MEASURING IMPACT OF OWNERSHIP STRUCTURE AND CORPORATE GOVERNANCE ON CAPITAL STRUCTURE OF VIETNAMESE SOES

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ABSTRACT

The research attempts to explore how corporate governance and ownership structure affect capital structure in the context of an emerging economy like Vietnam by considering impact level of three groups of factors which are corporate governance, ownership structure and firm elements. Method of Multivariable Regression Analysis used with cross-panel data collected from 300 non-financial State-owned Enterprises (SOEs) in the period 2006-2012 shows that corporate governance and ownership structure measures have a significant impact on decision of capital structure of Vietnamese SOEs. Besides, pecking – order theory can explain basically the impact of classical firm elements such as tangibility, profitability, firm size and cost of debt on capital structure of Vietnamese SOEs.

Keywords: Vietnamese SOEs, capital structure, corporate governance, ownership structure, innovation, emerging economy.
INTRODUCTION

Programs of Vietnamese State-owned Enterprises (SOEs) innovation and reform were formally started in 1992, since then, the SOEs have achieved great strides in expanding the scope and growth rate. SOEs are no longer confined in a single form of ownership but are diversified under different forms of ownership. Along with that, many problems have emerged for SOEs such as different issues of modern corporate governance, ownership issue, issues of capital structure when capital markets develop, and their crossing relationship in a company.

When a phenomena changes, in common sense, issues related to it will be studied, examined and analyzed to provide appropriate explanations and accordingly rational direction of development. With today's modern enterprises, issues of corporate governance, ownership, capital structure have attracted the interest of a large number of scholars, researchers and practitioners, because it is seen as a tool for social-economic development. When corporate governance and capital structure are both good, this is the expression of the correctness and effectiveness in business management. Conversely, that will give enterprises more risks and negative impacts on other related enterprises, and may cause significant adverse effects to the capital market, create a threat to the economy. The expression for this situation is the poor corporate structure, weak internal control system, state of un-disciplinary in corporate governance and labor management (Geniyu and Anbidun, 2009).

Meanwhile, appropriate business ownership right will create a momentum for the development and improvement of internal strength of enterprises. In transitioning and emerging economies in the last 2-3 decades, ownership had many ups and downs and fluctuations (Ezeoha and Okafor, 2010). In Vietnam, state ownership in SOEs through many stages of development has essentially transformed the face and body of SOEs. Like a number of countries in Africa, Southeast Asia and China, in Vietnam, there has been a lot of writings and debates on state ownership. Li et al. (2009) find out that state ownership is consistent to the role of the Chinese government - the controlling shareholder of SOEs and the major owner of commercial banks. They reported that state ownership is related positively to long-term financial leverage and inversely to other financial leverages. While Dewenter and Malatesta (2001) conclude that SOEs are more likely to use financial leverage than private enterprises. Nguyen and Ramachandran (2006) conclude that compared with private enterprises, SOEs use more long-term debt; and in Vietnamese context, the higher the state ownership in enterprises is, the greater the use of financial leverage.

Most scholars recognize that the issue of agency in ownership structure is associated with corporate governance. The agency problem arises from conflicting interests between related parties: shareholders and managers, shareholders and debt owners (Jensen, 1986). Meanwhile, the corporate governance is structured to reduce the agency problem. Thus, the agency problem, to a certain extent, is a bridge connecting corporate governance and capital structure.

The research examines whether other factors beside financial factor have an impact or not on the capital structure of SOEs. Groups of factors included in the group are: (i) the ownership variables, including managerial ownership and state ownership; (ii) the variables of corporate governance factors, including Board size, Non-executive Directors, CEO duality; and (iii) corporate finance variables, including variables that directly affect the capital structure: tangibility, growth opportunities, profitability, firm size, liquidity, the cost of debt and the cost of capital.
DESCRIPTION AND DESIGN OF VARIABLES

Managerial Ownership ($X_1$)

According to Fama and Jensen (1983), the fact that managers have ownership in enterprises may reduce the problem of appropriating shareholders’ assets and bring benefits for investors, along with that, for their own interests, they will not stop their efforts to expand firm size. Friend and Lang (1988) report the absence of property holding investors will tend to lead to lower corporate capital structure, but debt levels will be concentrated on managers (see Brailsford, 2002; Hasan and Butt, 2009), while Berger et al. (1997) suggests that the level of conservatism of managers will enable enterprises to keep away from debt. In contrast, Wiwattankantang (1999) points out that there exists a positive relationship between managerial ownership and the Debt-Equity selection in household enterprises in Thailand, while Short et al. (2002) provides evidence of a positive relationship between managerial ownership (internal shareholders) and financial leverage, negative relationship between ownership of external major shareholder and financial leverage.

Therefore, we believe that high level of debt tends to increase the risk of bankruptcy than to bring benefits for managers themselves, so in the long run, enable managers to reduce financial leverage. While, the fact that investors hold more shares will help enterprises increase financing capacity with a suitable debt agency cost. The variable of managerial ownership is measured as follows:

$$X_{1it} = MaOW_{it}$$

In which, $MaOW_{it}$ is the percentage of share capital by managers (the Board) of the company $i$ in the year $t$.

State ownership ($X_2, X_3, X_4$)

Shleifer and Vishny (1994) pointed out that state ownership is associated with the pursuit of political goals at the expense of stakeholders in a company. However, there has not been any prominent theoretical study about the relationship between state ownership and capital structure so far, but empirical researches concluded notable conclusions, most of which say that there exists positive relationship between state ownership and capital structure. Typically, Li et al. (2009) find that state ownership is an important factor in decisions of capital structure of Chinese enterprises and government ownership is positively proportional to long-term leverage. Wiwattanankantang (1999) showed a positive relationship of state ownership and leverage. Dewenter and Malatesta (2001), Nguyen and Ramachandran (2006) discovered that SOES use higher leverage than private enterprises.

To clarify the relationship between state ownership and capital structure, we divided the data into three groups: (i) the enterprises with state ownership of 51% or higher ($X_2$); (ii) the enterprises with state ownership of approximately 25% to 51% ($X_3$); (iii) the enterprises with state ownership below 25% ($X_4$).

$$X_{2it} = [0,1]_{it}, \text{ with value 1 if company } i \text{ in year } t \text{ has state ownership accounted for 51% and above, and value 0 for the opposite;}$$

$$X_{3it} = [0,1]_{it}, \text{ with value 1 if company } i \text{ in year } t \text{ has state ownership of about 25-51%, and value 0 for the opposite;}$$

$$X_{4it} = [0;1]_{it}, \text{ with value 1 if company } i \text{ in year } t \text{ has state ownership of less than 25%, and 0 for the opposite;}$$
**Board size (X5)**

In fact, the capital raising in enterprises is primarily based on decisions of the Board of Directors (BOD); if an enterprise has good corporate governance, the BOD will provide a good decision to raise capital for the enterprise. Pfeffer and Salancick (1978), Lipton and Lorsch (1992) suggests that decisions of enterprises affect their decisions of corporate capital structure. Berger et al. (1997), Abor (2007), Hasan and Butt (2009) and Ganiyu and Abiodun (2012) argues that the Board of Directors will have greater effectiveness in pressuring managers to pursue lower level of leverage and improving business performance. The variable of BOD size is measured as follows:

\[ X_{5it} = \ln(BS_{it}) \]

In which, \( BS_{it} \) is the number of Board members of company i in the year t.

**Non Executive Directors (X6)**

The previous studies have identified that the factor of the composition of Non Executive Directors (NED) significantly affects decisions of corporate sponsorship. Pfeffer and Salancick (1978), Jensen (1986) and Berger et al. (1997) report that firms with high level of agency of NED members in the Board of Directors have higher debt ratio. Abor (2007) pointed out that the small and medium enterprises in Ghana have more members outside the Board of Directors and a positive relationship between capital structure and composition of the NED. Meanwhile, Wen et al. (2002) argues that NED members have more effective quality supervision which forces managers to borrow less and still achieve good business management. We believe that, the presence of NED members in the Board of Directors provides a good signal that the company is being effectively controlled so easily create more trust for the creditors to give loans for the company. Measurement for the variable of the composition of NED is as follows:

\[ X_{6it} = \frac{NED_{it}}{BS_{it}} \]

In which, \( NED_{it} \) is the number of NED members of the company i in the year t, \( BS_{it} \) is the number of BOD members of the company i in the year t.

**CEO duality (X7)**

In agency theory, if a person holds both positions of chief executive officer (CEO) and Chairman of the BOD, agency problem is very easy to be created, leading to the formation of decisions which lacks of control and may adversely affect financing decisions. Fama and Jensen (1983) recommend a separation between management function and controlling function, decision-making function and decision-controlling function, meaning that there should be a separation between the role of the highest manager of the decision-making process (CEO) and the highest controller of the decision-making process (BOD Chairman). The findings of previous experimental studies show mixed results. Abor (2007) provides evidence of a positive relationship between financial leverage and CEO duality. While, Ganiyu and Abiodun (2012) indicate a negative relationship between CEO duality and financial leverage in the Nigerian enterprises. We believe that the highly controlled CEOs will reduced opportunistic behaviors in management which may lead to lower level of leverage, meaning that CEO duality is proportional to the capital structure.

\[ X_{7it} = [0;1]_{it} \]

with the value of 1 if the CEO is at the same time the BOD Chairman of the company i in the year t, and value of 0 for the opposite.
Tangibility ($X_8$)

Companies with highly tangible assets expect to have higher capital structure because of low cost of debt and less agency problem of debt than that of equity (Jensen and Meckling, 1976; Myers and Majluf, 1984; Harris and Raviv, 1991). Like most of previous researches, this research measures tangibility by calculating the ratio of tangible assets over total assets.

\[ X_{8it} = \frac{FA_{it}}{TA_{it}} \]

In which, $FA_{it}$ is tangible asset of company i in the year t, $TA_{it}$ is the total assets of company i in the year t.

Growth opportunity ($X_9$)

Miller (1977) states that financial leverage is inversely related to growth opportunities of firms because firms with many growth opportunities will have more options to invest in the future than firms with little growth opportunities. Sharing this viewpoint, however, Jensen and Meckling (1976) argue that firms with high growth opportunities will use less debt to reduce their agency issue, while the agency problem can be reduced if long-term debt are replaced by short-term one.

The variable of growth opportunity is formulated as follows:

\[ X_{9it} = \frac{\Delta TA_{it}}{TA_{it}} \]

In which, $\Delta TA_{it} = TA_{it} - TA_{it-1}$ with $TA_{it}$ as book value of total assets of company i in the year t and $TA_{it-1}$ as book value of total assets of company i in the year t-1.

Profitability ($X_{10}$)

Myers (1984) argues that firms with high profitability tend to raise more capital from internal resources, because the high profitability is expected to enable firms to have more retained earnings which are initially used as the firms’ first priority. Meanwhile, Jensen (1984) argues that companies with high profitability will use high debt to prevent the waste of free cash flow caused by managers. Profitability variable is identified in this study by the rate of returns on total assets.

\[ X_{10it} = \frac{EBIT_{it}}{TA_{it}} \]

In which, $EBIT_{it}$ is earnings before interest and taxes of company i in the year t, $TA_{it}$ is book value of total assets of company i in the year t.

Firm size ($X_{11}$)

Many scholars argue that larger firms tend to diversify many business fields, thus tend to have less risk of bankruptcy than smaller ones (Rajan and Zingales, 1995, Huang and Song, 2006 and Nguyen and Ramachandran, 2006). Besides, big firms have lower agency cost of debt, less fluctuating cash flow, more easy access to credit markets and greater tendency towards debt and equity to benefit from the tax shield (Myers, 1984 and Jensen, 1986).

Many researches use natural logarithm of sales to measure firm size, but we have same argument with Chen (2004) in using the natural logarithm of total assets to represent the measurement of the firm size variable, because we think that asset, with its structural characteristics, can ensure the accuracy more than revenue.

\[ X_{11it} = \ln(TA_{it}) \]

In which, $TA_{it}$ is book value of total assets of company i in the year t.
**Liquidity (X_{12})**

Jensen (1986) argues that enterprises with much cash will increase new debt to prevent managers from making their own decision which wastes free cash flows. Moreover, enterprises with high liquidity seems to give good signals to creditors about the ability of enterprises to perform short-term debt obligations which allows the enterprises to access more easily to loans.

\[ X_{12it} = \frac{\text{STA}_{it}}{\text{STD}_{it}} \]

In which, \( \text{STA}_{it} \) is book value of short-term assets of company \( i \) in the year \( t \), \( \text{STD}_{it} \) is short-term debt of company \( i \) in the year \( t \).

**Cost of debt (X_{13})**

Interest is used as debt cost because of extremely small number of firms issuing bonds in data set (it is supposed to be nearly 0). In theory, high interest rate leads to reduction in debt use, enterprises will switch to use equity. Under conditions of the immature financial market in Vietnam, the interest rate does not fully reflect the level risk faced by enterprises when they access bank loans. However, in each period of the economy, the interest rate can change, so the inclusion of interest rate in the model will help us examine the impact of interest rate on enterprises in different periods. Debt cost variable is built as follows:

\[ X_{13it} = \frac{\text{EI}_{it}}{\text{TD}_{it}} \]

In which, \( \text{EI}_{it} \) is actual paid interest of company \( i \) in the year \( t \), \( \text{TD}_{it} \) is total debt of company \( i \) in the year \( t \).

**Cost of equity (X_{14})**

The cost of equity is measured by the interest rate required by the owners of capital invested in the businesses. In theory, the cost of equity will fluctuate in the same direction with capital structure, when there is increase in the cost of equity, equity use by enterprises will be limited, debts are used instead. However, for Vietnamese enterprises, is the true that the cost of equity has important role to the choice of the capital structure of enterprises? Is its impact the same as theory? This will be demonstrated by empirical analysis of the model.

\[ X_{14it} = \frac{I_{it}}{E_{it}} \]

In which, \( I_{it} \) is actually paid dividends of company \( i \) in the year \( t \), \( E_{it} \) is the equity of company \( i \) in the year \( t \).

**Dependent variable (Y)**

Capital structure is the dependent variable and is measured based on the book value, it can be calculated by using the total debt or long-term debt as stated in many previous international researches in developing countries. Assuming that only long-term debt reflects the nature of corporate capital structure, in this next study we only study long-term debt of the enterprises in comparison to equity instead of comparing to total assets like in the above mentioned research.

\[ Y_{it} = \frac{\text{LTD}_{it}}{E_{it}} \]

In which, \( \text{LTD}_{it} \) is long-term debt of the company \( i \) in the year \( t \), \( E_{it} \) is equity of the company \( i \) in the year \( t \).
THE MODEL OF STATISTICAL RESEARCH AND DESCRIPTION

Research Model

\[ Y_{it} = \beta_0 + \sum \beta_k X_{kit} + u_{it} \]

In which, Y is the dependent variables, X is the explanatory variables, \( k = 1 \div 14 \) is the number of explanatory variables, \( i = 1 \div 300 \) is the number of observed companies, \( t = 1 \div 7 \) is the number of years of observation, \( \beta_0 \) is a constant, \( \beta_k \) is the coefficient of the explanatory variables, \( u_{it} = \mu_{it} + \epsilon_i \), \( \epsilon_i \) is the random error with \( E(\epsilon_i) = 0 \) and \( Var(\epsilon_i) = \delta^2 \) and \( \mu_{it} \) is the variance of panel data.

The hypothesis of the research model will be tested in turn to determine the logical model with SPSS 16 software, such as model without multi linearity, without changes in variance, without autocorrelation phenomena.

Testing of the table data model

The Durbin-Watson testing

This test aims at determining there is whether or not the phenomenon of autocorrelation in the model. Conclusion for the autocorrelation phenomenon is as follows:

- If the value of d in Durbin-Watson:
  - \( 1 < d < 3 \): no autocorrelation phenomenon.
  - \( 0 < d < 1 \): model has the phenomenon of positive autocorrelation.
  - \( 3 < d < 4 \): model has the phenomenon of negative autocorrelation.

The Wald testing

For the purpose of determining whether the original y-axis coefficients among variables are equal or not, this means the similarity among original y-axis coefficients of the model.

- \( H_0 \): original ordinates are equal among variables
- \( H_1 \): original ordinates are not equal among variables

If \( \alpha > p \)-value, the hypothesis \( H_0 \) is rejected and it can be concluded that original ordinates are not equal among variables

The Hausman testing

Testing coefficients of explanatory variables (\( \beta_i \))

- \( H_0 \): the coefficients are not statistically significant
- \( H_1 \): the coefficients are statistically significant

If \( \alpha > p \)-value, the hypothesis \( H_0 \) is rejected, or in other words, the tested variables affect the capital structure in a statistically meaningful way.
Data description

Data set is secondary data extracted from annual financial statements of 300 Vietnamese SOEs in the period from 2006 to 2012.

A question for research materials on capital structure is whether using book value or market value, or both. Many scholars believe that market value reflects better than the book value because the decision on choosing the capital structure of a firm is related to optimal degree of its financial leverage determined by the proportion the costs and benefits of borrowing. In contrast, viewpoints which support the use of book value say that major cost of borrowing is the cost of financial exhaustion estimated in case the firm goes bankrupt, and values related to the obligations the debtors is the book value rather than market value of the debt.

With this research, due to some limitations in data collection, we only use the book value instead of using both like many other international studies. In addition, we offer trade credits to measure dependent variables, because in fact, trade credit has been used as a financial tool.

Descriptive Statistics

Table 1. Descriptive Statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y (long-term debt to equity)</td>
<td>0.0000</td>
<td>20.7561</td>
<td>0.4479</td>
<td>1.0338</td>
</tr>
<tr>
<td>$X_1$ (managerial ownership)</td>
<td>0.0000</td>
<td>1.0000</td>
<td>0.4730</td>
<td>0.1881</td>
</tr>
<tr>
<td>$X_2$ (state ownership≥51%)</td>
<td>0.0000</td>
<td>1.0000</td>
<td>0.4247</td>
<td>0.4944</td>
</tr>
<tr>
<td>$X_3$ (51%&gt;state ownership&gt;21%)</td>
<td>0.0000</td>
<td>1.0000</td>
<td>0.2771</td>
<td>0.4477</td>
</tr>
<tr>
<td>$X_4$ (21%&gt;state ownership)</td>
<td>0.0000</td>
<td>1.0000</td>
<td>0.2981</td>
<td>0.4575</td>
</tr>
<tr>
<td>$X_5$ (board size)</td>
<td>0.0986</td>
<td>2.3979</td>
<td>1.6974</td>
<td>0.1873</td>
</tr>
<tr>
<td>$X_6$ (non executive directors)</td>
<td>0.0000</td>
<td>1.0000</td>
<td>0.4989</td>
<td>0.2276</td>
</tr>
<tr>
<td>$X_7$ (CEO duality)</td>
<td>0.0000</td>
<td>1.0000</td>
<td>0.4044</td>
<td>0.4909</td>
</tr>
<tr>
<td>$X_8$ (tangibility)</td>
<td>0.0000</td>
<td>0.9779</td>
<td>0.3122</td>
<td>0.2261</td>
</tr>
<tr>
<td>$X_9$ (growth opportunities)</td>
<td>-0.6742</td>
<td>13.2777</td>
<td>0.2339</td>
<td>0.5419</td>
</tr>
<tr>
<td>$X_{10}$ (profitability)</td>
<td>-0.6473</td>
<td>0.6503</td>
<td>0.0955</td>
<td>0.0941</td>
</tr>
<tr>
<td>$X_{11}$ (firm size)</td>
<td>1.4553</td>
<td>10.7279</td>
<td>6.0209</td>
<td>1.4045</td>
</tr>
<tr>
<td>$X_{12}$ (liquidity)</td>
<td>0.0012</td>
<td>39.2251</td>
<td>2.1176</td>
<td>2.3628</td>
</tr>
<tr>
<td>$X_{13}$ (cost of debt)</td>
<td>0.0000</td>
<td>0.8045</td>
<td>0.0401</td>
<td>0.0488</td>
</tr>
<tr>
<td>$X_{14}$ (cost of equity)</td>
<td>0.0000</td>
<td>0.9961</td>
<td>0.0634</td>
<td>0.0640</td>
</tr>
</tbody>
</table>

Table 1 presents descriptive statistics. The results showed the proportion of NEDs accounted for 49.89% which is higher than the level of 48% in enterprises in Pakistan (Hasan and Butt, 2009), showing rather good indicators for the monitoring of enterprises in Vietnam. However, these numbers do not provide guarantee for the full independence of NEDs. Besides, in the Vietnamese enterprises, the rate of BOD Chairman cum CEO is 40.44%. This is a good signal for activities of operation and supervision of corporate governance because it reduces agency problem. The managerial ownership of about 47.30%, significantly higher than 21% for the case in Pakistan. The reason for such high percentage is that some board members represent the state’s stake in the company, so this result is no surprise. The percentage of long-term debt/average equity is about 44.7%, business growth rate reaches 23.39%, profitability of 9.55%, fast solvency of 211.76%, interest expense 4% and equity cost 6.34% are figures proving good development of Vietnamese SOEs in general. That also shows that basically, after renovation and restructuring of SOEs, they experience rapid development in the right direction of the State.
ANALYSIS OF EMPIRICAL RESULTS

Table 2. The test results of the effects of corporate governance, ownership structure to the capital structure of Vietnamese SOEs

<table>
<thead>
<tr>
<th>Model</th>
<th>Standardized Coefficients</th>
<th>Std. Error</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>0.738</td>
<td>0.263</td>
<td>-2.807</td>
<td>0.005</td>
</tr>
<tr>
<td>X₁ (managerial ownership)</td>
<td>-0.069</td>
<td>0.202</td>
<td>-1.888</td>
<td>0.059</td>
</tr>
<tr>
<td>X₂ (state ownership≥51%)</td>
<td>0.125</td>
<td>0.091</td>
<td>2.829</td>
<td>0.005</td>
</tr>
<tr>
<td>X₃ (51%&gt;state ownership&gt;21%)</td>
<td>0.077</td>
<td>0.075</td>
<td>2.325</td>
<td>0.020</td>
</tr>
<tr>
<td>X₅ (board size)</td>
<td>0.021</td>
<td>0.145</td>
<td>0.794</td>
<td>0.428</td>
</tr>
<tr>
<td>X₆ (non executive directors)</td>
<td>-0.028</td>
<td>0.116</td>
<td>-1.064</td>
<td>0.287</td>
</tr>
<tr>
<td>X₇ (CEO duality)</td>
<td>0.052</td>
<td>0.055</td>
<td>1.939</td>
<td>0.053</td>
</tr>
<tr>
<td>X₈ (tangibility)</td>
<td>0.296</td>
<td>0.116</td>
<td>11.399</td>
<td>0.000</td>
</tr>
<tr>
<td>X₉ (growth opportunities)</td>
<td>0.037</td>
<td>0.046</td>
<td>1.503</td>
<td>0.133</td>
</tr>
<tr>
<td>X₁₀ (profitability)</td>
<td>-0.248</td>
<td>0.307</td>
<td>-8.719</td>
<td>0.000</td>
</tr>
<tr>
<td>X₁₁ (firm size)</td>
<td>0.208</td>
<td>0.019</td>
<td>7.923</td>
<td>0.000</td>
</tr>
<tr>
<td>X₁₂ (liquidity)</td>
<td>-0.003</td>
<td>0.012</td>
<td>-0.136</td>
<td>0.891</td>
</tr>
<tr>
<td>X₁₃ (cost of debt)</td>
<td>-0.097</td>
<td>0.552</td>
<td>-3.807</td>
<td>0.000</td>
</tr>
<tr>
<td>X₁₄ (cost of capital)</td>
<td>0.022</td>
<td>0.423</td>
<td>0.812</td>
<td>0.417</td>
</tr>
</tbody>
</table>

R=0.472; R²=0.222; Durbin-Watson=1.259; F=28.526; F_sig.=0.000

Note: Statistical significance levels of 1%, 5% and 10%

Inspection of the regression model

Table 2 for the Durbin-Watson test has a value of 1.259 in the range of (1; 3), showing that there is no autocorrelation phenomena in the model; Wald test with statistic value of 28.526 with p-value = 0.000 < α = 10%, so we can conclude that the hypothesis H₀ (equal slope coefficients among variables) can be accepted. So, both Wald and Durbin – Watson tests showed the appropriateness of the regression model.

Inspection of the values of the estimated coefficients of significantly explanatory variables, corresponding to the p-value < 10%. Table 2 shows that the estimated coefficients of the variables X₁, X₅, X₆, X₉, X₁₂ and X₁₄ have p-value > 10%. Particularly X₄ variable is excluded from the model because of the collinear phenomenon. That is, the explanatory variables are not statistically insignificant; in other words, in economic terms, these variables are not enough to explain their impact to the capital structure.

Analysis of factors affecting the capital structure

Managerial ownership is negatively related with statistical significance to capital structure. This is not difficult to understand when some members of the Board represent an amount of state-owned equity in enterprises, which therefore, increases the level of agency of managers in comparison to other external shareholders. This also means that the concentration of debt is high, meaning that businesses will choose lower debt with an assumption that high debt ratio would reduce profits. Meanwhile, managers, for the benefit of themselves or interests they represent, will give priority to lower leverage.
Table 2 shows the variables $X_2$ and $X_3$ are positively correlated with statistical significance with $Y$. That is, state ownership is positively correlated with capital structure. This finding is consistent with that of studies of Nguyen and Ramachandran (2006) and Dzung (2012) for the context of Vietnam. This means that SOEs with higher state ownership tend to have higher capital structure, ie to use more financial leverage. Higher state ownership in enterprises also help minimize the ability to raise capital from other external shareholders, due to the lack of inflexibility of state ownership. Therefore, when capital is needed, the choice of debt issuance is prioritized instead of issuing equity, when the amount of state equity in businesses trend to be reduced.

CEO duality is positively correlated to the capital structure of SOEs at statistical significance level of 5.3%. For SOEs, the fact that the CEO is concurrently the Chairman of the Board will increase the long-term debt for business despite the fact that agency problem and agency cost may increase. While the size of the Board is positively related to capital structure, NEDs is inversely associated with the capital structure of SOEs, although interpretation level of the survey data is not high.

Vietnamese enterprises tend to increase gradually the presence of NEDs in the Board, at the same time increase the rate of NEDs as high-profiled professionals, with the ability to monitor many aspects of operators, especially the supervisory role of Chairman of the Board, the highest leader among supervisors in an enterprise, when he became a non-executive BOD member. With the current context of SOEs, the proportion of NEDs is rather good, with certain impact on corporate governance and oversight capabilities of capital will be more efficient, thus somewhat affecting the operators, forcing them to raise average debt but still achieve high business efficiency.

Tangibility, this is one of traditional fundamental elements directly affecting capital structure. In theory, tangibility reflects the level of tangibility of enterprises’ assets, while asset and capital in enterprises are two indispensable sides a hand. Capital is used to generate asset, asset is the purpose to attract capital. In this study, tangibility is associated positively with long-term debt of SOEs. This result is similar to that of other studies of Vietnam enterprises (Nguyen and Ramachandra, 2006). Results of our study support the majority of international researches, that enterprises with high tangibility tend to use less short-term debt. This is caused by the nature of duration between the loan and the nature of the assets, at the same time, highly tangible assets increase the role of collateral assets in long-term debts.

Profitability is inversely proportional to the capital structure. When profitability gets higher, enterprises have chances to use retained earnings first, instead of choosing debt financing for investment projects. This result encourages most of studies from different economies in the world and also shows that Vietnamese SOEs also support pecking order theory.

Firm size is positively proportional to capital structure. The bigger size of the firm, the easier it gets to approach debt, especially long-term debt. In Vietnamese economy, most of big enterprises are hold by SOEs. With long-term accumulation of property, SOEs are increasingly dominant in debt financing, especially long-term debt. In fact, 80% of long-term bank credit is from SOE customers, 70% of which is hold by economic groups, state corporations.

Cost of debt has inverse relationship with statistic significance with long-term debt. This result reflects the theory that the higher the debt cost is, the more likely equity is selected instead of debt, especially long-term debt. SOEs with good potential support have better approach to long-term debt than other enterprises. However, when equity sources have little chance to change, enterprises, instead of using long-term debt as debt costs rise, shift to raise short-term debt to finance their operations, or select other forms of credits.
CONCLUSIONS

Businesses today unceasingly modernize themselves, from the issue of production materials, labor materials to business management. The constantly changing movement of the modern business models is to help enterprises achieve new progress in production and trading. The role of managers, executives and investors, owners are constantly improved. Under the interwoven impact and multidimensional relationship, they are aimed at bringing a favorable financial environment for enterprises. With current modern views of corporate governance, enterprises are constantly increasing control and internal control, enterprises in emerging economies like Vietnam are not an exception. Therefore, in Vietnamese SOEs, corporate governance has certain direct impact to the financial decisions of the enterprises and vice versa. Moreover, state ownership still play its active and decisive role to many aspects of SOEs’ life. Thus, it is easy to understand when the empirical evidences from our study make these judgments more persuasive.

Capital structure is under a lot of factors, both direct and indirect, internal and external, and factors forming capital structure themselves also have impact on the capital structure, and experience similar impact from it. However, in a reverse relationship, what benefits the capital structure can bring to enterprises? Our next experimental study attempts to examine the impact of capital structure on the efficiency of the SOE and what is an appropriate capital structure for SOEs which SOEs need to target at.
REFERENCES


