92*	0.075	2.59***
EDUDUM1	0.011	0.70	0.012	0.79
CEOGENDER	-0.032	-3.86***	-0.029	-3.51***
TENURE	0.001	1.15	0.001	1.21
SIZE	0.009	2.37**	0.007	1.71*
LEV	-0.084	-10.02***	-0.086	-10.25***
SGROWTH	0.003	2.46**	0.003	2.32**
QRATIO	0.004	1.45	0.003	1.26
INDDUM1	-0.043	-7.81***		
INDDUM2	-0.048	-6.16***		
INDDUM3	0.023	1.96**		
INDDUM4			-0.036	-7.81***
Adjusted R-squared	0.18		0.16	
F-statistic	26.52***		25.58***	

*EDUDUM1 equals 1 if the CEO has postgraduate degrees and 0 otherwise. CEOGENDER equals 1 if the CEO is female and 0 otherwise. TENURE equals the natural logarithm of the number of year appointed as CEO. SIZE equals the natural logarithm of total assets. LEV equals the total liabilities divided by total assets. SGROWTH equals the sales growth rate. QRATIO equals the quick ratio. INDDUM1 equals 1 if the company is in real estate sector and 0 otherwise. INDDUM2 equals 1 if the company is in financial sector and 0 otherwise. INDDUM3 equals 1 if the company is in high technology sector and 0 otherwise. INDDUM4 equals 1 if the company is in real estate, financial, and high technology sectors; 0 otherwise.*

*\*\*\*, \*\*, and \* indicate statistical significance at the 0.01, 0.05 and 0.10 level, respectively.*

Table 5 shows the results of the last two regression models. The coefficient for SAME is negative and significant at 5 percent level in both models. In Vietnam, splitting roles between CEO and chairperson improve performance of firms. This result confirms our expectation that monitoring role of chairperson over CEO responsibility is important in Vietnam and we can lower agency costs by splitting role of CEO and chairperson.

The results for control variables in model 5 and 6 are similar to those in pervious models. Specifically, the coefficients for SIZE and SGROWTH are positive and significant,

indicating that firm's size and growth of sales positively affect the performance of firms. On the other hand, the coefficient for LEV is negative and significant, indicating that leverage of firm negatively affects the performance of firms. Regarding the industry effects, INDDUM1, INDDUM2 and INDDUM4 are negative and significant, while INDDUM 3 is positive and significant. These results show that high technology firms perform better in comparison with performance of other firms. However, real estate and financial firms perform worse in comparison with performance of other firms. However, the overall positive impact of high



**Table 4: Impact of Under-Graduate Education, Gender, and Tenure on Firm performance**

Variables	Model 3		Model 4	
	Coefficient	z-statistic	Coefficient	z-statistic
C	0.069	2.47**	0.087	3.26***
EDUDUM2	0.005	1.20	0.004	0.90
CEOGENDER	-0.031	-3.87***	-0.028	-3.48***
TENURE	0.001	2.18**	0.001	2.11**
SIZE	0.009	2.22***	0.006	1.55
LEV	-0.085	-10.06***	-0.087	-10.28***
SGROWTH	0.003	2.43**	0.003	2.31**
QRATIO	0.004	1.15	0.004	1.34
INDDUM1	-0.043	-7.89***		
INDDUM2	-0.049	-6.26***		
INDDUM3	0.023	1.96**		
INDDUM4			-0.037	-7.87***
Adjusted R-squared	0.18		0.17	
F-statistic	26.64***		25.61***	

*EDUDUM2 equals 1 if the CEO only has bachelor degrees and 0 otherwise. CEOGENDER equals 1 if the CEO is female and 0 otherwise. TENURE equals the natural logarithm of the number of year appointed as CEO. SIZE equals the natural logarithm of total assets. LEV equals the total liabilities divided by total assets. SGROWTH equals the sales growth rate. QRATIO equals the quick ratio. INDDUM1 equals 1 if the company is in real estate sector and 0 otherwise. INDDUM2 equals 1 if the company is in financial sector and 0 otherwise. INDDUM3 equals 1 if the company is in high technology sector and 0 otherwise. INDDUM4 equals 1 if the company is in real estate, financial, and high technology sectors; 0 otherwise.*

*\*\*\*, \*\*, and \* indicate statistical significance at the 0.01, 0.05 and 0.10 level, respectively.*

technology firms is not enough to cover the negative impact of real estate and financial firms.

## 5. Conclusion

Using a sample of 248 public firms in a five year period, the paper shows that CEO's educational background has no impact on firm's performance in Vietnam. There is no significant evidence that firms with higher academic degree CEOs outperform firms with lower academic degree CEOs. This empirical finding is broadly in line with several previous studies regarding the relationship between CEO's educational background and firm

performance, for example Gottesman and Morey (2006). Furthermore, it is worth noting that CEOs' tenure has insignificant impact on performance when CEOs hold postgraduate degrees. However, tenure has positive impact when CEOs only hold undergraduate degrees. Despite many positive attributions, female CEOs perform worse compared to male CEOs do.

These results suggest that male CEOs have numerous advantages in conducting business in Vietnam compared to female CEOs. In general, education level and tenure of the CEOs do not have any impact on the performance of Vietnamese firms. However,

**Table 5: Impact of CEO Power on Firm performance**

Variables	Model 5		Model 6	
	Coefficient	z-statistic	Coefficient	z-statistic
C	0.069	1.37	0.087	1.56
SAME	-0.012	-2.12**	-0.011	-2.08**
SIZE	0.015	3.31***	0.013	3.15***
LEV	-0.091	-10.29***	-0.086	-10.10***
SGROWTH	0.005	2.32**	0.004	2.28**
QRATIO	0.003	1.02	0.003	0.98
INDDUM1	-0.023	-6.81***		
INDDUM2	-0.055	-5.12***		
INDDUM3	0.021	3.43***		
INDDUM4			-0.029	-4.87***
Adjusted R-squared	0.17		0.16	
F-statistic	22.16***		21.26***	

*SAME* equals one if a person serves as CEO and chairperson; 0 otherwise. *SIZE* equals the natural logarithm of total assets. *LEV* equals the total liabilities divided by total assets. *SGROWTH* equals the sales growth rate. *QRATIO* equals the quick ratio. *INDDUM1* equals 1 if the company is in real estate sector and 0 otherwise. *INDDUM2* equals 1 if the company is in financial sector and 0 otherwise. *INDDUM3* equals 1 if the company is in high technology sector and 0 otherwise. *INDDUM4* equals 1 if the company is in real estate, financial, and high technology sectors; 0 otherwise.

\*\*\*, \*\*, and \* indicate statistical significance at the 0.01, 0.05 and 0.10 level, respectively.

experience can be substituted for education in several situations.

This paper also shows that splitting roles between CEO and chairman improve performance of Vietnamese firms. The prior literature reports mixed results about the impact of duality (CEO and chairman)

on the performance of firms. Our evidence supports Rechner and Dalton (1991) who find a positive correlation between firm performance and separate leadership. However, further studies should consider the leadership structure of Vietnamese firms in investigation.

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