Financial and Non-financial Factors Affecting Board Size of the Listed Firms in Vietnam

Nguyen Vinh Khuong¹,², Phung Anh Thu³, Do Thi Thu Lieu¹,², Tran Thi Phuong Anh¹,², Nguyen Thi My Giau¹,², Nguyen Mai Han¹,² & Ngo Kim Mo¹,²

¹ Faculty of Accounting and Auditing, University of Economics and Law, Ho Chi Minh City, Vietnam
² Vietnam National University, Ho Chi Minh City, Vietnam
³ Faculty of Finance and Accounting, Nguyen Tat Thanh University, Ho Chi Minh City, Vietnam

Correspondence: Phung Anh Thu, Faculty of Finance and Accounting, Nguyen Tat Thanh University, Ho Chi Minh City, Vietnam.

Received: November 29, 2019 Accepted: December 26, 2019 Online Published: March 17, 2020

Abstract
The study contributes by providing empirical evidence on the extent to which financial and non-financial factors affect the size of the board of director of listed firms in Vietnam. Based on the data from 80 listed firms on the Vietnam’s stock market in 11 years from 2007-2017, using quantitative research method. We concluded that financial and non-financial factors affect board independence of listed firms in Vietnam. From the research results, it is recommended that listed companies have reasonable and effective corporate management policies, consistent with accounting policies at enterprises.

Keywords: financial, nonfinancial, the size of the board of director, listed firm

JEL: M41; M40

1. Introduction
Research on the Board of Director is one of the most developed fields of research in the management documents in the past two decades. When the Board of Director have grown from small homogeneous units to large representative entities, the focus of research is recorded in the structure of the Boards and their impact from performing important functions.

Theorists showed that Boards help connect organization with the external environment and guarantee important resources by increasing scale and diversity, including prestige and legitimacy (Mintzberg, 1983; Pearce and Zahra, 1992; Pfeffer, 1972, 1973). In his studies, Pfeffer (1972, 1973) discovered that the response of organization to the dependence on resource and legal pressure which led to the creation of quite large Boards, including members of different career groups.

Additionally, the Board is seen as an important structure to examine management opportunities and ensure that all actions of the organizations are appropriate for the interests of stakeholders (Williamson, 1975; Kosnik, 1987, 1990). The Researchers have focused on the impact of non-executive directors on corporate governance decisions. They have more objectivity and have ability to resist self-governing of managers influences on decisions of the Board (Kosnik, 1987; Singh and Harianto, 1989). Increasingly interest also raises conflicts from the structure of the Board of Director. Specifically, when Boards increase their scale and diversity to implement their regulation and management functions, they may not be ideally suited to implement timely strategic actions to deal with these important environmental changes. In particular, several studies on the size of the Boards in smaller firms are significantly interesting because factors that motivate the selection of the scale and structure of the Board in this enterprise group could be different from the factors affecting the Board size in large public companies.

For example, small and medium firms are often organized closely so they are slightly affected by the issues of representatives between managers and owners, which is mentioned in the representative theory. Meanwhile, some documents discussed by Yermack (1996) focus on the structures of Boards in large firms, which ranges between 6 and 24 staffs, with some companies having the Boards from 6 staffs. These firms, larger departments could
coordinate, communicate and make decisions more cumbersome than smaller groups (Jensen, 1993; Lipton and Lorsch, 1992; Yermack, 1996) but at the same time these companies could avoid the risk of asymmetric information about competitors.

Literature review of the research activities related to the research topic can be seen that the corporate governance, the board size of companies and how to measure these variables are the interest of many researchers. Method of measurement through many different approaches, either directly or through intermediaries. Firstly, corporate governance has been common in the world for a long time, but in the developing country, corporate governance has only been interested in companies recently. As international integration requirements are increasing, the number of companies, especially public joint-stock companies, increases rapidly. In the process, the increasingly competitive pressure among companies has led to the need to change and improve corporate governance efficiency. However, as mentioned above, corporate governance is still moderately new in Vietnam. Therefore, in-depth studies on the proxy variable of corporate governance are that the board size is necessary. Secondly, in developed economies, corporate governance, board size is highly recognised and there have been many studies on the impact of corporate governance on firm performance of listed companies. And the results of the above studies have confirmed the influence of corporate governance proxies in countries with developed economies and countries with transition economies. For countries with a transition economy, strengthening corporate governance can serve many important policies and goals. Vietnam is a developing country and has an economy in transition, in which context, corporate governance is one of the top interests. However, it refers to developing economies, especially the stock market operates only briefly, the legal framework for corporate governance is not as complete as Vietnam's, therefore, there should study the variables of corporate governance in Vietnam, namely the size of the board of directors. Therefore, research is conducted to fill these gaps.

Companies should adjust their size of Boards reasonably to preserve value. Therefore, this research aims to show the impact of financial and non-financial factors on the number of members of the Board of Directors in listed firms in Vietnam stock exchange based on the method of quantitative research, which is appropriate with panel data from 80 listed firms, published financial reports in the examined period 2007-2017.

2. Literature Review and Hypothesis Development

The study of Serfling (2014) obtained a result that the CEO's age has a significant impact on the company's performance. As regards a higher age, the CEO invests less in projects which involve a relatively high risk such as new product research and various management activities, so that it is necessary to form the Board of Directors with many members to discuss and make decisions that bring high efficiency to the company. The age of CEO is expected to exert a positive influence on the size of the Board of Directors. Conversely, based on the discussion mentioned above, we can develop the following hypothesis:

\[ H1: \text{The age of CEO is positively related to the size of Board of Directors.} \]

According to a research conducted by Bhagat and Bolton (2008, 2019), Ciftci et al. (2019) have shown that the rate of director return has a relative impact on the number of members of the Board. When the firm makes a decision of changing director positions, the process of implementing tasks and objectives with regard to company project will be affected, leading to a reduction in the company's productivity. In order to solve the internal turmoil, the Board of Directors should issue timely intervention policies, so fewer members of the Board of Directors will be easy to meet unified and quick agreement. According to the expectation of the research team, the number of substitutions of CEO has a negative relation to the size of the Board of Directors. Therefore, based on the above discussion, we can develop the following hypothesis:

\[ H2: \text{Number of times to replace CEO is negatively related to the size of the Board of Directors.} \]

According to research conducted by Kanter in 1977, if there is only one female director on the Board, this person will hardly change the company's decisions, if the number is two, then these directors will only influence on voting of opinion, however, only when the number of females is three or more, female directors will affect the decision-making process. This theory is again proved by Kristie (2011) and Lim et al. (2019), if the number of women is by far minority (1 or 2) in the Board of Directors, there will be pressure on gender and decisions based on the majority (here is male managers). Similarly, when the CEO is female, making the company's decisions becomes more difficult, requiring a large number of members of the Board of Directors; while the CEO is male, the decisions-making are often better so that the number of members of the Board of Directors does not require a large quantity. Therefore, based on the above discussion, we can develop the following hypothesis:

\[ H3: \text{The gender of the CEO has a negative relation to the size of the Board of Directors.} \]
To find effective methods so as to further develop and improve the efficiency of fixed capital usage, enterprises must have appropriate and comprehensive management system for fixed assets to utilize available source and promote all production capacity. Management of fixed assets in a scientific way will support the accounting to accurate fixed assets, which contributes to enhance the efficiency of fixed capital usage and prevent loss of assets. Conversely, the effective management team also has a significant impact, the Board of Directors should have a suitable number to promote the highest efficiency. Therefore, based on the above discussion, we can develop the following hypothesis:

**H4: Total value of tangible fixed assets of enterprises has a positive relation to the size of the Board of Directors.**

Berger et al. (1997) have come up with a conclusion, which is the reserve with previous studies, that registered the inverse relationship between Board size and leverage. Their findings are consistent with the arguments of Goodstein et al. (1994); Psaros (2009); Reddy et al. (2010) that larger boards provide an expert team to increase management oversight and greater access to broader resources as well as capital market, leading to lower leverage levels. Conversely, based on the above discussion, we can develop the following hypothesis:

**H5: Financial leverage has a negative relation to the size of the Board of Directors.**

Several previous documents discuss the main source of influence of the Board size, in which the researcher represented that the management and governance system when the size of the business increases and reduces the ability of the board of directors to oversight. Thus, this leads to problems in business originating from the separation between management and governance (Jensen, 1993; Yermack, 1996). This can be understood that larger the enterprise scale is, the more difficult it is to control the enterprise management, so that the organization requires that the number of members of the Board of Directors could change and increase accordingly to make it more appropriate and easier to manage the business. Therefore, based on the above discussion, we can raise the following hypothesis:

**H6: The size of businesses is positively related to the size of the Board of Directors.**

Previous studies used BIG4 variables as criteria for measuring audit quality and showed that the average and median value of the accrued accounting value (expression of profit management) because these values are lower in companies audited by Big4 than these in companies audited by non-Big4. That indicates that Big4 auditors provide better audit quality and higher reliability than non-Big4 auditors. In order to limit the profit management behaviors, businesses need to use audit services from other companies which are independent, reliable and reputable, furthermore it is necessary for these enterprises to restrict the control and profitability of stakeholders. Therefore, based on the above discussion, we can raise the following hypothesis:

**H7: The audit quality of companies which involves Big4 has a negative relation to the size of the Board of Directors.**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Hypothetical content</th>
<th>Theory</th>
<th>Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>The age of CEO has a contrary effect to the size of Board of Directors.</td>
<td>Agency theory, Asymmetric Information</td>
<td>+</td>
</tr>
<tr>
<td>H2</td>
<td>Number of times to replace CEO has a positive relation to the size of the Board of Directors.</td>
<td>Asymmetric Information.</td>
<td>-</td>
</tr>
<tr>
<td>H3</td>
<td>The gender of the CEO has a positive relation to the size of the Board of Directors.</td>
<td>Agency theory</td>
<td>-</td>
</tr>
<tr>
<td>H4</td>
<td>Total value of tangible fixed assets of enterprises has a positive relation to the size of the Board of Directors.</td>
<td>Agency theory, Asymmetric Information.</td>
<td>+</td>
</tr>
<tr>
<td>H5</td>
<td>Financial leverage has a contrary effect to the size of the Board of Directors.</td>
<td>Asymmetric Information</td>
<td>-</td>
</tr>
<tr>
<td>H6</td>
<td>The size of businesses has a positive relation to the size of the Board of Directors.</td>
<td>Agency theory, Asymmetric Information</td>
<td>+</td>
</tr>
<tr>
<td>H7</td>
<td>The audit quality of companies which involves Big4 has a positive relation to the size of the Board of Directors.</td>
<td>Agency theory</td>
<td>-</td>
</tr>
</tbody>
</table>
3. Research Methods
In this study, our author team uses many kinds of research methods to measure the influence of factors on the size of the Board of Directors of companies on Vietnam stock market. Specifically, our team uses Fixed Effect Model (FEM), Random Effect Model (REM) to conduct research and use STATA software to perform statistical data analysis.

3.1 Data
The sample includes 80 companies listed on the Vietnam stock market during the 2007-2017 period. Data sources come from annual reports and financial reports of companies listed on the Vietnamese stock exchange. Our author team synthesized 145 listed companies before 2007 on three stock exchange: HNX, HOSE and UpCOM. After eliminating financial, banking, insurance and securities companies, the remaining number of suitable companies is 80 companies, because of the different nature of economic and business operations (King and Santor, 2008). The sample selected by the authors is 80 companies including 25 companies on the HNX, 33 listed companies on the HOSE and 22 listed companies on the UpCOM stock exchange. Therefore, the research sample of authors represents the overall study.

3.2 Research Models
Our author team inherits the research model of previous studies (Serfling, 2014; Laux and Laux, 2008; Wen et al., 2002) to measure the impact of financial and non-financial factors on size of the Board of Directors of listed companies on Vietnam stock exchange. The research model is proposed as follows:

$$BOARDSize_{it} = \delta_0 + \delta_1 CEOage + \delta_2 CEOTurnover_{it} + \delta_3 CEOgender_{it} + \delta_4 PPE_{it} + \delta_5 Lev + \delta_6 Size + \delta_7 Big4 + \epsilon_{it}$$

In which: $i = 1, 2, 3, ..., 80$ (with $i$ being an expression for 80 listed companies respectively); $t = 1, 2, 3, ..., 11$ (with $t$ being an 11-year period from 2007 to 2017 respectively).

**BOARDsize** - dependent variable, measuring for the quality of corporate governance at time t.

3.2.1 Non-financial Factors
**CEOage** variable - Independent variable, showing the age of CEO of company $i$ at time $t$, ($CEOage = Age of CEO$) (Serfling (2014));

**CEOTurnover** variable - An independent variable, showing the change of the CEO of company $i$ in a fiscal year $t$, with a value of 0 if there is no change in CEO, otherwise, with a value of 1 if there is a change of CEO in 1 fiscal year.

**CEOgender** variable - Independent variable, showing the CEO's gender of the company $i$ at time $t$, with a value of 0 if the gender of the CEO is male, otherwise it is 1 if the CEO gender is female (Tharenou, 1999);

**BIG4** variable - Independent variable, showing auditor company for company $i$ at time $t$, with value of 0 if it is not audit companies from Big 4 (PwC, EY, Deloitte, KPMG), backwards, with the value of 1 if it is an audit company from Big 4 (Persakis and Iatridis, 2015).

3.2.2 Financial Factors
**PPE** variable - Independent variable, showing the total value of tangible fixed assets of company $i$ at time $t$, ($PPE = ln (Cost of tangible fixed assets / Total assets)$) (Persakis and Iatridis, 2015);

**Lev** variable - Independent variable, showing the leverage ratio of the company at time $t$, ($LEV = ln (Total liabilities / Total assets)$) (Persakis and Iatridis, 2015; Cho and Kim, 2003);

**Size** variable - Independent variable, representing the size of the company through the value of total assets of company $i$ at time $t$, ($SIZE = ln (Total assets)$) (Persakis and Iatridis, 2015; Dunerv and Kim, 2005);

$\delta_1, \delta_2, ..., \delta_7$ - regression coefficients measure the change in the size of the Board of Directors on a changing unit of the independent variable when the value of other independent variables is constant; $\epsilon_{it}$ - is a random error.
4. Research Results

4.1 Descriptive Statistics

Table 2. Descriptive statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>CEOage</th>
<th>CEOturnover</th>
<th>CEOgender</th>
<th>PPE</th>
<th>LEV</th>
<th>Size</th>
<th>Big4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.892</td>
<td>0.125</td>
<td>0.053</td>
<td>0.328</td>
<td>0.502</td>
<td>27.042</td>
<td>0.355</td>
</tr>
<tr>
<td>SD</td>
<td>0.155</td>
<td>0.331</td>
<td>0.233</td>
<td>0.246</td>
<td>0.206</td>
<td>1.351</td>
<td>0.479</td>
</tr>
<tr>
<td>Minimum</td>
<td>3.296</td>
<td>0</td>
<td>0</td>
<td>0.000</td>
<td>0.015</td>
<td>24.169</td>
<td>0</td>
</tr>
<tr>
<td>Maximum</td>
<td>4.290</td>
<td>1</td>
<td>1</td>
<td>0.959</td>
<td>0.952</td>
<td>31.625</td>
<td>1</td>
</tr>
<tr>
<td>Observation</td>
<td>460</td>
<td>472</td>
<td>471</td>
<td>473</td>
<td>473</td>
<td>473</td>
<td>473</td>
</tr>
</tbody>
</table>

Source: Data analysis from STATA software

According to descriptive statistics of all variables, the average value of the CEO's age of listed companies fluctuates from 3,296 to 4,290 with an average of 3,892 in the period 2007-2017. The average age is from 27 to 73, with the 49-year-old average being an appropriate age for an experienced CEO and risk-taking business. The change of CEO in the fiscal year of listed companies receives a value of 0 to 1 with an medium value of 0.125 in the period 2007-2017. The CEO gender also fluctuates from 0 to 1 with an average of 0.053. The value of tangible fixed assets of listed companies ranges from 0 to 0.959 with an average of 0.33 in the period from 2007-2017. Financial leverage changes from 0.015 to 0.952 with the means of 0.502 in the period of 2007-2017, showing that the companies using liabilities accounted for a large proportion in the capital structure. The company size gives a result is from 24.17 to 31.63 with an average of 27.04 in the period 2007-2017. Auditing companies range from 0 to 1 with an average of 0.355 in the period 2007-2017.

4.2 Correlation Analysis

Correlation analysis is a measure of the intensity of the relationship between two variables and two variables are considered as random variables - regardless of the independent and dependent variables. Table 3 shows the correlation coefficient between the dependent variable and the independent variables ranging from -0.262 to 0.603. This shows that the variables have relatively low correlation coefficients and no multi-collinear phenomenon (if the correlation coefficient is greater than 0.9, multi-collinear occurs) (Gujarati and Porter, 2003).

Table 3. Correlation matrix

<table>
<thead>
<tr>
<th>Boardsize</th>
<th>CEOage</th>
<th>CEO turnover</th>
<th>CEOgender</th>
<th>PPE</th>
<th>LEV</th>
<th>Size</th>
<th>Big4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boardsize</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEOage</td>
<td>0.0683</td>
<td>-0.262</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEOturnover</td>
<td>-0.0178</td>
<td>-0.262</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEOgender</td>
<td>-0.1168</td>
<td>0.048</td>
<td>-0.037</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPE</td>
<td>0.338</td>
<td>-0.013</td>
<td>-0.015</td>
<td>-0.109</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEV</td>
<td>0.0042</td>
<td>0.057</td>
<td>0.024</td>
<td>-0.139</td>
<td>-0.122</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>0.2691</td>
<td>-0.056</td>
<td>0.066</td>
<td>-0.098</td>
<td>-0.027</td>
<td>0.536</td>
<td>1</td>
</tr>
<tr>
<td>Big4</td>
<td>0.0253</td>
<td>-0.119</td>
<td>0.062</td>
<td>-0.171</td>
<td>0.003</td>
<td>0.339</td>
<td>0.603</td>
</tr>
</tbody>
</table>

Source: Data analysis from STATA software
4.3 Regression Analysis Results

Table 4. Results of regression analysis of the FEM model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression coefficient</th>
<th>SE</th>
<th>t- Test</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEOAGE</td>
<td>0.065**</td>
<td>0.020</td>
<td>3.3</td>
<td>0.001</td>
</tr>
<tr>
<td>CEOTURNOVER</td>
<td>-0.004</td>
<td>0.003</td>
<td>-1.55</td>
<td>0.122</td>
</tr>
<tr>
<td>CEOGENDER</td>
<td>-0.015</td>
<td>0.021</td>
<td>-0.7</td>
<td>0.482</td>
</tr>
<tr>
<td>PPE</td>
<td>0.125**</td>
<td>0.014</td>
<td>9.21</td>
<td>0.000</td>
</tr>
<tr>
<td>LEV</td>
<td>-0.036**</td>
<td>0.011</td>
<td>-3.15</td>
<td>0.002</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.030**</td>
<td>0.003</td>
<td>10.18</td>
<td>0.000</td>
</tr>
<tr>
<td>BIG4</td>
<td>-0.031**</td>
<td>0.007</td>
<td>-4.46</td>
<td>0.000</td>
</tr>
<tr>
<td>$\delta_0$</td>
<td>0.567</td>
<td>0.128</td>
<td>4.43</td>
<td>0.000</td>
</tr>
</tbody>
</table>

$R^2$ squared 0.0342

Hausman Test 15,80
P-value 0.0271

Modified Wald Test 1.6e+35
P-value 0.000

Wooldridge Test 8.500
P-value 0.0049

*, **, *** correspond to the significance level of 10%, 5%, 1%

Source: Data analysis from STATA software

Table 4 shows the regression results related to the relationship between financial and non-financial factors affecting the size of the Board of Directors in the 2007-2017 period of companies listed on the stock market in Vietnam.

To select the appropriate regression model, the author performed Hausman test to determine the fixed impact model (FEM) and the random impact model (REM), which model is more effective with H0 hypothesis: REM model is more appropriate. With P-value <0.05 (Level of significance), then reject H0: REM model is appropriate. Thus, Hausman test proved that using FEM model is more suitable than REM model.

The Modified Wald test shows that P-value = 0 <0.05, that is to reject H0: No variance change occurs, in other words, variance change occurs. To detect autocorrelation, we performed Wooldridge test. The above results with P-value <0.05. Our author team reject the hypothesis H0: The model has no autocorrelation phenomenon, that is, the model with autocorrelation occurs in the table data. Tests related to variance change and autocorrelation are violated. Therefore, the study used Robust correction to eliminate heterogeneous variance and correct Prais-Winsten to overcome the autocorrelation phenomenon.

The above test results show that: TURNOVER and CEOGENDER variables have p-value of 0.122 and 0.482, p-value> 5%, so we conclude that the two variables are not statistically significant for the dependent variable. Board size. The level of explanation of the model is equal to 0.0342, the independent variables explain 3.42% of the variation of the dependent variable. Obtaining model results as follows:

$\text{BOARDsize} = 0.5666 + 0.0652\text{CEOAGE}_{it} + 0.1253\text{PPE}_{it} - 0.0360\text{LEV}_{it} + 0.0297\text{SIZE}_{it} - 0.0313\text{BIG4}_{it} + \epsilon_{it}$

Research results show that the CEO's age has a positive impact on the number of board members. This result is consistent with the study of Serfling (2014) that showed that the CEO’s age has a significant impact on the performance of the company. With the older age, the general manager invests less in high risk projects such as new product research and diverse management activities, so many members of the Board of Directors need to work together. Discuss and make decisions that bring high efficiency to the company. The more the value of a company’s fixed assets, the more...
chance a company has for a mortgage loan, which is an important decision as it relates to the company's interests in need of the consent of its members board of directors. On the other hand, the management of fixed assets scientifically will help the accounting of fixed assets to be accurate, contributing to improving the efficiency of using fixed capital, preventing asset loss. Therefore, the effective management team also has a small impact, the Board needs to have the appropriate number to bring the highest efficiency. Through research, our author team sees that Leverage is inversely proportional to the number of Board members. This result is consistent with the arguments of Goodstein et al. (1994), Psaros (2009); Reddy et al. (2010) suggest that larger boards provide an increased expertise, management oversight and greater access to broader contracts and resources, so that access rights can be achieved better access to capital markets, leading to lower leverage. There are many documents discussing the main source of influence of the number of Board of Directors members, including mention of controlling management as the size of the business increases, reducing the ability of the Board of Directors to management control, thus leading to problems in the enterprise resulting from the separation of management and control (Jensen, 1993; Yermack, 1996). In order to limit profit management, businesses need to use auditing services from reliable, reputable and limited independent auditing companies for those who have control and profit. From here, our author team registers an inverse relationship to the use of professional audit services and the number of Board members.

5. Conclusions and Recommendations

According to the research results, the author team helps the government authority to better understand the information of the Board of Directors, especially the number of Board members and some financial and non-financial factors affecting the regulation Board size. Thereby, local government area could better understand the internal issues of the company, promptly issue regulations to control the information about large, medium and small enterprises in the market's Vietnam. Similarly, we find that the total value of tangible fixed assets of enterprises vary in the same direction and have the greatest impact on the size of the Board of Directors. Therefore, the government authority could apply this evidence to consider and assess the situation of enterprises in the most specific and effective way.

Limiting research to only approach the problem by quantitative methods, namely performing statistics describing correlation coefficients, regression analysis. This study did not mention all the factors related to financial and non-financial factors to analyze its impact on listed companies. The second limitation of the research is that the study did not select financial and banking organisations to eliminate industry-specific factors as well as the time-consuming factor from the financial crisis years of 2008. The purpose of this is to remove outlier to ensure the accuracy of the predicted models. Therefore, this research result cannot be used for specific industries as mentioned.

This research can contribute to the research line on corporate governance. Specifically, this paper conducts research on the extent of financial and non-financial influence. However, any research will have no end and will continue to open the next investigation direction. In the course of the study, we realized that there was some impact on markets in the context that Vietnam needed to conduct future research. Specifically, the next research direction should not only analyze the impact of financial and non-financial factors on listed businesses but also analyze other factors. These studies are essential to consider the impact on corporate governance mechanisms of listed companies in Vietnam.

This research will help enterprises to recognize the importance of the size of the Board of Directors or the number of Board members and adjust the relationship between financial and non-financial factors and the size of the Board of Directors to implement public governance policies effective and more appropriate. As a result of the regression model, with significant independent variables, our author team makes recommendations to increase the governance efficiency for businesses as follows:

Firstly, for large enterprises and large total fixed assets, all decisions of the Board of Directors must be carefully to consider the benefits of the enterprise as a whole and maximize the benefits of equity. Therefore, the enterprise needs to establish a Board of Directors with a reasonable number of members. For small and medium-sized enterprises, the size of the Board of Directors should not be too large to debate the investment options and shareholder benefits. Secondly, enterprises which implement a strategy of expanding the market could prioritize young CEOs because they have a keen sense of capturing changes in the business market as well as the tendency of society and enthusiasm with the work, dare to make risky decisions, withstand great pressure from work. Therefore, the number of Board members could be large to make reasonable discussions and decisions for the company. Thirdly, with low leverage enterprises, enterprises could choose a large board size to show to the public that the Board of Directors has many resources in supervision and management, be easy to access to the capital market due to low leverage. Fourthly, for large enterprises, the Board of Directors may consider selecting the biggest auditing firms such as BIG 4 in order to improve the transparency and rationality in the work, which supports enterprises to accurately announce the information on the status of operation, increasing the ability to attract investment capital in the future.
Acknowledgment

This research is funded by University of Economics and Law, Vietnam National University Ho Chi Minh City, Vietnam.

References


