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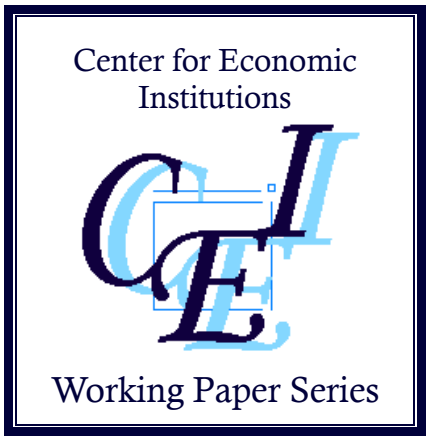

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Fundraising Behaviors of Listed Companies in Vietnam: An Estimation of the Influence of Government Ownership

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Abstract

This study investigates the capital structure and investment activities of listed companies on the Hanoi Securities Exchange and the Ho Chi Minh Securities Exchange in Vietnam. Estimation analysis using panel data covering the four-year period 2006-2009 revealed the following results. (1) Standard corporate financing theories such as trade-off theory and agency cost theory could be appropriate for explaining the capital structure of listed companies in Vietnam. (2) Compared to the fundraising activities of the companies analyzed by Nguyen (2006) and Biger et al. (2008), the fundraising activities of the listed companies were better explained by standard agency cost theory. (3) There are differences between the determinants of long-term fundraising and short-term fundraising of listed companies in Vietnam. (4) The fundraising determinants of state-controlled companies are different from those of other companies; state-controlled companies have an advantage in tapping external debt funds, and their incentive to reduce their tax payments by debt financing is weaker. (5) The companies listed on the Ho Chi Minh Securities Exchange depended less on debt financing than those listed on the Hanoi Securities Exchange. (6) Listed companies in Vietnam face weak incentives to reduce their tax payments by debt financing because the effective corporate tax rate is low. These results imply that the economic reforms ("Doi Moi") implemented by the Vietnamese government, which aims to create an economic system based on market mechanisms, have achieved some of their goals in terms of fund mobilization and corporate financing. However, our estimation study illustrates several limitations of economic reforms, such as the opaque relationship between state-controlled companies and government banks, financial restrictions on investment activities, and inactive investment of companies that are state-controlled or listed on the Ho Chi Minh Securities Exchange.

Keywords: Corporate Finance, Capital Structure, Transition Economy, Vietnam
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1. Introduction

After implementing the "Doi Moi" (economic reforms) policy, Vietnam applied market principles, and the structure of its economy has changed greatly. In order to multiply forms of property, apply market principles, and open the economy, the legal system has rapidly produced many new laws such as the Private Company Law (1990), the State-owned Company Privatization Law (1990), the Company Law (2000), the Foreign Investment Law (2001), the Interest Rate Liberalization Law (2002), the Competition Law (2005), and others.

Along with the "Doi Moi," equitization of state-owned companies has been implemented.[1] With the exception of special industries that need to remain government-controlled, the privatization of state-owned companies has been carried out beginning with comparatively small-scale companies that have good chances of achieving business efficiency, and the number of industries that need to remain government-control has gradually decreased. In addition, many private companies have been equitized, and many joint stock companies have been newly established. By the end of 2008, about 3,000 of the 5,000 state-owned companies had been equitized, and there are about 30,000 joint stock companies that do not have state-owned capital.[2]

Listing on a stock exchange is the final stage of the equitization process in Vietnam. In 1998, it was decided to establish securities exchanges in Hanoi City and Ho Chi Minh City as stock markets that would enable joint stock companies to raise mid- and long-term funds. The Ho Chi Minh Securities Exchange (HOSE) and the Hanoi Securities Exchange (HASE) were established in 2000 and 2005, respectively. The listing conditions of the HOSE are stricter than those of the HASE. In order to be listed on the HOSE, companies need to meet a higher minimum capital requirement, show better business performance, and have a more differentiated stock holding structure (Table 1-1). The number of listed companies, the amount of buying and selling, the trading value, and the aggregate market value of the HOSE and the HASE have increased in recent years (Table 1-2). [3]

(Table 1-1) Listing conditions for the Hanoi and Ho Chi Minh Securities Exchanges

[1] This is described in Table A-1 in the Appendixes.
[2] These facts were obtained from the statistical data of the General Statistics Office (http://www.gso.gov.vn/)
[3] As is shown in Table A-3 in the Appendixes, upon the establishment of stock markets, preferential corporate tax systems for listed companies were established in order to promote listing.

(Table 1-2) The Major Indices of Stock Exchange Markets in Vietnam

In the period of transition, understanding whether companies that played a major role in domestic investment could raise funds effectively is crucial for privatizing the Vietnamese economy. However, there are very few analyses of the fundraising activity of Vietnamese companies that show the characteristics and challenges of this activity.

Nguyen (2006), who studied empirically the fundraising structure of small and medium-sized Vietnamese companies, conducted the first study in this field in Vietnam. In addition, Biger et al. (2008) studied the financial structure of Vietnamese companies by using data from the company census conducted by the Vietnamese Statistics Bureau in 2002 and 2003. While these studies clarified the financial structure of Vietnamese companies, they had several limitations. First, since they focused on the financial activities of small and medium-sized companies that faced an underdeveloped institutional infrastructure and that were in a two-year company census, the financial activity of listed companies in Vietnam remains uninvestigated. Second, because of the lack of available data, these studies used problematic methods in their estimation analyses.

Our study attempts to answer the following two questions by using current standard corporate financing theories. (1) What are the characteristics of the fundraising structure of listed companies in a transitional economy such as Vietnam, in comparison with the fundraising structure of listed companies in developed economies and in other transitional economies? (2) What factors can explain the differences, if any, between listed companies in Vietnam and listed companies in developed economies and in other transitional economies? In addition, this study suggests policies for increasing the effectiveness of Vietnamese corporate finance.

Through an empirical investigation, we found several interesting results about the fundraising behaviors of listed companies in Vietnam. (1) Standard corporate financing theories such as trade-off theory and agency cost theory could be appropriate for explaining the capital structure of listed companies in Vietnam. (2) The capital structure of listed companies in Vietnam is better explained by the standard corporate financing theory based on the agency cost approach in comparison with Nguyen (2006) and Biger et al. (2008): Debt ratios have a significantly positive relation with firms' scale and tangibility, and they have a significantly negative relation with firms' growth opportunities. (3) There are differences between the determinants of long-term fundraising and of short-term fundraising for listed companies in Vietnam: a firm's scale and its ability to provide collateral are important determinants of long-term fundraising but are not

important for short-term fundraising. (4) The fundraising determinants for state-controlled companies are different from those for other companies: state-controlled companies have an advantage in reducing agency costs that are accompanied by tapping external debt funds. (5) There is a tendency for the companies listed on the Ho Chi Minh Securities Exchange to depend less on debt financing than those listed on the Hanoi Securities Exchange. (6) Listed companies in Vietnam have weak incentives to reduce their tax payments through debt financing because the effective corporate tax rate is low. These observations suggest that Vietnam's economic reform ("Doi Moi"), whose goal was market economization, has already achieved some successes in the corporate financing systems for listed companies. However, in order to end the opaque collusion between government-controlled companies and banks and to protect outside creditors, further liberalization of the banking sector and disclosure of corporate information are urgently needed.

This study is organized as follows. Section 2 presents the analytical framework used to explain the capital structure of listed companies in Vietnam. Sections 3 and 4 present an empirical examination of the capital structure of listed companies in Vietnam and discuss the empirical estimation results. Section 5 summarizes the study's findings and suggests policy implications.

2. Analytical Framework for Investigating the Fundraising Behaviors of Listed Companies in Vietnam

According to Modigliani and Miller's (1958) theory (hereafter referred to as the "MM theory"), corporate value does not depend on capital structure; thus, corporate financing has no impact on corporate value when the following conditions exist together: a complete capital market, perfect information, no corporate taxes, no transaction costs, and no economic externalities.

However, the full set of preconditions of the MM theory is not likely to exist in the real world; therefore, an adjusted MM theory (also called the trade-off theory) is required. According to the trade-off approach, companies choose the optimal capital structure, which is the structure that minimizes the cost of capital so as to maximize the value of the company, while considering the risk of bankruptcy and the impact of the corporate tax. The higher a company's debt ratio, the lower its average capital cost. However, when the debt ratio is high, the risk of bankruptcy is also

high, so the risk premium is higher as well. The optimal debt ratio is the one associated with maximum corporate value.[4]

In addition to corporate taxes and business risk, when there is an information asymmetry, agency costs have an important influence on the determination of corporate value, namely the choice of the most suitable capital structure for the company. Since the studies of Jensen and Meckling (1976), Myers (1977), and Myers and Majluf (1984), the problem of conflicting interests among stockholders, managers, and creditors, which are factors in agency costs, has attracted a great deal of attention. Companies are able to reduce the agency cost of debt financing due to the information asymmetry between the managers of a company and outside creditors by providing collateral. Companies with low growth opportunities tend to secure more financing through debt to reduce the agency costs that arise due to the information asymmetry between stockholders and managers (because stockholders seek the maximization of company value while managers pursue their own personal profit).

Regarding the problem of fundraising structure, there are many studies on both developed countries and developing countries; for example, Rajan and Zingales (1995), Varouj et al. (2005), and Lee (2000) investigated the fundraising structure of companies in G7 countries, in Canada, and in Korea, respectively. Booth (2001), Mieno (2002), and Suto (2001) investigated the fundraising structure of companies in ten developing countries, in Thailand, and in Malaysia, respectively. There are also many studies on the fundraising structure of companies in transitional economies such as those of Eastern European countries and China. For example, Delcoure (2007) analyzed the fundraising structure of listed companies in the Czech Republic, Poland, Russia, and Slovakia; Bauer (2004), Hussain and Nivorozhkin (1997), and Colombo (2001) analyzed the fundraising structure of listed companies in the Czech Republic, in Poland, and in Hungary, respectively. Jean (2004) and Guihai and Frank (2006) considered the fundraising structure of listed companies in China. However, there have been few formal econometric investigations of corporate finance in Vietnam. Nguyen (2006) used data from 1998 to 2001 for 558 small and medium-sized companies in Vietnam with fewer than 300 employees and less than 10,000,000,000 VND in capital. Biger et al. (2008) used a sample of 3,778 companies with more than ten employees, chosen from enterprises in the 2002-2003 census conducted by the Vietnamese Statistics Bureau. These studies used the adjusted MM theory, the

[4] See Myers and Majluf (1984) for details.

agency cost approach, and the pecking order approach to investigate the characteristics of the fund mobilization of companies in Vietnam. According to these studies, the fundraising activities of companies in Vietnam do not accord with many aspects of corporate finance theory; for example, the debt ratios are positively correlated with growth opportunities and negatively correlated with the fixed assets rate. These discrepancies may be due to the underdeveloped institutional environment that the companies in their samples face.[5]

Regarding the agency cost problem in transition economies, the influence of government on corporate behaviors is an interesting research topic that has been discussed in previous studies. Under an unlisted world analyzed by Nguyen (2006), state-owned small and medium-sized companies are found to access bank loans more easily than companies that are not state-owned. In fact, there are many listed companies of which the government became the controlling stockholder and whose activities were influenced by the government after state-owned companies were equitized. These companies are defined as state-controlled companies. Even among listed companies on the Ho Chi Minh Securities Exchange and the Hanoi Securities Exchange, where listing is the last process of company reform, more than 30% are state-controlled.[6] Regarding the characteristics of the fund mobilization of state-controlled listed companies in Vietnam, we present the following hypotheses.

Hypothesis 1

First, it is thought that state-controlled companies have closer relations with state-owned banks than other companies. After the "Doi Moi" began, the functions of the state bank and of commercial banks were separated, and the interest rate was gradually liberalized.[7] However, Vietnam's four major state-owned banks provide 70% of the financing of the entire economy, and more than half of that amount is provided to state-owned companies (World Bank, 2006). Due to these relations, in terms of raising funds, state-controlled companies are able to secure funds under advantageous conditions. Therefore, it is expected that the debt ratio of state-controlled companies will be higher than that of companies that are not state-controlled.

[5] Regarding the method of estimation, Nguyen (2006) used four-year average values of both explanatory variables and explained variables. Biger et al. (2008) used simultaneous explanatory variables and explained variables. The use of these methods may result in the loss of endogenicity of the explanatory variables.

[6] According to the latest State-owned Company Law, which was enacted on November 26, 2003, in addition to companies in which the government invests 100%, those stock-issuing companies in which the government invests more than 50% are classified as state-owned (state-controlled) companies. Among the 286 companies listed on the HOSE or the HASE by the end of 2008, the number of state-controlled companies was 96.

[7] See Appendix A-2 for details.

Hypothesis 2

Second, it is thought that state-controlled companies' incentive to increase debt to reduce their corporate tax payments is different from the incentive of companies that are not state-controlled. From the viewpoint of the government, which is a 50% stockholder in state-controlled companies, corporate tax payments are income for the government itself; thus, it has less incentive to use debt to reduce corporate tax payments than other stockholders. Therefore, the debt ratio of state-controlled companies may be lower than the debt ratio of companies that are not state-controlled.

3. Estimation Model for Fundraising Behaviors of Listed Companies in Vietnam

3.1 Estimation Function

Like Rajan and Zingales (1995), this paper estimates debt ratios, which are the most basic index demonstrating the capital structure of companies. Y_{it} is an explained variable; X_{jit} represents the explanatory variables (j = 1, 2,…, k); *STATE* is the state-controlled company dummy; α is the fixed effect; β_j, γ_j are coefficients (j = 1, 2,…, k); ε is the matrix of error items; and i and t denote the individual company and time, respectively. In order to investigate the differences in fundraising structure between the Ho Chi Minh Securities Exchange (HOSE) and the Hanoi Securities Exchange (HASE) caused by the differences in listing conditions between the two exchanges, we estimate separately the samples of these two exchanges by using the same estimation function.

$$Y_{it} = \alpha_i + \Sigma\beta_j X_{jit-1} + \Sigma\gamma_j STATE*X_{jit-1} + \varepsilon_j$$

(1) Explained Variables Y_{it}

We use four debt ratios as explained variables: Total Debt Ratio (*DR*), Long-term Debt Ratio (*LDR*), Long-term Bank Loan Ratio (*LBR*), and Short-term Debt Ratio (*SDR*). Total Debt Ratio (*DR*) expresses the proportion that fundraising by debt holds in the entire funding of a company, and it is the most basic index of fundraising structure. Because of the effects of saving tax payments and bankruptcy risk on finance structure relates to the whole debt; using the debt ratio is considered to be appropriate for observing the influences of these factors on fundraising

structure. We calculated the Total Debt Ratio (*DR*) by dividing the amount of total debt by the amount of total assets.

Short-term debts such as accounts payable or bills used to balance short-term funds and long-term debts used for long-term investments like equipment, have different characteristics. Accounts payable and bills relate to clients, so the information asymmetry of fundraising by accounts payable and bills is comparatively small. In contrast, the information asymmetry between firms and creditors of long-term debt is larger. Thus, the influence of the agency cost of long-term debt on capital structure is stronger than the influence of the agency cost of short-term debt. We calculated the Long-term Debt Ratio (*LDR*) by dividing the total amount of long-term debt (for which the maturity period exceeds one year) by the total amount of assets. The Short-term Debt Ratio (*SDR*) was calculated by dividing the total amount of short-term debt (for which the maturity period is less than one year) by the total amount of assets.

(2) Explanatory Variables X_{jit}

We used the corporate tax rate (*TAX*) and business scale (*SIZE*) based on the adjusted MM theory (trade-off theory). The effective tax rate (*TAX*) is calculated by the ratio of the amount of corporation tax payment to the amount of operating income.[8] Because there is no term for operating income (the total amount of profit before interest payments and tax payments) in the financial reports of Vietnamese companies, we calculated operating income by adding interest payments and profits before taxes. Business scale (*SIZE*), which is used as a proxy variable for a company's bankruptcy risk, is calculated as the natural logarithm of total assets.[9] TAX has a positive predicted sign because when its corporate tax is higher, a company should raise funds through debts such as bank borrowing or bonds, rather than equities in order to reduce its corporation tax payment and to allow it to raise its value by that amount. SIZE also has a positive sign because the larger the company, the smaller its reductions from exogenous shocks, so its bankruptcy risk is lower; thus, payment of the risk premium for mobilizing funds by debt is also lower, and its debt ratio tends to be higher.

We used the fixed assets ratio (*TANG*) and Tobin's Q (*Q*) based on the agency cost approach. The fixed assets ratio (*TANG*), which is used as a proxy variable for the ability to provide

[8] Guihai and Frank (2006) used the same variable. For information on the tax system in Vietnam, see Table A-3 in the Appendixes.

[9] Jean (2004) used the same variable. (The natural logarithm of sales is also used often as a proxy for business scale).

collateral, is defined as the ratio of the total amount of fixed assets to the total amount of assets.[10] We used Tobin's Q (the ratio of the total amount of debts and the present value of stocks to the book value of total assets) as a proxy variable for the business growth opportunities of a company (*Q*). *TANG* has a positive predicted sign because the more collateral a company can offer, the lower the agency cost of debt financing due to the information asymmetry between the managers of the company and the outside creditors, and the higher the debt ratio of the company can rise. *Q* is predicted to have a negative sign because low-growth companies tend to increase financing through debt to prevent managers from plundering company profits; this is the issue of agency costs between stockholders (clients) and managers (agents) that arises because stockholders expect the maximization of company value while managers pursue their own personal profit.

We also used the state-controlled company dummy (*STATE*) and industry dummies expressing characteristics of listed companies in Vietnam as explanatory variables.[11] The state-controlled company dummy (*STATE*) takes a value of 1 for the companies whose government stock holding is more than 50% and 0 for the others. In order to control for the influences of macroeconomic circumstances, we used a year dummy variable (*YD2008*, *YD2009*) that takes a value of 1 for the years 2008 and 2009 and 0 for the other years.

3.2 The Data Set

The samples we used in the analysis are the non-financial companies listed on the HOSE or the HASE before 2008 for which we could obtain the necessary data for at least two consecutive years of the period from 2006 to 2009. Financial institutions were excluded from the sample because the determinants of their capital structure are different from the determinants of the capital structure of non-financial institutions. Data from 2005 and before were excluded from the sample because they were too small in comparison with the data from 2006 onward, and thus their inclusion biased the estimation results. The necessary data were obtained from the annual financial reports of listed companies that were disclosed by the HOSE and the HASE.

[10] Similar to Rajan and Zingales (1995). The amount of fixed assets here includes both the amounts of tangible and intangible fixed assets.

[11] The industry dummy variables include construction industry (*CONS*), manufacturing industry (*MANU*), mining industry (*MIN*), electricity industry (*POWE*), services (*SERV*), communications (*COMM*), real estate (*REAL*), and commerce (*COM*). See Table 4 in the Appendixes.

There were 172 companies listed on the HOSE and 168 companies listed on the HASE before 2008. From these, 154 non-financial companies listed on the HOSE and 145 non-financial companies listed on the HASE were included in the sample. The total sample was composed of 299 non-financial companies.

3.3 Estimation Method

Nguyen (2006) and Rajan and Zingales (1995) used four-year average values of both explained variables and explanatory variables for their estimations. Booth et al. (2001), Lee (2000), and Suto (2001) used simultaneous explained variables and explanatory variables for their estimations. In this study, we employ a one-period lag for the explanatory variables in relation to the explained variables.

Commonly used estimation methods for panel data are the Ordinary Least Squares method (OLS), the random effect model, and the fixed effect model. However, this study examines 299 companies for four-year periods (after taking the one-year lag, the periods are three years each). Because the time series are too short in comparison with the cross sections, estimation results of the fixed effect model are too dependent on the fixed effect; thus, use of this method would be improper. For this reason, we did not use the fixed effect method. In order to find out whether use of the OLS method or the random effect method would be more proper, we performed a Lagrange Multiplier Test (LM test) in which OLS was the null hypothesis.

3.4 Basic statistics

Table 3-1 shows the characteristics of the main variables used in the analysis of the sample of 299 companies. Table 3-2 displays the characteristics of four groups of the companies divided by stock market and state control of the company.

(Table 3-1) Basic Statistics of the Main Variables
(Table 3-2) Comparison of State-controlled and Non-state-controlled Companies
(Table 3-3) Correlation Coefficients of the Explanatory Variables

As is shown in Table 3-1, the average debt ratio of listed companies in Vietnam is 50.4%, which is approximately the same as that of listed companies in China (50%) as reported by Guihai and Frank (2006). However, the standard variance of the debt ratio of the listed companies in Vietnam is high (22.42%). Table 3-2 shows that the average debt ratio of the

companies listed on the HASE is about 58%, which is higher than that of the companies listed on the HOSE (44%). There is almost no different between state-controlled companies and companies that are not state-controlled on the HASE or the HOSE.

The average long-term debt ratio of listed companies in Vietnam is 11%, which is higher than that of listed companies in China (7%) as reported by Jean (2004). The standard variance of the long-term debt ratio of listed companies in Vietnam is high (15.1%). The average long-term debt ratio of companies listed on the HASE is 12.4%, which is higher than that of companies listed on the HOSE (9.8%). Both on the HASE and on the HOSE, state-controlled companies have higher long-term debt ratios than companies that are not state-controlled. State-controlled companies listed on the HOSE have the highest average long-term debt ratio (14.4%), while companies listed on the HOSE that are not state-controlled have the lowest average long-term debt ratio (8.4%).

The average long-term bank loan ratio of listed companies in Vietnam is 6.8%, which means that about 62% of the long-term debt of listed companies in Vietnam is made up of loans from banks. The standard variance of the long-term bank loan ratio of listed companies in Vietnam is 12%. Companies listed on the HASE have a higher average long-term bank loan ratio (7.5%) than that of companies listed on the HOSE (6.2%). State-controlled companies have a higher average long-term bank loan ratio than companies that are not state-controlled on both the HASE and the HOSE, but the gap is larger on the HOSE. The average long-term bank loan ratio of state-controlled companies listed on the HOSE is 10.7%, while that of companies listed on the HOSE that are not state-controlled is only 4.8%.

The average short-term debt ratio of listed companies in Vietnam is 39.3%, and the standard variance is 20.7%. The average short-term debt ratio of companies listed on the HASE is 45.2%, which is higher than that of companies listed on the HOSE (34.2%). There are differences between the short-term debt ratios of state-controlled companies and companies that are not state-controlled on the HASE and the HOSE. On the HASE, the average short-term debt ratio of state-controlled companies is lower than that of companies that are not state-controlled, but on the HOSE the reverse is true: state-controlled companies have a higher average short-term debt ratio than companies that are not state-controlled. State-controlled companies listed on the HASE have the highest average short-term debt ratio (47.1%), and state-controlled companies listed on the HOSE have the lowest average short-term debt ratio (29.7%).

The average Effective Tax Rate of listed companies in Vietnam is 10.5%, which is much lower than the official corporate tax rate according to the Corporate Tax Law (28%); this means that most listed companies in Vietnam enjoy tax preferences. The standard variance of the Effective Tax Rate of listed companies in Vietnam is 7.7%. The Effective Tax Rate of companies listed on the HOSE is 10.9%, higher than that of companies listed on the HASE (10.1%). Both on the HASE and on the HOSE, state-controlled companies have a lower Effective Tax Rate than companies that are not state-controlled, but the difference is stronger on the HOSE than on the HASE. State-controlled companies listed on the HOSE have the lowest Effective Tax Rate (6.7%), and companies listed on the HOSE that are not state-controlled have the highest Effective Tax Rate (12.1%).

The average logarithm of total assets (SIZE) of listed companies in Vietnam is 26.34, and the standard variance is 1.38. On both the HASE and the HOSE, state-controlled companies have larger SIZE than companies that are not state-controlled.

The average fixed assets rate of listed companies in Vietnam is 30.2%, which is slightly lower than that of listed companies in China (34%) as reported by Guihai and Frank (2006). The standard variance is 21%. There is almost no difference between the fixed assets rate of listed companies on the HASE and on the HOSE, but the difference between state-controlled companies and companies that are not state-controlled is smaller on the HASE (31.1% vs. 29%) than on the HOSE (40.2% vs. 27.6%).

The average Tobin's Q of listed companies in Vietnam is 1.96, and the standard variance is 1.30. Listed companies on the HOSE have a higher average Tobin's Q than listed companies on the HASE (2.18 vs. 1.70). On the HOSE, state-controlled companies have a higher average Tobin's Q than companies that are not state-controlled, but on the HASE the reverse is true: companies that are not state-controlled have a higher average Tobin's Q than state-controlled companies.

4. Estimation Results of Fundraising Behaviors of Listed Companies in Vietnam

In order to investigate the differences in fundraising structure between companies on the Ho Chi Minh Securities Exchange (HOSE) and the Hanoi Securities Exchange (HASE) caused by differences in the listing conditions of the two securities exchanges, we conduct separate

estimations for these two securities exchanges using the same estimation function. The estimation results are summarized in Tables 3-4 and 3-5.[12]

(Table 4-1) Estimation Results of Debt Ratios (HOSE)
(Table 4-2) Estimation Results of Debt Ratios (HASE)

In order to check the robustness of the state-controlled effect, we use the variable GOV (state holding ratio) instead of the dummy variable STATE. The estimation results are summarized in Tables 3-6 and 3-7.

(Table 4-3) Estimation Results of Debt Ratios by Using the GOV Variable (HOSE)
(Table 4-4) Estimation Results of Debt Ratios by Using the GOV Variable (HASE)

We also conducted tests to check the significance of the differences between capital structures of listed companies on the two exchanges.

(Table 4-5) Testing the Differences in Capital Structure of Listed Companies on the HOSE and the HASE

There is no robustness between the estimation results using STATE and GOV. According to the estimation results, listed companies in Vietnam have the following characteristics. First, in general, the estimation results of the debt ratios are consistent with the corporate financing theory explained in Section 2: business scale (*SIZE*) and collateral ability (*TANG*) positively relate to the debt ratios, and growth opportunities (Q) negatively relates to the debt ratios. In the estimation of the Total Debt Ratio, Long-term Debt Ratio, and Long-term Bank Loan Ratio, we found no explanatory variables whose coefficients had signs that were contrary to the theoretical expectations and statistically significant. This suggests that standard corporate financing theories could be appropriate for explaining the capital structure of listed companies in Vietnam.

[12] According to the LM tests where the Pool OLS Model is the null hypothesis and the Random Effect Model is the opposite hypothesis, the Random Effect Model is more suitable for the estimation.

Second, the capital structure of listed companies in Vietnam is better explained by the standard corporate financing theory based on the agency cost approach, in comparison with Nguyen (2006) and Biger et al. (2008). According to the agency cost approach, debt ratios have a positive relation with tangibility and a negative relation with firms' growth opportunities. The results of our investigation support these hypotheses, while the findings of Nguyen (2006) and Biger et al. (2008) do not.

Third, it seems that there are differences between the determinants of long-term fundraising and the determinants of short-term fundraising of listed companies in Vietnam. Firms' scale (*SIZE*) and ability to provide collateral (*TANG*) have significantly positive relations with the Long-term Debt Ratio and the Long-term Bank Loan Ratio, while *SIZE* has no significant relation and *TANG* has a significantly negative relation with the Short-term Debt Ratio. This suggests that a firm's ability to provide collateral is important for long-term borrowing decisions but not important for short-term borrowing decisions.

Fourth, we found differences in the fundraising activities of state-controlled companies and companies that are not state-controlled. The fact that the cross terms STATE*TANG and GOV*TANG are significantly positive suggests that with the same amount of collateral, state-controlled companies can borrow more than other companies. This means that state-controlled companies possess an advantage in reducing their agency costs that accompany the tapping of external borrowed funds.

Fifth, the fundraising structure of the companies listed on the Ho Chi Minh Securities Exchange differs from the fundraising structure of the companies listed on the Hanoi Securities Exchange. The companies listed on the Ho Chi Minh Securities Exchange were less dependent on borrowed funds than those listed on the Hanoi Securities Exchange, which suggests that there was a significant difference in the information asymmetry of companies listed on these two securities exchanges for outside creditors and outside investors.[13]

Lastly, listed companies in Vietnam have a weak incentive to reduce their tax payments through debt financing because the effective corporate tax rate is low.

These observations suggest that the economic reform of Vietnam ("Doi Moi"), whose goal was market economization, has already achieved some successes in the corporate financing systems

[13] Recently, many companies have met the listing conditions of the HOSE but have remained listed on the HASE. It is thought that there is almost no difference between listing on the HOSE and the HASE.

for listed companies. However, in order to end the opaque collusion between state-controlled companies and banks and to protect outside creditors, further liberalization of the banking sector and disclosure of corporate information are urgently needed.

5. Conclusion

This study used data from 2006 to 2009 for listed companies on the Ho Chi Minh Securities Exchange and the Hanoi Securities Exchange that are representative of companies in Vietnam in order to investigate their fundraising determinants and investment behaviors. As was shown by the estimation results that were presented in the previous two sections, we arrived at many interesting findings.

First, the capital structure of listed companies in Vietnam is consistent with standard corporation financing theories such as trade-off theory and agency cost theory. Compared to the capital structure of the companies facing an underdeveloped institutional environment analyzed by Nguyen (2006) and Biger et al. (2008), the capital structure of the listed companies could be better explained by agency cost theory. In addition, the debt ratios of the listed companies were higher than the debt ratios of the small-to-medium companies examined by Nguyen (2006). These observations suggest that the development of market infrastructure successfully mitigated the agency cost problem of listed companies that accompanies the tapping of external funds and, at the same time, made the listed companies' capital structure more consistent with the theoretical prediction.

Second, we found that state-controlled companies had higher debt ratios than other companies and that collateral assets are less important to state-controlled companies in borrowing. These results imply that state-controlled companies hold an advantageous position for reducing the agency costs attendant to tapping borrowed funds. This gives rise to the suspicion that state-controlled listed companies have maintained the privilege to borrow easily from the state-controlled banks even after being formally privatized and listed on the stock exchanges.

Third, the companies listed on the Ho Chi Minh Securities Exchange were less dependent on borrowed funds than those listed on the Hanoi Securities Exchange. Listing on the Ho Chi Minh Securities Exchange, whose listing conditions were more stringent than that of the Hanoi Securities Exchange, seemed to mitigate the information asymmetry problem between companies and outside investors and to reduce the agency costs of equity financing. This

suggests that the further information disclosure required by strengthening the regulations would encourage fund mobilization through stock markets and help companies diversify their sources of funds.

This paper identified the key features of the fundraising structure and their effects on the investment behaviors of listed companies in Vietnam. In terms of fund mobilization and corporate financing, the economic reforms (“Doi Moi”) implemented by the Vietnamese government, which are aimed at creating an economic system based on market principles, have achieved some of their goals. However, our estimation study illustrates several limitations of the economic reforms, such as the opaque relationship between state-controlled companies and government banks, financial restrictions on investment activities, and the inactive investment of companies that are state-controlled or listed on the Ho Chi Minh Securities Exchange. Solving these problems will require further investigation of the mechanisms behind the features identified in this paper, and this remains a task for future research.

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Table 1-1 Listing Conditions for the Hanoi and Ho Chi Minh Securities Exchanges

Conditions	Hanoi Securities Exchange	Ho Chi Minh Securities Exchange
Minimum capital	10 billion VND	80 billion VND
Business performance	Must have made a profit in the year before listing (excluding privatized state-owned companies and newly established companies of the infrastructure industry and the high-tech industry)	Must have made profits in two years before listing
Voting shares	Have to be possessed by at least 100 shareholders	At least 20% of voting shares have to be possessed by at least 100 shareholders.

Source: Vietnam Securities Law

Table 1-2 The Major Indices of Stock Exchanges

	Number of Listed Companies		Amount of Buying and Selling (million shares)		Trading Value (billion VND)		Aggregate Market Value	
	HASE	HOSE	HASE	HOSE	HASE	HOSE	Tril. VND	%GDP
2000	0	5	0	3	0	90	na	na
2001	0	11	0	19	0	964	na	na
2002	0	20	0	35	0	959	na	na
2003	0	22	0	28	0	502	na	na
2004	0	28	0	73	0	1,971	4	0.6
2005	6	35	20	94	260	2,784	10	1.2
2006	81	106	95	538	3,917	35,472	221	22.7
2007	110	141	612	1,814	63,442	217,835	491	43.7
2008	168	172	1,531	2,977	57,122	124,576	210	17.0
2009			5,765	10,402	197,524	422,460	620	37.7

Source: Homepages of Hanoi and Ho Chi Minh Securities Exchanges

Note: All are shown in year-end values. HASE means the Hanoi Securities Exchange, and HOSE means the Ho Chi Minh Securities Exchange.

Table 3-1 Basic Statistics of the Main Variables

	TDR	LDR	LBR	SDR	TAX	SIZE	TANG	Q	GOV
Mean	0.504	0.110	0.068	0.393	0.108	26.339	0.302	1.960	0.309
Median	0.526	0.042	0.007	0.394	0.102	26.328	0.258	1.555	0.310
Maximum	1.000	0.809	0.746	0.973	0.990	30.935	1.683	17.916	0.850
Minimum	0.033	0.000	0.000	-0.618	0.000	22.844	0.003	0.970	0.000
Std. Dev.	0.224	0.151	0.120	0.207	0.089	1.3809	0.210	1.304	0.221
Obs.	965	965	965	965	961	965	964	965	963

Table 3-2 Comparison of State-controlled and Non-state-controlled Companies

	Hanoi Securities Exchange		Ho Chi Minh Securities Exchange	
	State-owned companies	Non-state-owned companies	State-owned companies	Non-state-owned companies
Total Debt Ratio	0.602	0.551	0.442	0.440
Long-term Debt Ratio	0.131	0.117	0.144	0.084
Long-term Bank Loan Ratio	0.080	0.070	0.107	0.048
Total assets	773	342	1,140	911
Fixed assets ratio	0.311	0.290	0.402	0.276
Effective Tax Rate	0.090	0.111	0.067	0.121
Tobin's Q	1.619	1.794	2.448	2.101

Source: Homepages of Hanoi and Ho Chi Minh Securities Exchanges
Note: Average values are from 2006 to 2009. Total assets are expressed in billion VND.

Table 3-3 Correlation Coefficients of the Explanatory Variables

Correlation	TDR	LDR	LBR	SDR	TAX	SIZE	TANG	PROF	Q
TDR	1.000000								
LDR	0.445216	1.000000							
LBR	0.354455	0.771938	1.000000						
SDR	0.757496	-0.247319	-0.179254	1.000000					
TAX	-0.213798	-0.167162	-0.156914	-0.109474	1.000000				
SIZE	0.233696	0.334281	0.283929	0.009162	-0.110046	1.000000			
TANG	0.034261	0.566854	0.566769	-0.376212	-0.153392	0.066062	1.000000		
PROF	-0.529193	-0.295935	-0.253799	-0.356876	0.249214	-0.200630	-0.079640	1.000000	
Q	-0.299752	-0.141679	-0.124118	-0.221065	0.019583	0.013613	-0.042690	0.445269	1.000000

Table 4-1 Estimation Results of Debt Ratios (HOSE)

Variable	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.
C	-0.120		-0.668*		-0.312**		0.542**	
TAX(-1)	0.021		-0.007		-0.020		0.029	
SIZE(-1)	0.022**		0.026*		0.012**		-0.003	
TANG(-1)	0.018		0.138***		0.125***		-0.114**	
Q(-1)	-0.021***		-0.005***		-0.004		-0.015***	
STATE*TAX	0.019		0.368*		0.188		-0.343	
STATE*SIZE	-0.001		-0.006***		-0.005***		0.005***	
STATE*TANG	0.289***		0.440***		0.446***		-0.153	
STATE*Q	-0.016***		-0.000		0.000		-0.016***	
Y2008	-0.025*		-0.007		-0.001		-0.017	
Y2009	-0.035**		-0.018**		-0.001		-0.017	
CONS	0.105*		0.072**		0.037		0.033	
MANU	-0.018		0.000		-0.007		-0.019	
MIN	-0.046		0.011		-0.012		-0.058	
POWE	-0.055		0.074		-0.150***		-0.131	
SERV	0.041		0.054		-0.033		-0.014	
CARR	-0.029		0.091**		0.076**		-0.122	
COM	0.194		0.100		-0.001		0.093	
REAL	0.161*		0.120**		0.021		0.042	
COMM	-0.013		-0.007		-0.022		-0.005	
Adjusted R-squared	0.101		0.334		0.365		0.071	
S.E. of regression	0.088		0.052		0.049		0.080	
F-statistic	3.131	0.000	10.454	0.000	11.835	0.000	2.452	0.000
Observations	359		359		359		359	
Hausman test $X^2(10)$	50.896	0.000	41.946	0.000	34.483	0.000	50.741	

Note: ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 4-2 Estimation Results of Debt Ratios (HASE)

Variable	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.
C	-0.629	0.028	-0.750	0.001	-0.592	0.000	0.161	0.573
TAX(-1)	-0.050	0.673	0.136	0.112	0.020	0.795	-0.203	0.075
SIZE(-1)	0.050	0.000	0.035	0.000	0.024	0.000	0.013	0.180
TANG(-1)	0.038	0.406	0.097	0.003	0.136	0.000	-0.072	0.104
Q(-1)	-0.017	0.045	-0.012	0.042	-0.008	0.149	-0.000	0.927
STATE*TAX	-0.101	0.557	-0.005	0.964	-0.113	0.328	-0.073	0.658
STATE*SIZE	0.008	***	-0.002	0.077	-0.000	0.490	0.010	***
STATE*TANG	-0.324	***	0.161	***	0.141	***	-0.482	***
STATE*Q	-0.047	***	-0.002	0.873	-0.014	0.233	-0.042	***
Y2008	-0.046	0.010	-0.009	0.460	-0.004	0.699	-0.038	0.023
Y2009	-0.038	0.048	-0.014	0.294	-0.017	0.174	-0.022	0.228
CONS	-0.002	0.982	-0.037	0.682	0.042	0.545	0.031	0.788
MANU	-0.143	0.217	-0.076	0.405	0.011	0.872	-0.072	0.534
MIN	-0.016	0.899	0.043	0.675	0.075	0.340	-0.062	0.635
POWE	-0.108	0.437	0.062	0.576	0.049	0.557	-0.173	0.220
SERV	-0.137	0.266	-0.054	0.577	0.047	0.527	-0.091	0.461
CARR	-0.094	0.464	-0.034	0.734	0.078	0.310	-0.064	0.618
COM	-0.004	0.975	-0.169	0.182	-0.014	0.879	0.162	0.311
REAL	-0.087	0.645	-0.135	0.374	0.034	0.759	0.036	0.850
COMM	-0.120	0.511	0.009	0.947	0.099	0.357	-0.134	0.470
Adjusted R-squared	0.243		0.175		0.202		0.226	
S.E. of regression	0.092		0.066		0.065		0.088	
F-statistic	6.089	0.000	4.372	0.000	5.016	0.000	5.640	0.000
Observations	302		302		302		302	
Hausman test $X^2(10)$	50.210	0.000	35.105	0.000	41.079	0.000	32.830	0.000

Notes: ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 4-3 Estimation Results of Debt Ratios by using GOV (HOSE)

Variable	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.
C	-0.188	0.5193	-0.718	0.0000	-0.392	0.0049	0.521	0.0534
TAX(-1)	0.029	0.7320	-0.011	0.8291	-0.018	0.6832	0.034	0.6674
SIZE(-1)	0.025	0.0193	0.029	0.0000	0.016	0.0017	-0.003	0.7502
TANG(-1)	-0.003	0.9524	0.099	0.0053	0.078	0.0117	-0.101	0.0666
Q(-1)	-0.022	0.0000	-0.008	0.0033	-0.007	0.0047	-0.014	0.0017
GOV*TAX	-0.352	0.2352	0.206	0.2499	0.083	0.6034	-0.581	0.0369
GOV*SIZE	0.002	0.4775	-0.005	0.0134	-0.004	0.0406	0.008	0.0198
GOV*TANG	0.392	0.0280	0.681	0.0000	0.720	0.0000	-0.284	0.0867
GOV*Q	-0.050	0.0000	-0.013	0.0476	-0.009	0.1425	-0.038	0.0004
Y2008	-0.040	0.0036	-0.016	0.0531	-0.010	0.1837	-0.023	0.0648
Y2009	-0.052	0.0009	-0.027	0.0037	-0.010	0.2384	-0.025	0.0884
CONS	0.102	0.1007	0.061	0.0874	0.023	0.4005	0.041	0.4698
MANU	-0.023	0.6731	-0.009	0.7626	-0.023	0.3628	-0.012	0.8059
MIN	-0.020	0.8406	0.021	0.7069	-0.006	0.8787	-0.038	0.6717
POWE	-0.043	0.6200	0.075	0.1398	-0.146	0.0004	-0.120	0.1373
SERV	0.062	0.4770	0.049	0.3263	-0.040	0.3082	0.013	0.8707
CARR	-0.020	0.7628	0.083	0.0333	0.066	0.0330	-0.103	0.0949
COM	0.197	0.1417	0.103	0.1823	1.46E-05	0.9998	0.093	0.4429
REAL	0.157	0.0614	0.110	0.0231	0.012	0.7414	0.047	0.5349
COMM	-0.017	0.8025	-0.015	0.7075	-0.033	0.2926	-0.001	0.9875
Adjusted R-squared	0.123		0.341		0.393		0.090	
S.E. of regression	0.086		0.052		0.049		0.080	
F-statistic	3.644	0.000	10.789	0.000	13.225	0.000	2.866	0.000
Observations	359		359		359		359	
Hausman test $X^2(10)$	45.155	0.000	35.386	0.000	44.432	0.000	40.780	0.000

Notes: ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 4-4 Estimation Results of Debt Ratios by using GOV (HASE)

Variable	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.
C	-0.530	0.0722	-0.617	0.0069	-0.463	0.0069	0.114	0.6882
TAX(-1)	-0.021	0.8566	0.156	0.0648	0.036	0.6327	-0.190	0.0858
SIZE(-1)	0.046	0.0000	0.031	0.0001	0.020	0.0010	0.014	0.1504
TANG(-1)	0.056	0.2453	0.051	0.1359	0.068	0.0322	-0.001	0.9748
Q(-1)	-0.011	0.1971	-0.011	0.0633	-0.006	0.2469	0.002	0.7377
GOV*TAX	-0.313	0.2856	-0.072	0.7293	-0.275	0.1539	-0.219	0.4252
GOV*SIZE	0.017	0.0000	-0.004	0.1019	-0.003	0.1574	0.021	0.0000
GOV*TANG	-0.471	0.0011	0.514	0.0000	0.532	0.0000	-0.997	0.0000
GOV*Q	-0.116	0.0002	-0.016	0.4619	-0.030	0.1473	-0.095	0.0011
Y2008	-0.067	0.0005	-0.011	0.4114	-0.006	0.6010	-0.057	0.0015
Y2009	-0.061	0.0029	-0.012	0.3789	-0.015	0.2389	-0.046	0.0144
CONS	-0.022	0.8514	-0.053	0.5688	0.026	0.7031	0.028	0.8075
MANU	-0.160	0.1835	-0.092	0.3222	-0.003	0.9572	-0.071	0.5404
MIN	-0.034	0.7978	0.003	0.9739	0.035	0.6445	-0.037	0.7751
POWE	-0.163	0.2609	0.012	0.9135	-0.002	0.9762	-0.174	0.2180
SERV	-0.147	0.2494	-0.068	0.4938	0.033	0.6529	-0.085	0.4924
CARR	-0.119	0.3695	-0.083	0.4211	0.029	0.6980	-0.037	0.7723
COM	-0.032	0.8447	-0.179	0.1600	-0.028	0.7636	0.146	0.3583
REAL	-0.073	0.7081	-0.154	0.3158	0.015	0.8861	0.073	0.6999
COMM	-0.177	0.3505	0.023	0.8739	0.112	0.2951	-0.205	0.2688
Adjusted R-squared	0.238		0.210		0.260		0.249	
S.E. of regression	0.090		0.064		0.063		0.086	
F-statistic	5.956	0.000	5.234	0.000	6.592	0.000	6.259	0.000
Observations	302		302		302		302	
Hausman test $X^2(10)$	43.528	0.000	22.089	0.014	26.592	0.003	33.215	0.000

Notes: ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively

(Table 4-5) Testing the Differences in the Capital Structures of the HOSE and the HASE

	HOSE	HASE	Test of the difference (P value)
TDR	0.441	0.576	0.000
LDR	0.098	0.124	0.008
LBR	0.062	0.471	0.089
SDR	0.342	0.452	0.000
TAX	0.109	0.101	0.098
SIZE	26.719	25.906	0.000
TANG	0.304	1.619	0.773
Q	2.180	1.707	0.000
Sample	515	449	

Notes: Average value of 2006–2009

Appendixes

Table A-1 Privatization of State-owned Companies in Vietnam

Regulation on equitization of state-owned companies (7/5/1996)
Object companies: State-owned companies that satisfy 3 conditions: (1) They are small-medium companies, (2) There is no need for the state to hold 100% ownership, (3) There is an efficient investment plan.
Regulation on equitization of state-owned companies (revised 29/6/1998)
Object companies: State-owned companies for which there is no need for the state to hold 100% ownership
Regulation on equitization of foreign-owned companies (15/4/2003)
Object companies: Foreign-owned companies that have been running at least 3 years and made a profit in the year before applying for equitization.
Simultaneity of equitizing and listing of state-owned companies (revised 4/8/2005)
State-owned companies that satisfy the listing conditions of the Ho Chi Minh Securities Exchange or the Hanoi Securities Exchange can equitize and list at the same time.
Regulation on issuing company bonds（19/5/2006）
Object companies: joint-stock companies, state-owned companies that have become joint-stock companies or limited liability companies, foreign-owned companies.
Regulation on equitization of state-owned companies (revised 26/6/2007)

Source: Compiled by the authors from various sources.

Table A-2 Banking Reform and Liberalization of Interest Rates in Vietnam

Period	
Before 1988	Monobank system: There is no separation of the functions of financial institutions. Regulation of the interest rate is independent of foreign interest rates. The nominal interest rate is lower than the inflation rate; thus, the real interest rate is negative.
26/3/1988	Separation of the functions of the state bank and commercial banks According to 53/HDBT Order
1989–5/1992	Fixed interest rate regime The interest rate is adjusted in relation to the fluctuation of the price index. Interest rates of foreign currencies are those of the world market.
6/1992–1995	Limited interest rate regime The State Bank of Vietnam fixes the lower limit of the deposit interest rate and the ceiling of the lending interest rate. Commercial banks decide their interest rates based on those interest rates.
1996–7/2000	Ceiling interest rate regime The deposit interest rate is liberated, and the ceiling of the lending interest rate is fixed.
8/2000–5/2002	Basic interest rate and flexible interest rate regime The basic interest rate and the allowed movement rate are announced monthly. In case of necessity, the state bank will announce proper adjustments. Commercial banks negotiate with borrowers and decide lending interest rates based on these rates.
5/2001–Present	Liberalization of interest rates of foreign currencies Interest rates of foreign currencies are decided on the basis of their interest rates on world markets and their demand and supply in the domestic market.
6/2002–Present	Expansion of liberalization of the deposit interest rate and the lending interest rate Liberalizing the deposit interest rate and the lending interest rate of VND Setting a ceiling for the deposit interest rate of USD of companies, but liberating the deposit interest rate of USD of individuals

Source: Homepage of the State Bank of Vietnam.

Table A-3 Corporate Tax on Listed Companies in Vietnam

Corporate Tax Law (17/6/2003) (1) Tax rate: 28% (2) Preference tax rate: (1) Applying a tax rate of 20%, 15%, or 10% for companies that are newly established in preference industries or preference areas, (2) Applying a tax exemption (at most 4 years) and half reduction (at most next 9 years) for the companies that are moved to preference areas, (3) Applying a tax exemption (at most 4 years) and half reduction (at most next 7 years) for the increasing profit of the companies that apply new production lines or new technology.
Regulation of tax preferences for listed companies (20/10/2004) (1) Applying a tax exemption in 2 years after listing for newly listed companies, (2) If listing is not at the beginning of the year, the tax exemption could be calculated from the next year, (3) If Preferences of Corporate Tax Law are being applied, this preference could be applied after applying those preferences.
Nullification of regulation on tax preferences for listed companies (8/9/2006) (1) For the companies listing after 1/1/2007, preferences of the above regulation are not applied, (2) For the companies listing before 1/1/2007, preferences of the above regulation are applied.

Source: Homepages of the Ho Chi Minh Securities Exchange and the Hanoi Securities Exchange.

Table A-4 Breakdown of Listed Companies by Industry

	Hanoi Securities Exchange		Ho Chi Minh Securities Exchange		Total	
	Number of companies	Proportion (%)	Number of companies	Proportion (%)	Number of companies	Proportion (%)
Agriculture, forestry, and fisheries	4	2.38	15	8.77	19	5.60
Construction	67	39.88	27	15.79	94	27.73
Manufacturing	54	32.14	68	39.77	122	35.99
Mining	8	4.76	4	2.34	12	3.54
Power	4	2.38	5	2.92	9	2.65
Service	11	6.55	7	4.09	18	5.31
Carrier	8	4.76	19	11.11	27	7.96
Finance	6	3.57	4	2.34	10	2.95
Communication	3	1.79	2	1.17	5	1.47
Real estate	1	0.60	6	3.51	7	2.06
Commerce	2	1.19	14	8.19	16	4.72
Total	168	100	172	100	340	100

Source: Homepages of the Hanoi and Ho Chi Minh Securities Exchanges