The Effect of Foreign Ownership on Capital Structure in Vietnam

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ABSTRACT

The paper aims to explore the impacts of foreign ownership on capital structure of Vietnamese companies. Based on a dataset of 261 firms listed on Ho Chi Minh stock exchange from 2007 to 2014, we employ several estimators to demonstrate that the proportion of foreign investment is negatively associated with short-term, total and market leverage. This relationship is robust when we examine sub-samples classified by firm size and firm type.

1. INTRODUCTION

In Vietnam, liberalization process began in 1986 in order to build a market-oriented economy that can replace for the old centrally-planned economy. In 2000, the foundation of Ho Chi Minh Stock Exchange (HOSE) contributed to the increase of the market capitalization from $154,000,000 in 2003 to $20,385,000,000 in 2010 (DN Phung and TPV Le, 2013). At the end of 2010, Vietnam is ranked 16th in the Emerging Markets Opportunity Index 2010 of Grant Thornton. Since 2013, Vietnam has been on the review list to upgrade to the Emerging market from frontier market by Morgan Stanley Capital International. Hence, the Vietnamese government has been expected to improve the openness to foreign investors. Under Decree 60 signed on 26 June 2015 by the Ministry of finance, Foreign Ownership Limit (FOL) has been loosened so that foreign investors now have the chance to own 100 percent of voting shares. At the end of 2016, foreign ownership accounts for 18% of the market (around $11,700,000,000) while the State holds 33% of stake in 312 companies listing on HOSE. Foreign investors mainly invest in healthcare, technology, consumer goods while key industries like utilities, banks are largely controlled by the government (Stockplus, 2016).

The examination of the ownership impacts on capital structure of Vietnamese listed firms arose in the recent years. However, most of research focus on state ownership (Nguyen and Ramachandran (2006), Biger et al. (2008), Nguyen et al. (2012), Okuda and Nhung (2012)). Only one study of DN Phung and TPV Le (2013) tested the relationship between the offshore investors and leverage ratio. They observed firms listed on HOSE within a 4 - year period of time from 2008 to 2011 and learnt that foreign ownership affected negatively to leverage. They revealed that un-concentrated foreign investment could not monitor the activities of top managers effectively, similar to cases of other emerging markets. Compared to the study of DN Phung and TPV Le (2013), our paper aims to contribute to the understanding of capital structure decision by analyzing a more complete data set of listed over 8 years. Besides, we cover all

possible leverage measures (both book and market), and use more estimator tools to entrust the findings. In addition, using the number of shares hold by foreign investors as a proxy for foreign ownership instead of dummy variable will provide sufficient and convincing arguments on the relationship between foreign investment and capital structure.

Figure 1.1: Foreign ownership from 2007 to 2015 on HOSE
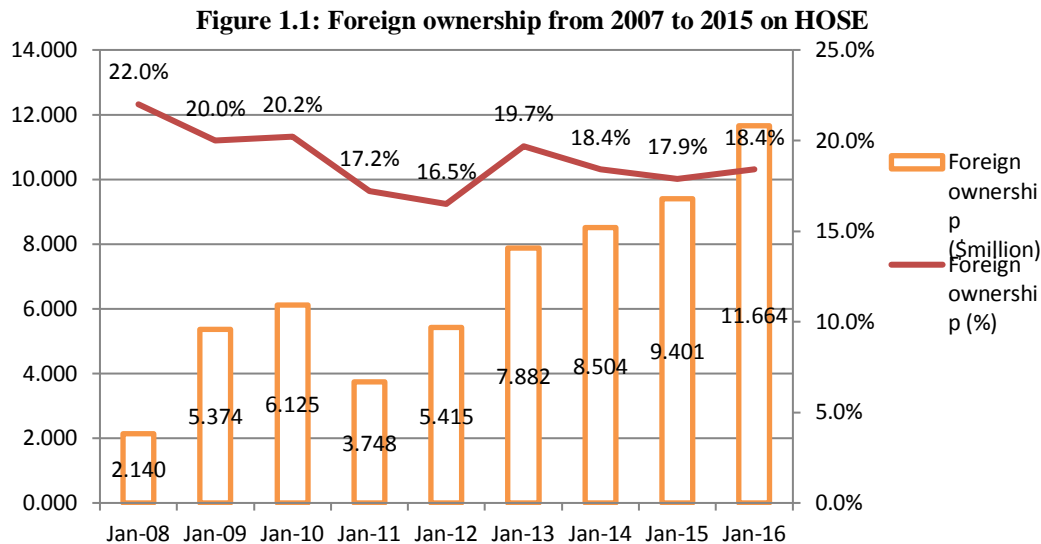
Source: 2015 Report of Ministry of Planning and Investment

The rest of our study is as follows: Section 2 is for reviewing the background literature and empirical studies, followed by Section 3 where data and methodology are described. Next, section 4 is for results; and then, the conclusion comes in Section 5.

2. LITERATURE REVIEW

2.1. CAPITAL STRUCTURE

As one of the major concerns of both theoretical and empirical corporate finance studies, capital structure has attracted significant attention. Since the MM theory (Modigliani and Miller, 1958) which states that the value of a company does not depend on how its business activities are financed if the capital market is perfect, many efforts have been made to know more about financing decisions of firms. The well-known trade-off theory (Kraus and Litzenberger, 1973), which takes imperfect conditions of capital market into account, posits that firms do have target leverage and will choose an optimal level of debt by considering both costs and benefits of leverage. The optimal leverage can be seen as an equilibrium point where benefits and costs of using debt balance. Firms will use more debt when the saving from debt tax shield overweight the costs, which stem mainly from debt overhang and financial distress. The static trade-off study suggests that adjustment will occur immediately and completely whenever the deviations to the optimal leverage exist in order to maximize firm value. However, the dynamic trade-off model states that costs of adjustment can prevent the firm from correcting its level of debt regularly. The firm will only readjust when the cost of adjustment is smaller than the loss caused by a non-preferable level of debt (Fischer et al., 1989). The trade-off theory implies that highly profitable firms tend to more levered

to maximize tax saving amount. This point suggests a positive correlation between foreign ownership and leverage because foreign investors might like to invest their money in firms with high performance and less default risk.

In contrast, the pecking order theory (Myers, 1984) supposes that there is no perfect debt ratio. It implies that debt is only used if internal funding sources cannot meet firm demands, while equity is considered as the least preferable types of funds. Based on the asymmetric information assumption, shares issuance can be considered as a signal of low-return business so they will be undervalued by outside investors (Leland and Pyle, 1977). On the other hand, using debt will send a positive signal of future growth to the market. Some empirical studies find that this model can explain many problems of modern corporate finance, including firms' avoidance of issuing shares (Jean, 2004). The pecking order theory implies profitable firms are less levered since they can generate more internal capital flows, thus a negative link between foreign ownership and leverage can be expected. Another famous theory - market timing (Baker and Wurgler, 2002) argues that shares are issued when the market-to-book ratio is high and capital structure depends on the ability of selling overpriced shares. In contrast, when the market is undervalued, debt is issued. Indeed, based on current conditions of the market, firms decide how to shape their leverage ratio. Similar to the pecking order, the market timing theory implies that there is no optimal capital structure.

To test theories, many empirical studies, including Titman and Wessels (1988), Baker and Wurgler (2002), Hovakimian (2006), Frank and Goyal (2009), have been conducted but the results are still mixed. Some of them support the trade-off theory when providing the evidence of positive impacts of size, profitability and tangibility on debt ratios, but the other is on the side of pecking-order theory when showing debt desirability of firms.

2.2. FOREIGN OWNERSHIP AND CAPITAL STRUCTURE

Together with the wave of offshore investment, cross-country investors are shown to have strong impacts on corporate governance and agency cost. Indeed, in emerging markets, foreign ownership is considered as the most important part of ownership structure that affects capital decisions of firms (Douma et al., 2006). Theoretically, there are three key arguments for the relationship between foreign capital and funding choice. Firstly, some studies provide evidences of the positive impact of foreign investment on the level of debt. In research conducted in China, Zou and Xiao (2006) showed that asymmetric information was a big problem for foreign investors, so using more debt is a good way to improve the monitoring role. Information disadvantages for foreign owners are also found in the studies of Brennan and Cao (1997) and Choe et al. (2005). Furthermore, foreign investors tend to minimize their risks, at both micro and macro levels, by improving firm operation and management through contributing technology and the ability to acquire cheaper sources of debt (Gurunlu and Gursoy, 2010).

However, some studies agree on the negative relationship between debt level and foreign ownership. Gurunlu and Gursoy (2010) believed the main reason was a higher equity contribution from foreign investors. Allen et al. (2005) suggested that foreign-owned firms had more available funding sources to substitute debts thanks to their management skills, wide-network of relationship, superior technology, strong brand name and reputation. Besides, lower corporate tax rates that lead to small benefits from debt tax shield do not encourage them to use more debts (Li et al., 2009). Instead

of using debts, increasing foreign ownership is a good way to reduce not only over-investment problems caused by managers, but also the agency cost between managers and stockholders (Huang et al., 2011). Foreign ownership can help to strengthen the monitoring role, and reduce the cost of capital thanks to the existence of a group of external investors, professional analysts and economists closely following the managers' actions.

Last but not least, some studies agree on there is no relationship between foreign investors and funding decision of firms. The reason is offshore owners may only want to diversify their investments so they often focus on short-term efficiency, and therefore the impacts of their existence on capital structures are limited. Especially in unstable and underdeveloped stock markets, institutional foreign investors may not involve with target firms' financing decisions because their participant may take only a very small proportion of their whole portfolio.

In Vietnam, although the connection between ownership and funding choice still ambiguous, most of studies support a positive relationship because three main reasons. Firstly, similar to China and other underdeveloped countries, information asymmetry are believed a big problem that foreign investors have to face (Vo, 2011). When investing in Vietnam, foreign investors not only individuals, but also institutions may suffer several risks, from cultural differences to political changes. As a consequence, they tend to use debt to improve the managerial monitoring role (DN Phung and TPV Le, 2013). Secondly, Vietnamese listed firms which attract a high level of foreign funds often have large size and reputation. They have stable cash flows and the significant amount of valuable assets in place, bringing them the bargaining power to borrow more money from banks and other financial institutions with cheaper costs. Thirdly, foreign-owned firms have more advantage in minimizing agency cost which enables them to acquire more debts. However, DN Phung and TPV Le (2013) found the evidence of a negative relationship caused by low and non-concentrated offshore funds. In fact, wide-spreading capital reduces its managerial monitoring effects because foreign investors only have the power to correct the behavior of top managers when their investment is large and concentrated enough.

3. DATA AND METHODOLOGY

3.1. DATA

In Vietnam, reliable audited financial data are only found in reports of listed companies so the paper focuses on that type of firms in order to entrust the empirical results. The database used is from Stoxplus which covers the whole range of listed enterprises on Ho Chi Minh stock exchange from 2007 to 2014. Our sample data consists of 261 among 312 companies listed on HOSE and spans over 8 industries including Basic Material, Healthcare, Industrials, Technology, Utilities, Consumer Goods, Consumer Services and Other.

Table 3.1: Industry summarize

Industry	Total Observations	Percent	Foreign Observations	Percent
Basic Materials	329	15.11	251	15.18
Consumer Goods	422	19.38	349	21.11
Consumer Services	93	4.27	71	4.30

Health Care	75	3.45	61	3.69
Industrials	662	30.41	492	29.76
Technology	67	3.08	45	2.72
Utilities	147	6.75	114	6.90
Other	382	17.55	270	16.33
Total	2,177	100	1,653	100

3.2. RESEARCH MODEL

To test the impact of foreign ownership on capital structure, we apply the model as follows:

$$\text{LEV}_{it} = \alpha + \beta_1 FOREIGN_{it} + \beta_2 SIZE_{it} + \beta_3 MTB_{it} + \beta_4 PROFIT_{it} + \beta_5 TANG_{it}$$
$$+ \beta_6 GROWTH_{it} + \beta_7 NDTS_{it} + \beta_8 MIL_{it} + \varepsilon_{it}$$

$i = 1,..., 261; t = 2007,..., 2014$

Where LEV_{it} indicates leverage. $FOREIGN_{it}$ stands for foreign ownership of the firm i at time t. The control variables are chosen based on the guidance of prior studies, including firm size (SIZE), profit (PROF), tangibility (TANG), growth opportunity (GROWTH), market-to-book ratio (MTB), non-debt-tax shield (NDTS) and median industry leverage (MIL).

There are three techniques that are popularly used to analyze panel data, including pooled ordinary least squares (POLS), fixed effects (FEM) and random effects method (REM). When testing the determinants of capital structure, the POLS regression seems to provide bias outcomes when ignoring omitted specific factors which are not mentioned in equations (Serrasqueiro and Nunes, 2008). With the awareness of the possible existence of the correlation between firm-specific non-observable individual effects and capital structure's determinants, some previous literatures suggested to use the FEM to test the hypotheses about leverage and ownership structure (Mira, 2005; Degryse et al., 2012, Köksal, B. and Orman, C., 2014). Under the FEM assumptions, the individual specific effect is allowed to be correlated with the independent variables, while REM does not allow such kind of correlation (Kurt Schmidheiny, 2016). With papers running both FEM and REM, Hausman test is used to determine which one is more appropriate. If the REM assumption holds, the REM is more efficient than the fixed effects model and vice versa.[1]

In addition, for panel data, the cross-correlation and autocorrelation of variables often exist. If this occurs, although models still provide worth trusting estimated coefficient, the standard deviation of the coefficient will be biased and t-statistics will have lower significance (Petersen 2009). Guided by Petersen (2009), to tackle this problem, robust standard errors will be used to solve the heteroskedasticity.

3.3. DEPENDENT VARIABLE - LEVERAGE

Welch (2014) supposes that the book measure of equity has a little meaning of managerial relevance as it measures things in the past. Thus, in this study, the author

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[1] See Kurt Schmidheiny (2016) for how to use Stata14 to run these types of regression on panel data.

used six proxies of firm leverage as follows to observe funding behavior of Vietnamese firms completely.

Table 3.2: Explanatory for dependent variables

Variable	Description	Measurement
SDA	Short-term debt ratio	Short-term debt divided by the book value of total assets
LDA	Long-term debt ratio	Long-term debt divided by the book value of total assets
TDA	Total book leverage	Total debt divided by the book value of total assets
SDM	Market short-term debt ratio	Short-term debt divided by the market value of total assets
LDM	Market long-term debt ratio	Long-term debt divided by the market value of total assets
TDM	Total market leverage	Total debt divided by market value of assets

The study defines the market value of assets as the total of the market value of equity and debt (short-term plus long-term) minus deferred taxes and investment tax credit (Frank and Goyal, 2009).

3.4. KEY INDEPENDENT VARIABLE - FOREIGN OWNERSHIP

Consistent with studies of Zou and Xiao (2006) and Li et al. (2009), foreign ownership (FOREIGN) equal to the total shares owned by foreign investors divided by the total number of shares issued by a particular firm, then multiply by 100 to obtain proportion. However, the lack of information in Vietnam prevents us from separating the differences in behavior of institutions and individuals foreing investors, as well as investors from different regions in the world.

3.5. CONTROL VARIABLES

To examine theories, several empirical research has been conducted and one main strand concerns with determining factors that have impacts on firm leverage. Harris and Raviv (1991) state that debt ratio has a positive relationship with fixed assets, non debt tax shields, growth opportunities, firm size, but negative link to volatility, advertising expenditures, bankruptcy probability, profitability, research and development expenditures. However, Titman and Wessels (1988) do not provide any support for non-debt tax shields, volatility, collateral value as significant influential factors. In 2009, Frank and Goyal find that the most reliable determinants are median industry leverage, market-to-book ratio, the tangibility of assets, profits, size and expected inflation after testing 39 key factors. Follow the prior research and the information availability of the stock market, the author includes 7 control variables, including size, profit, tangibility, growth, market-to-book ratio, non-debt-tax shield, and median industry leverage.

Table 3.3: Explanatory for control variables

Variable	Description	Measurement	Prediction
SIZE	Size	The log of total assets	+ (trade-off)
PROFIT	Profitability	Earnings before interest, tax and depreciation divided by total assets	+ (trade-off) - (pecking order)
TANG	Tangibility	Net fixed assets divided by total assets	+ (trade-off, pecking order)

			- (market timing)
GROWTH	Growth	Percentage change in total assets	-(trade-off) + (pecking-order)
MTB	Market to book	The market value of assets divided by total assets	- (market-timing)
NDTS	Non debt tax shields	Depreciation and amortization expenses divided by total assets	?
MIL	Median industry leverage	Industry average debt to equity ratio (for 8 different sections)	?

3.6. SUMMARY OF VARIABLES

Table 3.4 represents descriptive statistics of all variables. Surprisingly, the total leverage of listed firms (excluding the financial companies) over the 8-year period from 2007 to 2014 is 24,6% on average, which is much lower than 52% during 2002-2003 (Binger et al., 2008) and 48% between 2007 and 2010 (Nguyen, Dzung et al., 2014). This can be explained by the development of equity market and higher loan interest rate – from 7% to 11% throughout that period. The use of long-term leverage is low, with the average of 8.6%. Consistent with Nguyen and Ramachandran (2006), our analysis shows that Vietnamese listed firms have a tendency to rely on short-term debt because of the underdeveloped financial markets. In terms of the market measure, we can see that debts dominate around 36% of total firm value instead of 24.6% of book recording. These figures also imply that the market value of assets is much lower than the book value of assets.

Table 3.4: Descriptive statistics of regression variables

Variable	Observation	Mean	Standard deviation	p90	p75	p50 (median)	p25	p10
Leverage measure								
SDA	2,175	0.159	0.164	0.403	0.254	0.105	0.022	0.000
LDA	2,175	0.086	0.128	0.261	0.121	0.029	0.000	0.000
TDA	2,175	0.246	0.196	0.522	0.393	0.227	0.069	0.000
SDM	2,175	0.238	0.238	0.620	0.388	0.164	0.026	0.000
LDM	2,175	0.121	0.173	0.387	0.178	0.038	0.000	0.000
TDM	2,175	0.360	0.283	0.764	0.600	0.345	0.080	0.000
Foreign ownership measure								
FOREIGN	1,653	0.136	0.165	0.400	0.211	0.065	0.010	0.002
Other capital structure determinants								
SIZE	2,175	11.921	0.549	12.613	12.243	11.876	11.555	11.309
MTB	2,175	0.883	0.681	1.488	1.027	0.727	0.518	0.357
PROFIT	2,173	0.105	0.091	0.212	0.145	0.090	0.051	0.022
TANG	2,175	0.186	0.193	0.466	0.265	0.121	0.043	0.012
GROWTH	2,169	1.438	34.907	0.524	0.252	0.085	0.000	-0.080
NDTS	2,175	0.023	0.033	0.057	0.032	0.015	0.002	0.000
MIL	2,073	0.476	0.159	0.686	0.603	0.497	0.343	0.271

The mean and median of foreign ownership in our sample are 13.6% and 6.5%, respectively. It reflects that on average, the foreign funds invested in Vietnamese listed firms are quite limited compared to other countries in the same region. Firms in our sample are quite profitable with earnings before interest and tax take more than 10% of the book value of total assets. About 19% of total assets are tangibility, and average growth rate of assets is around 143.8%.

Using the wide range of firm-level data, we suffer the problem of outliers when some observations are far away from the zone the rest locate. However, we decide to run regression with the whole sample without wisorizing or trimming outliers because we do not want to bias the results, and our sample is quite small to worry about overvaluing outliers. [2]

3.7. CORRELATION AMONG VARIABLES

Table 3.5 shows the pairwise correlation coefficient matrix of dependent and independent variables. As can be seen from the table, ownership variables have low correlation coefficients with six proxies of capital structure. Foreign is negatively correlated to all measures of leverage at -0.11776 for SDA, -0.0785 for LDA, -0.1969 for TDA, 0.2178 for SDM, -0.0991 for LDM, and -0.2467 for TDM.

In addition, both 6 proxies of leverage have an adverse correlation with firm profitability and market-to-book value while firm size, growth, and medium industry leverage are positively associated with all debt measures. Tangibility and non-debt tax shield vary its sign on every debt to asset ratios. Between independent variable, correlation coefficients are less than 0.8 [3] so the multicollinearity may not be a big problem here.

4. RESULTS
4.1. RELATIONSHIP BETWEEN FOREIGN OWNERSHIP AND LEVERAGE

Table 4.1 shows the results of the relationship between foreign ownership and the book measures of leverage employ by four different estimators: POLS, REM, FEM and FEM with clusters. In terms of short-term leverage, the POLS outcomes show that level of foreign investment has negatively significant influence at the 1% level (coefficients is -0.183). However, the adjusted R squares in the model run by POLS is quite small at 8.3%. When testing the determinants of capital structure, the pooled OLS regression seems to provide bias outcomes when ignoring omitted specific factors which are not mentioned in equations. By pooling all observations without awareness of uniqueness of firms, the estimated outcomes seem to be inconsistent. Furthermore, the results of the Breusch-Pagan test confirm that REM is better than POLS. With REM, foreign investors affects negatively to debt to asset ratio with coefficients at -0.187. Between FEM and REM, to conclude which model is more appropriate, we perform the Hausman test. As can be seen, the p-value of Hausman test is less than 0.05 which show FEM better fit over REM. With FEM results, foreign coefficient is significantly negative, at the 1 % level which indicates that, ceteris paribus, firms with higher foreign ownership are less involved to short-term debts.

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[2] To solve the problem of outliers, we follow the instructions of Ghosh and Vogt (2012)
[3] The accepted highest level suggested by Kennedy (1992)

Table 3.5: The correlation coefficient matrix

	SDA	LDA	TDA	SDM	LDM	TDM	FOREIGN	SIZE	MTB	PROFIT	TANG	GROWTH	NDTS	MIL
SDA	1													
LDA	-0.1353	1												
TDA	0.6844	0.6298	1											
SDM	0.8892	-0.1703	0.5718	1										
LDM	-0.1342	0.9243	0.575	-0.099	1									
TDM	0.615	0.4963	0.8474	0.7308	0.5983	1								
FOREIGN	-0.1776	-0.0785	-0.1969	-0.2178	-0.0991	-0.2467	1							
SIZE	0.0705	0.3222	0.2924	0.0688	0.2914	0.2645	0.3365	1						
MTB	-0.1183	-0.0487	-0.1285	-0.3274	-0.188	-0.3962	0.2651	0.0183	1					
PROFIT	-0.195	-0.2318	-0.3235	-0.2986	-0.2756	-0.4323	0.1806	-0.0686	0.4884	1				
TANG	-0.0857	0.3862	0.2171	-0.1886	0.288	0.0399	-0.039	-0.06	0.1656	0.0371	1			
GROWTH	0.08	0.1144	0.1469	0.0607	0.1076	0.1246	0.0079	0.2173	0.1042	0.1037	-0.14	1		
NDTS	-0.082	0.11	0.0167	-0.1255	0.0649	-0.0596	-0.017	-0.0737	0.1205	0.1092	0.4111	-0.107	1	
MIL	0.0445	0.1626	0.1545	0.1321	0.1913	0.2369	-0.104	-0.1322	-0.2085	-0.1301	-0.001	0.0042	-0.0467	1

We also conduct the modified Wald test for group-wise heteroskedasticity, and the outcomes (all Prob> Chi2 = 0.000) indicate that there is the heteroskedasticity problem in our panel data. Besides, the Wooldridge test for autocorrelation reveals a presence of autocorrelation. Therefore, our study needs to employ FEM with adjusted standard errors. The clustered-FEM shows that, with a 99% confidence interval, short-term debt to asset ratio is affected by the number of shares owned by foreign investors. Besides, the adjusted R squares are high, around

Considering to long-term debt to book value of total asset, when results from POLS and REM suggests a significant negative association between level of offshore investment and gearing ratio, Breusch-Pagan test and Hausman test reveal that FEM is more fitting. However, FEM outcome does not support a link between foreign investment and the size of long-term debt. Similarly, FEM with adjusted standard errors does not find a notable influence of foreign ownership to the amount of debt.

Turning to total debt to total asset ratio, both estimators reveal an adverse link to foreign ownership. Depending on the results of Breusch-Pagan tests and Hausman tests, FEM and clustered-FE seem to be more appropriate. With a 99% confidence interval, the foreign coefficient is at -0.188 (t= -4.81) which indicates that, ceteris paribus, a 1 % increase in foreign ownership leads to 18.8% decrease in total debt ratio. In terms of other determinants, size and profitability have strong impacts on capital structure decisions but in opposite directions. The negative relationship between leverage ratio and profitability is consistent with previous studies, including Titman and Wessels (1988), Baker and Wugler (2002) and Huang and Ritter (2009). This result is predicted by pecking order theory because profitable firms can produce more internal funds by themselves to use so they use less debts. Moreover, the results suggest that firms are more levered when they have large size, which is consistent with the empirical study of Booth et al (2001). The explanations are economies of scale, small bankruptcy costs, and reputation that bring them many advantages to borrow from banks. Furthermore, our results do find that firm growth has persistent positive effects on leverage ratios. This direction of impact is predicted by pecking order theory because internal funds will not satisfy the demands of high growth firms. However, non-debt tax shield is insignificantly associated with debt ratio. Tangibility is an important factor that affects long-term, and total leverage, but do not have a significant impact on the short-term debt ratio.

The combination of foreign ownership and other firm-specific characteristics explains up to 18% of the short term, and 27.36% of the book leverage ratio. However, R-squared for long-term debt ratio is only 7% and do not change much when we add median industry leverage as an additional variable. A possible explanation is that firms in our sample acquire too small amount of long-term debt during observed periods, around 8% of total debt, due to the unstable and non-preferable market conditions.

Table 4.1: The regression results for book leverage

	SDA				LDA				TDA			
	POLS	REM	FEM	Clustered FEM	POLS	REM	FEM	Clustered FEM	POLS	REM	FEM	Clustered FEM
FOREIGN	-0.183***	-0.187***	-0.167***	-0.167***	-0.127***	-0.0631**	-0.0211	-0.0211	-0.310***	-0.237***	-0.188***	-0.188***
	(-7.10)	(-7.02)	(-5.63)	(-4.07)	(-7.10)	(-2.93)	(-0.81)	(-0.58)	(-11.09)	(-8.01)	(-5.68)	(-4.81)
SIZE	0.0219**	0.103***	0.160***	0.160***	0.102***	0.0730***	0.0525***	0.0525*	0.124***	0.168***	0.213***	0.213***
	(2.7)	(9.26)	(11.29)	(5.38)	(18.16)	(8.69)	(4.24)	(2.03)	(14.1)	(13.61)	(13.42)	(5.96)
MTB	-0.00185	0.0277***	0.0482***	0.0482**	0.0100*	0.0148*	0.0292***	0.0292	0.00815	0.0462***	0.0774***	0.0774*
	(-0.25)	(3.65)	(5.36)	(2.74)	(1.97)	(2.47)	(3.72)	(1.42)	(1.02)	(5.49)	(7.71)	(2.42)
PROFIT	-0.338***	-0.290***	-0.251***	-0.251***	-0.264***	-0.144***	-0.109***	-0.109**	-0.602***	-0.422***	-0.359***	-0.359***
	(-6.88)	(-8.86)	(-7.37)	(-5.29)	(-7.75)	(-5.18)	(-3.65)	(-3.04)	(-11.30)	(-11.58)	(-9.46)	(-6.69)
TANG	-0.0244	-0.00352	-0.000518	-0.00052	0.294***	0.186***	0.120***	0.120*	0.270***	0.158***	0.119***	0.119*
	(-1.06)	(-0.15)	(-0.02)	(-0.01)	(18.46)	(10.13)	(5.44)	(2.55)	(10.82)	(6.27)	(4.23)	(2.46)
GROWTH	0.0289*	0.0258***	0.0222***	0.0222	0.0378***	0.0263***	0.0236***	0.0236*	0.0667***	0.0511***	0.0458***	0.0458**
	(2.49)	(4.05)	(3.47)	(1.96)	(4.7)	(4.78)	(4.21)	(2.12)	(5.31)	(7.21)	(6.4)	(2.82)
NDTS	-0.113	-0.0631	-0.0551	-0.0551	-0.0579	-0.0921	-0.103	-0.103	-0.171	-0.159	-0.158	-0.158
	(-0.91)	(-0.85)	(-0.74)	(-1.08)	(-0.67)	(-1.44)	(-1.59)	(-1.12)	(-1.26)	(-1.93)	(-1.91)	(-1.77)
MIL	-0.0308	0.0484	0.0495	0.0495	0.141***	0.0871***	0.048	0.048	0.110***	0.121***	0.0975*	0.0975
	(-1.23)	(1.53)	(1.31)	(1.02)	(8.11)	(3.56)	(1.46)	(-1.14)	(4.05)	(3.47)	(2.32)	(1.6)
Constant	-0.0288	-1.079***	-1.788***	-1.788***	-1.222***	-0.853***	-0.595***	-0.595	-1.251***	-1.825***	-2.384***	-2.384***
	(-0.29)	(-8.00)	(-10.48)	(-5.09)	(-17.76)	(-8.34)	(-4.00)	(-1.93)	(-11.62)	(-12.23)	(-12.51)	(-5.65)
Adj_R2	0.0834				0.371				0.2925			
F-test that all β = 0	18.82				116.54				81.98			
Pro>F	0.0000				0.0000				0.0000			
R2 (within)		0.1708	0.1813	0.1813		0.0702	0.076	0.076		0.263	0.2736	0.2736
Wald test for REM - chi2		248.21				261.34				531.46		
Prob>chi2		0.0000				0.0000				0.0000		
Breusch and Pagan Lagrangian multiplier test for REM - chibar2		2332.00				1558.54				2112.29		

Prob>chibar2		0.0000				0.0000				0.0000		
Overall F-test			35.58	10.80			13.22	3.92			60.49	21.06
Pro>F			0.0000	0.0000			0.0000	0.0000			0.0000	0.0000
F-test that all u_i = 0			21.33				11.75				19.9	
Pro>F			0.0000				0.0000				0.0000	
Hausman test - chi2			51.28				66.7				47.8	
Prob>Chi2			0.0000				0.0000				0.0000	
Modified Wald test for groupwise heteroskedasticity for FEM- chi2			1500000				1.60E+08				5.70E+07	
Prob>Chi2			0.0000				0.0000				0.0000	
Wooldridge test for autocorrelation in panel data			53.3020				61.624				79.962	
Prob>F			0.0000				0.0000				0.0000	
N	1568	1568	1568	1568	1568	1568	1568	1568	1568	1568	1568	1568
t statistics in parentheses												
*, ** and *** denote the significance level at 10%, 5%, 1% respectively												

Table 4.2 shows the results of the relationship between foreign ownership and three measures of market leverage employ by four different estimators: POLS, REM, FEM and FEM with clusters. In terms of short-term leverage, the POLS outcomes show that level of foreign investment has negatively significant influence at the 1% level (coefficients is -0.25). However, the results of the Breusch-Pagan test confirm that REM is better than POLS. With REM, foreign investors affects negatively to debt to asset ratio with coefficients at -0.254. Between FEM and REM, the p-value of the Hausman test (less than 0.05) shows that FEM better fit over REM. With FEM results, foreign coefficient is significantly negative, at -0.221 with a 99% confidence interval which reveals that, ceteris paribus, firms with higher foreign ownership tend to use less short-term debts. Similarly, the clustered-FEM shows that, with a 99% confidence interval, short-term debt to asset ratio is affected by the number of shares owned by foreign investors.

Considering to long-term debt to market value of total asset, results from POLS and REM suggests a significant negative association between level of offshore investment and gearing ratio. However, Breusch-Pagan test and the Hausman test indicates that FEM is more appropriate. With FEM, there is no significant association between foreign investment and level of long-term debt. Similarly, FEM with adjusted standard errors does not find a notable influence of foreign ownership to the amount of debt.

Turning to market debt ratio, both estimators reveal an adverse link to foreign ownership. Depending on the results of Breusch-Pagan tests and Hausman tests, FEM and clustered-FE seem to be more appropriate. With a 99% confidence interval, the foreign coefficient is at -0.244 implied that, ceteris paribus, a 1 % increase in foreign ownership leads to 24.4% decrease in total debt ratio.

In terms of other determinants, the outcomes do not change much compared to the table 7 when size, growth and profitability still show their strong impacts on capital structure decisions. Our results are consistent with previous studies, including Titman and Wessels (1988), Baker and Wugler (2002) and Huang and Ritter (2009). Non-debt tax shield, and industry median leverage are insignificantly associated with debt ratios. Tangibility is an important factor that affects long-term, and total leverage, but do not have a significant impact on the short-term debt ratio. The R-square is notably high for market leverage equation. The combination of foreign ownership and other firm-specific characteristics explains up to 23.5% change in total market leverage.

Table 4.2: The regression results for market leverage

	SDM				LDM				TDM			
	POLS	REM	FEM	Clustered FEM	POLS	REM	FEM	Clustered FEM	POLS	REM	FEM	Clustered FEM
FOREIGN	-0.250***	-0.254***	-0.221***	-0.221***	-0.145***	-0.0715*	-0.0221	-0.0221	-0.401***	-0.304***	-0.244***	-0.244***
	(-6.98)	(-7.02)	(-5.55)	(-3.93)	(-5.73)	(-2.40)	(-0.64)	(-0.37)	(-10.33)	(-8.23)	(-6.15)	(-5.74)
SIZE	0.0295**	0.125***	0.191***	0.191***	0.123***	0.0815***	0.0557***	0.0557	0.156***	0.210***	0.256***	0.256***
	(2.63)	(8.19)	(10.04)	(5.11)	(15.54)	(6.87)	(3.34)	(91.7)	(12.83)	(13.27)	(13.46)	(6.42)
MTB	-0.0694***	-0.0213*	0.0121	0.0121	-0.0258***	-0.0101	0.0144	0.0144	-0.0957***	-0.0191	0.0251*	0.0251
	(-6.83)	(-2.06)	(1)	(0.8)	(-3.58)	(-1.22)	(1.36)	(0.76)	(-8.68)	(-1.80)	(2.09)	(1.18)
PROFIT	-0.467***	-0.273***	-0.198***	-0.198***	-0.347***	-0.127***	-0.0616	-0.0616	-0.816***	-0.363***	-0.261***	-0.261***
	(-6.86)	(-6.19)	(-4.33)	(-4.09)	(-7.20)	(-3.36)	(-1.54)	(-1.50)	(-11.06)	(-8.14)	(-5.74)	(-4.88)
TANG	-0.137***	-0.0279	0.00439	0.00439	0.315***	0.192***	0.140***	0.140*	0.175***	0.146***	0.146***	0.146*
	(-4.30)	(-0.91)	(-0.13)	(-0.1)	(13.98)	(7.55)	(4.73)	(2.25)	(5.07)	(4.64)	(4.32)	(2.42)
GROWTH	0.0344*	0.0345***	0.0304***	0.0304*	0.0446***	0.0344***	0.0317***	0.0317*	0.0796***	0.0704***	0.0652***	0.0652***
	(2.14)	(4.02)	(3.53)	(2.31)	(3.92)	(4.63)	(4.21)	(2.39)	(4.57)	(8.17)	(7.6)	(4.01)
NDTS	-0.163	-0.0449	-0.0228	-0.0228	-0.151	-0.0785	-0.0694	-0.0694	-0.313	-0.109	-0.0864	-0.0864
	(-0.94)	(-0.45)	(-0.23)	(-0.39)	(-1.23)	(-0.91)	(-0.80)	(-0.55)	(-1.67)	(-1.09)	(-0.87)	(-0.70)
MIL	0.0465	0.0887*	0.0612	0.0612	0.199***	0.110**	0.0485	0.0485	0.247***	0.190***	0.135**	0.135
	(1.34)	(2.07)	(1.21)	(1)	(8.14)	(3.21)	(1.1)	(1.01)	(6.56)	(4.3)	(2.67)	(1.92)
Constant	0.0227	-1.225***	-2.059***	-2.059***	-1.430***	-0.909***	-0.594**	-0.594	-1.445***	-2.193***	-2.768***	-2.768***
	(0.16)	(-6.65)	(-8.99)	(-4.61)	(-14.70)	(-6.30)	(-2.97)	(-1.50)	(-9.69)	(-11.44)	(-12.13)	(-5.77)
Adj_R2	0.1757				0.307				0.343			
F-test that all β = 0	42.74				87.78				103.25			
Pro>F	0.0000				0.0000				0.0000			
R2 (within)		0.1134	0.1269	0.1269		0.0407	0.046	0.046		0.2223	0.235	0.235
Wald test for REM - chi2		193.17				161.13				456.39			
Prob>chi2		0.0000				0.0000				0.0000			
Breusch and Pagan Lagrangian multiplier test for REM - chibar2		2304.65				1455.15				2249.51			

Prob>chibar2		0.0000				0.0000				0.0000		
Overall F-test			23.35	8.97			7.74	2.08			49.35	15.33
Pro>F			0.0000	0.0000			0.0000	0.0000			0.0000	0.0000
F-test that all u_i = 0			23.04				13.43				28.16	
Pro>F			0.0000				0.0000				0.0000	
Hausman test - chi2			54.73				64.74				71.06	
Prob>Chi2			0.0000				0.0000				0.0000	
Modified Wald test for groupwise heteroskedasticity for FEM- chi2			2.70E+06				2.10E+09				1.70E+06	
Prob>Chi2			0.0000				0.0000				0.0000	
Wooldridge test for autocorrelation in panel data			49.25				45.533				121.999	
Prob>F			0.0000				0.0000				0.0000	
N	1568	1568	1568	1568	1568	1568	1568	1568	1568	1568	1568	1568
t statistics in parentheses												
*, ** and *** denote the significance level at 10%, 5%, 1% respectively												

4.2. ROBUSTNESS CHECK

In section 4.1 we find that the number of shares held by foreign investors is significantly and negatively correlated to 4proxies of debt ratios, including book and market measures of short-term, and total leverage. In this section, we will check the robustness of our results. Firstly, in the table 4.3, we divide the samples into state-owned and non state-owned firms to get the insights into the relationship between ownership and capital structure. The average amounts of foreign funds invested in the two types of firms are not different much with 13.2% for non-state owned and 13.9% for the state-controlled group. The slight difference in these proportions is due to the fact that state-owned firms tend to have the larger size, higher profitability and less distress costs that may attract foreign investors. Employing FEM, across two sub-samples, the results reflect the negative significant correlation between the number of shares hold by foreigners and all measures of debt except long-term ratio.

In addition, to alleviate the concern that the world financial crisis may drive our results during the period of 2007-2009, we divide the sample into two sub-samples: crisis and non-crisis period. The results are reported in the table 4.4 which reflects the differences between two analyzed periods. The negative relationship between foreign ownership and leverage ratio is statistically significant for short-term, total and all market leverages for the period from 2009 to 2014. For the period before 2009, the associations are not significant except for market measure. The figures show that the association of different types of leverages and foreign ownership becomes stronger after the financial crisis.

In the previous section, we use the log of total assets to define the size of firms. On table 4.5, we will use the number of employees to observe the difference between small and large firms. A firm is considered as large when its employees are equal or more than 100. It seems that effect of foreign ownership holds strong within 2 different size categories, especially in large firms.

Various tests show the robustness of our finding related to the negative relationship between leverage and the number of shares held by foreigners in Vietnam. In terms of theory, pecking order shows its power in explaining the determinants of capital structure decisions compared to the trade-off theory.

Table 4.3: *Regression results for state-owned company and non state-owned company*

	State-owned company						Non state-owned company					
	SDA	LDA	TDA	SDM	LDM	TDM	SDA	LDA	TDA	SDM	LDM	TDM
FOREIGN	-0.169***	0.017	-0.153**	-0.280***	0.0458	-0.234***	-0.143***	-0.0642	-0.207***	-0.123*	-0.106*	-0.236***
	(-4.07)	(0.47)	(-3.28)	(-5.29)	-0.96	(-4.34)	(-3.40)	(-1.81)	(-4.50)	(-2.00)	(-2.11)	(-4.06)
SIZE	0.187***	0.0263	0.214***	0.242***	0.0087	0.251***	0.112***	0.0917***	0.204***	0.100**	0.132***	0.260***
	(10.17)	(1.64)	(10.4)	(10.38)	(0.41)	(10.52)	(4.96)	(4.8)	(8.23)	(3.02)	(4.91)	(8.31)
MTB	0.0613***	0.0501***	0.111***	0.0193	0.0329*	0.0522**	0.0236	0.0135	0.0371*	-0.0129	0.00717	-0.00949
	(5.01)	(4.69)	(8.16)	(1.24)	(2.35)	(3.29)	(1.75)	(1.18)	(2.52)	(-0.66)	(0.45)	(-0.51)
PROFIT	-0.269***	-0.155***	-0.424***	-0.166**	-0.137**	-0.302***	-0.220***	-0.0646	-0.284***	-0.238**	0.0251	-0.223**
	(-6.12)	(-4.04)	(-8.65)	(-2.97)	(-2.72)	(-5.31)	(-4.06)	(-1.41)	(-4.79)	(-2.99)	(0.39)	(-2.98)
TANG	-0.00109	0.0820**	0.0809*	0.0024	0.0818*	0.0842*	-0.00311	0.218***	0.215***	0.00902	0.291***	0.299***
	(-0.03)	(3)	(2.32)	(0.06)	(2.29)	(2.08)	(-0.07)	(5.93)	(4.52)	(0.14)	(5.59)	(4.97)
GROWTH	0.0132	0.0361***	0.0493***	0.0126	0.0450***	0.0576***	0.0372***	0.0107	0.0479***	0.0533***	0.0158	0.0771***
	(1.48)	(4.64)	(4.97)	(1.12)	(4.42)	(5)	(3.95)	(1.34)	(4.64)	(3.85)	(1.41)	(5.92)
NDTS	-0.0582	-0.0635	-0.122	-0.0135	0.00409	-0.00944	-0.0385	-0.542**	-0.581*	-0.199	-0.812**	-0.974**
	(-0.73)	(-0.91)	(-1.37)	(-0.13)	(0.05)	(-0.09)	(-0.16)	(-2.66)	(-2.20)	(-0.56)	(-2.82)	(-2.92)
MIL	0.019	0.0071	0.0261	0.00986	0.0106	0.0204	0.0825	0.148**	0.230***	0.128	0.157*	0.358***
	(0.39)	(0.17)	(0.48)	(0.16)	(0.19)	(0.33)	(1.38)	(2.92)	(3.52)	(1.46)	(2.19)	(4.330
Constant	-2.095***	-0.281	-2.376***	-2.636***	-0.0345	-2.670***	-1.222***	-1.100***	-2.322***	-0.991*	-1.557***	-2.904***
	(-9.56)	(-1.47)	(-9.72)	(-9.47)	(-0.14)	(-9.40)	(-4.45)	(-4.73)	(-7.72)	(-2.46)	(-4.74)	(-7.64)
R_squared	0.2142	0.0761	0.2917	0.1759	0.0389	0.2255	0.1388	0.1558	0.2899	0.08	0.1417	0.3044
N	964	964	964	964	964	964	604	604	604	604	604	604
t statistics in parentheses												
*, ** and *** denote the significance level at 10%, 5%, 1% respectively												

Table 4.4: *Regression results for crisis period (2007 -2009) and non-crisis period (2009- 2014)*

		2007 - 2009						2009 - 2014					
		SDA	LDA	TDA	SDM	LDM	TDM	SDA	LDA	TDA	SDM	LDM	TDM
FOREIGN		-0.115	0.0289	-0.086	-0.241*	0.0519	-0.190*	-0.108**	-0.0471	-0.155***	-0.111*	-0.107*	-0.222***
		(-1.68)	(0.51)	(-1.17)	(-2.49)	(0.69)	(-2.08)	(-2.84)	(-1.46)	(-3.77)	(-2.25)	(-2.44)	(-4.58)
SIZE		0.101	0.223***	0.324***	0.177*	0.255***	0.432***	0.174***	0.0974***	0.272***	0.186***	0.123***	0.332***
		(1.63)	(4.36)	(4.85)	(2.01)	(3.74)	(5.22)	(9.06)	(5.96)	(13.07)	(7.42)	(5.52)	(13.51)
MTB		0.0545	0.0867***	0.141***	-0.0537	0.0667*	0.013	0.0492***	0.0255**	0.0747***	0.0259*	0.0177	0.0436***
		(1.83)	(3.53)	(4.39)	(-1.27)	(2.04)	(0.33)	(5.19)	(3.16)	(7.29)	(2.1)	(1.61)	(3.6)
PROFIT		-0.359***	-0.0345	-0.394***	-0.463***	-0.00381	-0.467***	-0.241***	-0.0917**	-0.333***	-0.180***	-0.035	-0.215***
		(-4.46)	(-0.52)	(-4.52)	(-4.03)	(-0.04)	(-4.34)	(-6.68)	(-2.99)	(-8.53)	(-3.84)	(-0.84)	(-4.66)
TANG		-0.0906	0.0824	-0.0082	-0.141	0.0163	-0.125	0.0255	0.124***	0.149***	0.0246	0.148***	0.176***
		(-1.08)	(1.19)	(-0.09)	(-1.19)	(0.18)	(-1.12)	(0.93)	(5.29)	(5.01)	(0.69)	(4.63)	(5.02)
GROWTH		0.0172	0.00169	0.0189	0.0229	0.00248	0.0254	0.0226***	0.0197***	0.0423***	0.0276**	0.0260***	0.0572***
		(0.77)	(0.09)	(0.79)	(0.72)	(0.1)	(0.85)	(3.41)	(3.51)	(5.91)	(3.21)	(3.39)	(6.76)
NDTS		-0.255	-0.0156	-0.271	-0.116	-0.183	-0.299	-0.0678	-0.109	-0.177*	-0.049	-0.0897	-0.13
		(-0.73)	(-0.05)	(-0.71)	(-0.23)	(-0.47)	(-0.64)	(-0.92)	(-1.74)	(-2.21)	(-0.51)	(-1.05)	(-1.38)
MIL		0.0465	-0.0226	0.0239	-0.0274	-0.0462	-0.0736	0.0891*	0.0930*	0.182***	0.109	0.0942	0.251***
		(0.54)	(-0.32)	(0.26)	(-0.22)	(-0.49)	(-0.64)	(2.04)	(2.51)	(3.86)	(1.92)	(1.86)	(4.51)
Constant		-1.051	-2.638***	-3.689***	-1.722	-2.947***	-4.668***	-1.993***	-1.154***	-3.147***	-2.044***	-1.423***	-3.766***
		(-1.45)	(-4.41)	(-4.72)	(-1.67)	(-3.70)	(-4.82)	(-8.45)	(-5.76)	(-12.35)	(-6.67)	(-5.21)	(-12.52)
R-Squared		0.1681	0.2146	0.3527	0.1540	0.1420	0.3138	0.1533	0.0898	0.2774	0.0871	0.0650	0.2421
N		357	357	357	357	357	357	1364	1364	1364	1364	1364	1364
t statistics in parentheses													
*, ** and *** denote the significance level at 10%, 5%, 1% respectively													

Table 4.5: *Regression results for large versus small companies*

	Large company						Small company					
	SDA	LDA	TDA	SDM	LDM	TDM	SDA	LDA	TDA	SDM		TDM
FOREIGN	-0.154***	-0.0181	-0.172***	-0.186***	-0.051	-0.237***	-0.121	-0.0392	-0.160*	-0.196*	0.0536	-0.142
	(-4.51)	(-0.60)	(-4.49)	(-4.00)	(-1.26)	(-5.14)	(-1.92)	(-0.79)	(-2.29)	(-2.29)	(0.76)	(-1.79)
SIZE	0.182***	0.0326*	0.215***	0.214***	0.0446*	0.269***	0.0432	0.143***	0.186***	0.0514	0.152**	0.203***
	(11.56)	(2.32)	(12.15)	(9.92)	(2.37)	(12.6)	(0.99)	(4.2)	(3.86)	(0.87)	(3.12)	(3.71)
MTB	0.0676***	0.0351***	0.103***	0.0161	0.02	0.0332*	-0.00502	0.0255	0.0205	-0.00398	0.027	0.0231
	(5.93)	(3.46)	(8.04)	(1.04)	(1.47)	(2.16)	(-0.30)	(1.92)	(1.09)	(-0.17)	(1.43)	(1.08)
PROFIT	-0.249***	-0.0824*	-0.331***	-0.220***	-0.0422	-0.265***	-0.337**	-0.254**	-0.591***	-0.164	-0.173	-0.337**
	(-6.91)	(-2.57)	(-8.21)	(-4.47)	(-0.99)	(-5.44)	(-3.31)	(-3.19)	(-5.23)	(-1.19)	(-1.51)	(-2.63)
TANG	0.0263	0.105***	0.131***	0.0396	0.124***	0.167***	0.017	0.0423	0.0593	0.0312	0.0243	0.0555
	(0.9)	(4.05)	(4.02)	(1)	(3.59)	(4.24)	(0.29)	(0.91)	(0.9)	(0.39)	(0.37)	(0.74)
GROWTH	0.0251***	0.0207***	0.0459***	0.0330***	0.0286***	0.0652***	0.0176	0.0119	0.0296	0.0623*	0.014	0.0763**
	(3.71)	(3.44)	(6.04)	(3.56)	(3.55)	(7.11)	(0.82)	(0.71)	(1.23)	(2.13)	(0.58)	(2.81)
NDTS	-0.0633	-0.056	-0.119	-0.0144	-0.0222	-0.0319	-0.15	-0.176	-0.326	-0.331	-0.377	-0.707*
	(-0.83)	(-0.82)	(-1.39)	(-0.14)	(-0.24)	(-0.31)	(-0.61)	(-0.91)	(-1.19)	(-0.99)	(-1.37)	(-2.28)
MIL	0.0439	0.101**	0.145**	0.0839	0.0916	0.209***	-0.0209	0.0933	0.0724	-0.15	0.125	-0.0246
	(1.03)	(2.66)	(3.03)	(1.43)	(1.8)	(3.6)	(-0.23)	(1.31)	(0.72)	(-1.22)	(1.23)	(-0.21)
Constant	-2.070***	-0.386*	-2.456***	-2.349***	-0.478*	-2.972***	-0.305	-1.673***	-1.978***	-0.284	-1.783**	-2.067**
	(-10.93)	(-2.29)	(-11.56)	(-9.08)	(-2.12)	(-11.58)	(-0.58)	(-4.05)	(-3.38)	(-0.40)	(-3.02)	(-3.11)
R-Squared	0.2199	0.1945	0.2927	0.1504	0.0417	0.2633	0.0788	0.1945	0.2497	0.0744	0.1114	0.2058
N	1265	1265	1265	1265	1265	1265	303	303	303	303	303	303
t statistics in parentheses												
*, ** and *** denote the significance level at 10%, 5%, 1% respectively												

5. CONCLUSION

Our study is designed to explore the link between foreign ownership and capital structure of Vietnamese listed firms throughout of 8-year period. Using the various estimators, our results clearly demonstrate that the number of shares held by foreign investors affects negatively to the funding choices of enterprises, holding other thing constant. The finding is consistent with the study of DN Phung and TPV Le (2013). The first possible reason is foreign investors in Vietnamese listed firms dominated by institutions rather than individuals with the goal to diversify their portfolios. They may focus on short-term efficiency so their impacts on capital structures are limited. Secondly, the offshore investment level in Vietnam is low and widespread, leading to the limitation of its monitoring role. Finally, many strict regulations in the investment policies of the government, including the limitation of foreign investors' voting right and the restrictions on the maximum amount of shares that foreign investors can buy from a firm, have contributed to this negative association.

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