

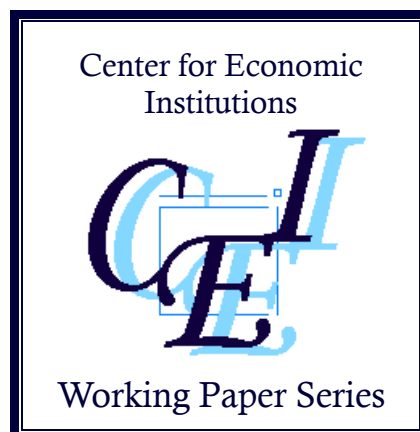
Center for Economic Institutions
Working Paper Series

No. 2010-14

*“Foreign Ownership, Listed Status and the
Financial System in East Asia: Evidence from
Thailand and Malaysia”*

Fumiharu Mieno

March 2011



Institute of Economic Research
Hitotsubashi University
2-1 Naka, Kunitachi, Tokyo, 186-8603 JAPAN
<http://cei.ier.hit-u.ac.jp/English/index.html>
Tel:+81-42-580-8405/Fax:+81-42-580-8333

Foreign Ownership, Listed Status and the Financial System in East Asia: Evidence from Thailand and Malaysia

Fumiharu Mieno,
Kobe University
fmieno@kobe-u.ac.jp

Abstract

Existing studies on the financial system in East Asia have emphasized its excessive debt financing, the lack of a bond market and its limited function on corporate governance. Other apparent facts, such as the average low debt ratio, the existence of large but unlisted firms, and the significance of foreign firms in its economy are generally ignored. Based on a uniquely compiled database for the top 1000 firms in Thailand and Malaysia, we examined the distributional feature of listed status and foreign ownership, and then re-estimated the determinants of the capital structures. We confirmed basic facts, such as the fact that unlisted firms occupy a large portion in the distribution, and that the debt financing of major firms is relatively inactive. We also found the significance of foreign ownership and its negative relationship with debt financing and 'going public'. Finally, we found that certain kinds of foreign firms tend to keep large retained earnings and non-bank debt, suggesting their deep reliance on self-financing and internal capital markets. The characteristics of corporate finance in East Asia can be explained in part by distributional features on listing status and foreign ownership. Our findings raised questions about the conventional view of the current policy framework which emphasized on the shift from financial intermediation to the capital and bond markets.

Keywords: Financial System, Corporate Finance, East Asia, FDI

JEL Categories: G30, G32, O52

Acknowledgement:

The paper is written based on the products of the research project on the corporate finance in Malaysia and Thailand, conducted at Japan Bank for International Cooperation (JIBC) in 2006-08. The author thanks for JIBC institution for realizing such uneasy research attempt, and for project colleagues at the institute: Toshiro Nisizawa, Masahiro Shimobacbi, Qun Liu, Akiko Sugiyama and Shinya Handa, for the overall cooperation and support. The Author also thanks for valuable comments from Satitniramai Apichat, Yutaka Arimoto, Yoshihisa Godo, Laurence Harris, Akira Kohsaka, Takashi Kurosaki, Anna Maria Cristina Menichini, Hiroyuki Mizuno, Mamoru Nagano, Machiko Nissanke, Eiji Ogawa, Hidenobu Okuda, Marco Pagano, Xu Peng, Iichiro Uesugi. Remaining errors are mine.

1. Introduction

Conventional policy arguments on the financial system in East Asia have emphasized the issues of excessive debt financing, the lack of a bond market and the problems with weak corporate governance. On the other hand, some apparent facts which are contradictory to such a view but crucial for the argument have generally been ignored. For example, the debt ratio of major firms is comparably low on average in East Asia, and many of the large but unlisted firms play a significant role in the economy. Also, the size of the numerous foreign firms in a form of foreign direct investment (FDI) varies widely, from large multinational companies (MNCs) to very small enterprises.

The purpose of this paper is to revisit the conventional understanding of corporate finance in East Asia, expanding the sample focus from the major listed firms referred in most studies to wider varieties including unlisted firms and foreign subsidiaries. The country focus is Thailand and Malaysia.

Based on the financial statement of the listed firms in 9 countries, Claessens et al. pointed the high debt ratio of the firms and their increasing trends during the early 1990s, the period preceding the Asian financial crisis in one of their representative studies on the corporate finance and governance in the East Asia (Claessens et al. 1999,2000). They also asserted that the weak corporate governance caused the major inefficiency problems under the pyramid-shaped ownership structure. Meanwhile, Booth et al. (2001) examined the determinants of capital structure based on the financial data of the listed firms in developing countries including East Asia, and pointed out that the equity dependent features, instead of debt, are found in developing countries.

Many studies have focused on the corporate finance in the individual countries in East Asia: e.g. Mieno (2006) on Thailand, Okuda and Saito (2007) on the Philippines, Suto (2003) on Malaysia, and Lee et al. on Korea (2000). All examine the determinants of the capital structures. Although the results of the estimations vary across the countries and the approaches, the debt ratios observed in all the studies are generally lower than those of

Classens's studies¹, and shows only very partial relationships among debt ratio, ownership and weakness of governance.

One possible research breakthrough on this issue may be achieved by examining on how the financial system does or does not play an intermediation role to the sectors which have led economic and industrial growth in East Asia, rather than by merely criticizing the underdeveloped financial and corporate system, or of excessively emphasizing the significance of capital inflow in the macroeconomic point of view. Looking back on the last decade, the transformation in the real sectors accompanied in the recovery process from the Asian crisis, independently from the prolonged distress in the financial sector. The fact suggests that the current financial sectors in East Asia may not play a major role in providing funds to leading industrial sectors, although it appears so and that industrial sectors behave more independently in their fund raising.

In fact, the largest impediment for accurate examination on the reality of the financial intermediation from the microeconomic stand point in East Asia is the simple fact that the basic information on the major firms currently existing and operating is not easily available. This is in part because many firms still stay unlisted and do not participate in the organized capital market(securities exchange), and in part because economic growth has largely depended on FDI, and requires numerous foreign firms to operate, most of which are not easily observable in researches. Actually, the corporate finance focusing only on listed firms has been studied and discussed in the situation that no one knows how the major firms are distributed in the East Asian countries, and no one knows where the listed firms are actually located in these distributions.

Recognizing such shortcoming, the research question here is set in rather simple form; does the financial sector really play a sufficient role of intermediation to the corporate sector, and how much significant is it? The question can be expressed in different words; does the corporate sector really depend on the financial sector for their fund raising, and how much

¹ The ratios seem consistent only in Korea.

crucial is it? In order to find the answer to this, we will start with a very basic work of constructing a higher-coverage firm database and of draw the picture of the distribution of firms in the economies. To acquire the better-covered sample data, the firm information was collected not from the disclosed data of listed firms at the stock exchanges, but from the stored microfiches in the company registration offices of the each government².

The rest of the paper is organized as follows. In Section 2, we explain how we use our data. The characteristics of the firm distributions are examined in Section 3, and the general tendency of the capital structures is observed in Section 4. In Sections 5 and 6, we estimate the determinants of the capital structure, namely debt ratio, bank borrowing ratio and non-bank debt, with focus on foreign ownership structure and listed status. Section 7 gives some discussions and concludes the paper.

2. Data

We selected the data sample for the corporate profiles and financial statements using the following process (Table1). First, based on the total asset size in 2004, we listed the top 1,000 unlisted firms in the non-financial sector, and collected their corporate profiles. Adding the same information of all the listed firms in the non-financial sector available at the stock exchanges, we completed a “firm profile database” of 1,301 firms for Thailand and 1,860 firms for Malaysia. Setting the minimum size criteria at the smallest total asset size of the unlisted firms (e.g. 1,040 Million Bahts in Thailand), we got rid of listed firms that were smaller than the minimum criteria ,from the samples and finally arrived at sums of 1,189 and 1,860 samples respectively (Table 1).

Second, we collected shareholder information for all the available firms. Information for the top ten shareholders in Thailand, and the top five in Malaysia, were available in our data

² The registration office operates under the ministry of commerce in Thailand, and under local (state) governments in Malaysia. All the firms are obligated to submit their company profiles and simplified financial statements. For Malaysia, we focus the regions on Kuala Lumpur Capital and Negri Sembilan State.

source.

Third, we collected and compiled the financial statements (i.e. the balance sheet and income statement) of the unlisted firms, for the top 300 firms in Thailand and the top 250 in Malaysia in the period of 2000-04³. Adding the financial statements of listed firms in the same ranges of the total asset size, we completed a “financial statement database” in panel data form for top 447 firms and 846 firms respectively.

The main sources of the data for the unlisted firms were registration documents stored in the registration offices in microfiche form. We entrusted consultant companies in each country to collect and compile the primal data of the unlisted firms. The data for the listed firms are from a commercial database, OSIRIS by *Bureau van Dijk Ltd.*

3. Distribution of listed status and foreign ownership

3.1. General Characteristics

Table 1 summarized the sample structure classified by the asset size and the listed status. Apparently, the unlisted firms weigh significantly in total samples for both countries. The number of listed firms is counted to only 33.3% in the top 447 and 22.5% in the top 1,189 in Thailand, and 74.8% in the top 846, and 48.6% in the top 1,824 in Malaysia. The table also shows that the listed firm sample includes very small-sized ones. Particularly in Thailand, the listed firms are tail-long distributed, and as much as 29.5% (112 / 380) of the firms are so small that they do not satisfy our observation criteria.

3.2. Foreign Ownership

In order to investigate the foreign ownership structure, we classified the foreign share based on the top 10 (Thailand), or top 5 (Malaysia) shareholders' information. We defined the percentage of foreign shares as the total sum of shares in the top 5 or 10 shareholders. We employed the following typology of foreign ownership.

³ The sample sizes of the available data are a little smaller due to the lack of the data quality.

A. 0-10%: Financial Investment

B. 10-95%: Joint Venture – participation in managerial control

B-a: 10-50%: controlled mainly by local counterparts

B-b: 50-95%: controlled mainly by foreign capital

C. 95% or more: Foreign Subsidiary – completely controlled by foreign capital

Figures 1 and 2 show the distribution of the ownership combined with listed status. Each bar shows the composition of 100 firms, ordered by total size from left to right. The graphs include more detailed classification than the typology above, 33.3% and 66.7% for reference.

Thailand

For Thailand, Figure 1 confirms that the weight of the listed firms is relatively low; they are counted in around 50% of the top 100 firms, and less than 30% of the smaller layers. The figure also indicates several remarkable facts. First, many firms accept foreign capital in fact. For example, the foreign shares are found in as much as 52.3% of firms (62.1% in the listed, and 54.5% in the unlisted) among the top 400 in various forms, and 31.8% of firms (14.7% and 40.5% respectively) accept more than 10% of the foreign shares.

Second, the main form can be classified into two types;

- Type (1) financial investment (A), less than 10% share, to the listed firms;
- Type (2) joint venture (B-a and B-b), or local subsidiary (C) to the unlisted firms.

The case of more than 10% share is rarely found in the listed firms, while conversely, investment share in the unlisted firms is over 10% in most cases, suggesting that FDI-related firms generally remain as unlisted firms.

Third, the type (1) investment is prevalent and significant in the top 400 layer, outreaching to 47.4% of all the listed firms. Thai securities market recovered and portfolio investment restored to be active after 2003. However, this finding suggests that the recovering

inflow of foreign portfolio investment is largely biased to the layer of large listed firms, hence, the expanding foreign portfolio investment have had a limited role for firms' fundraising situation as whole.

Fourth, the wide prevalence and significance of type (2) investment is a little surprising. About 18% of the unlisted firms are owned by foreign capital as local subsidiaries, C, and 27-30% of all the unlisted firms are under their control by over 50% (C, and B-a). Type (2) firms are not concentrated in the large firm layer, but are distributed more broadly to the smaller firm layer.

Malaysia

In contrast to the case of Thailand, a substantial portion of the large firms in Malaysia participate in the securities market as listed firms. The listed firms occupy around 97% in the top 100, and 74% in the top 600. This fact confirms a common view that Malaysia retains the most developed securities market in Southeast Asia. Figure 2 also shows that Malaysia holds a substantial amount of genuine local firms compared with Thailand, and foreign firms are less significant both in the listed and the unlisted groups.

We found three striking characteristics in the distribution of Malaysian firms. First, the financial investment in the listed firm by less than 10% (Type (1)), is rare in Malaysia. Among the listed firms in the top 600, only 4% are classified into this type. On the other hand, in the large firm level, such as the top 200, firms with substantially high foreign shares are common, some of which hold more than 50% of the foreign share. Secondly, while the unlisted firms are rarely found in the top 200th layer, they occupy a substantial portion in the 200-1000th layers, with a larger portion in the smaller layer. Foreign ownership is distributed prevalently in Malaysia, just as it is in Thailand.

Third, and most strikingly for Malaysia, local subsidiaries of foreign firms counted for a very large portion among Type (2) foreign investment, suggesting that FDI in Malaysia is implemented in the form of establishing subsidiaries more frequently than joint ventures. This

is a remarkable difference from Thailand, and seems consistent with the FDI ‘enclave’ feature of the Malaysian manufacturing sector.

Both two cases imply the limited role of portfolio investment for firms’ fund raising. Although in Thailand portfolio investment at the organized capital markets is popular to a degree, the stock acquisition by foreign capital is mainly realized outside of organized markets (i.e. authorized securities exchanges). In Malaysia, foreign portfolio investment through the market is generally rare, and the joint venture relationship of foreign and local capital is seemingly weak.

(3) The nationalities of foreign capital

The nationalities of the sample firms show each country’s characteristics. Table 2 summarizes the nationality of the largest shareholders of the sample firms⁴. While the number of the genuine domestic firms counted a little larger for Malaysia (77.4% in total) than for Thailand (63.7%), in both cases foreign capitals occupy substantial weight as the largest shareholders. Among foreign capitals, Japanese are the largest in number in both countries, followed by the U.S., Singaporean and EU’s. Japanese capital is overwhelming in Thailand (18.8%), but is just comparable with Singaporean and EU’s in Malaysia (6.4%). The presence of the U.S. firms is larger in Thailand than in Malaysia, are EU firms are observed only in Malaysia. Taiwanese and Korean seem to remain as a minority foreign capital.

4. Capital Structure

Thailand

Table 3 summarizes the capital structure of the top 447 Thai firms in the year averages classified by their listed status. Since samples are selected in a common criteria based on total assets, the figures in the table are controlled for the total assets⁵. The available sample size

⁴ Calculated only with the firms available for nationality. The nationality of the largest shareholder cannot be identified in ** of 1,189 firms in Thailand and ** of 1848 in Malaysia.

⁵ The available sample size varies across years. Also, we omitted the firms where the data are not

varies by years. Also, we omitted the firms where the data are not available for at least the past three years.

The table gives us important information. First, the debt ratios are levels of 50%, which falls into a substantially low category in international comparison⁶ contrary to the assertion of Claessens (1998, 2000). The ratios are slightly higher in the listed firms. The debt ratio generally tends to decline in the early 2000s, suggesting that the firms have weakened their dependence on financial intermediation for their fund raising during the period of the financial turmoil and restructuring.

Second, in the capital account side, the listed firms hold greater capital surplus than the unlisted ones. This is seemingly caused from the retained surplus gained at the initial public offering (Mieno and Gunji (2004)). Conversely, the retained earnings are greater in the unlisted firm particularly in 2000-01, suggesting the listed firms which depend more on external finance were damaged more seriously from the 1997's financial crisis.

Third, the composition of bank borrowings show the trend similar to the debt ratio, which is higher in listed firms than unlisted firms, the gap is much higher; 22.7% in the listed, 17.9% in the unlisted. Corresponding to this, the non-bank debts are higher in the unlisted firms. The listed firms are more dependent on financial intermediation than the unlisted firms, in spite of the fact that they are more accessible to the capital markets. The unlisted firms tend to depend on internal capital market or informal markets. This is evidence of complementarity, rather than substitutability, between financial intermediation and the capital markets.

The bank borrowing ratio also declines in the early 2000s, while the non-bank debt is constant in the listed firms, and declines in the unlisted firms, implying that the former coped with the retrogression of financial intermediation by strengthening the preference to the internal market, while the latter coped by self-financing.

available at least three years.

⁶ According to Booth et al.(2001), the debt ratios of major firms in developed countries are roughly classified into two categories: Middle of 50% level in Anglo-Saxon type (The U.A., the U.K. etc.) and around 70% in Continental Europe type (France, Germany, Japan, etc.)

In sum, Thai firms are not seriously dependent on debt financing, and the levels of the bank borrowing and the long-term debt are low. Their dependence on intermediation is relatively weak. Comparably, the listed firms more actively utilize financial intermediation in their fundraising. And the dependence on the financial intermediation is shrinking recently in both the listed and the unlisted firms.

Malaysia

Table 4 shows the Malaysian case with the same treatment of the sample selection as Thailand. The tendency is similar to Thailand in some points, and different in others.

First, the debt ratios show the middle of 40% level in the listed firms, and less than 40% in the unlisted. The levels are indeed low, much lower than in Thailand, and are incomparable to the case of developed countries. The gap of debt ratios between the listed and the unlisted is around 5%, which is higher than in Thailand. On the other hand, the ratio keeps constant through the observation periods, and the sign of the decline is not found. The facts suggest that the function of the financial intermediation was not seriously damaged by the crisis in Malaysia, while the degree of the dependence on financial intermediation is generally low.

Second, in the capital account side, capital surpluses are almost the same in the listed and unlisted firms, whereas retained earnings are higher in the unlisted firms, suggesting that financial crisis primarily hit the listed firms.

Third, the bank borrowing ratio, one of the components of debt ratio, is surprisingly low in Malaysia: 10-13% in the listed firms, and only 4-6% in the unlisted firms. These striking figures indicate that, in Malaysia, the bank borrowing or financial intermediation hardly plays a role for firms' fundraising, and a large portion of the firms' debt consists of non-bank debt. In other words, they largely rely on internal capital markets. The important fact is that non-bank debt ratios in the listed and the unlisted firms are almost the same, and the gap in debt ratios is generated by the gap in bank borrowing. The bank borrowing and the non-bank debt are not

substitutive in Malaysia, and the listed firms utilize bank borrowing jointly with non-bank debt⁷.

Summarizing the observation in comparison with Thailand, the debt ratios of major firms in both countries are not necessarily high, but rather low. In particular, bank borrowing ratios are so low in Malaysia that we can see that the financial intermediation hardly plays a significant role in the firms' fundraising. The internal market is significant in both countries, whereas bonds have not yet become a major funding source for firms. The listed firms are more dependent on intermediation than the unlisted, which is a common tendency in both countries.

Regarding the difference between the two countries, Malaysian firms show remarkably low dependence on the financial intermediation. However, it has gradually strengthened in the early 2000s, while it has weakened in Thai firms.

5. Estimation Methodology

Based on the descriptive observation below, the following two sections will estimate determinants of capital structure, searching for the relationship among fundraising, the listed status and foreign ownership. In these sections, we will estimate the determinants of debt ratio, bank borrowing ratio and the non-bank debt ratio, based on the agency cost approach, and interpret the results with the evidence also from the descriptive statistics.

There are several well known basic factors to primarily influence the capital structure in numerous relevant studies. The firm size and the level of tangible asset are known to be a proxy for the potential repayment capacity and collateral, being positively correlated with debt. Likewise, the risk factor is usually recognized as negative factor for debt since the risk is mainly shouldered on the creditor under the debt contract. We adopt the indicators of these factors as following,

Size: log of total asset

Tangible Asset: Fixed Asset / T.A.

⁷ However, bank borrowing ratio tends to increase in the early 2000s, though the level is still small.

Risk: standard deviation of ROA in 2000-04

Another well known factor is the non-debt tax shield. Even in the Modigliani-Miller's framework, tax saving mechanism through the debt is a primary influence on the debt ratio (Modigliani-Miller (1963)). Debt incurs tax saving because interest expenses are treated as deductions from taxable income. However, the magnitude of this effect usually depends on the scope of tax deduction through debt, roughly determined by the residual of the total tax shield minus the non-debt tax shield. Thus, the tax-saving effect through debt is negatively correlated with the non-debt tax shield. We directly calculate the non-debt tax shield by following the method shown in Titman and Wessels (1988).

$$\mathbf{NDTS:} \quad \text{Non-Debt Tax Shield} = \text{OI} - \text{I} - \text{T} / \tau^8$$

where τ is the tax rate, OI is operating income, I is interest expenses, and T corporate tax

The agency theory gives us possible control variables. Financial Hierarchy argument (Fazzari et.al. 1988) and Pecking Order Hypothesis (Myers et.al. 1984) inform us that cash flow usually loosens the necessity of external finance since the self-finance is the cheapest fundraising source in term of capital cost. In fact, previous studies obtained negative correlations between cash flow and debt ratio. On the other hand, the bank monitoring processes information which decreases the information asymmetry between creditors and firms. If it is the case, the more active in bank borrowing, the more active debt financing. We introduce these factors in the following calculation.

Cash Flow: retained earnings / T.A.

Bank Borrowing: bank borrowing / debt

Our major concern is placed on the relationship with listed status and foreign ownership.

List Dummy tests the difference between listed and non-listed firms. For the foreign ownership, we prepare **Foreign Share**, the percentage of foreign share, and dummy variables for the four

⁸ The formula is deduced from the simple relation; is $T = \tau (\text{OI} - \text{I} - \text{NDT})$, and NDT is the non-debt tax shield.

and six classes of foreign share: [0%, 0-10%, 10-50%, 50-95%, 95% and more], [0%, 0-10%, 10-33.3%, 33.3-50%, 50-95%, 95% and more],

Manufacturing Dummy and *Time Trend* are also introduced as explanatory variables in some cases in order to observe basic tendencies.

We focus on three types of debt as dependent variables.

1. **Debt Ratio** = Debt / Total Assets;
2. **Bank Borrowing Ratio** = Bank Borrowing / Total Assets;
3. **Non-Bank Debt** = (Debt – Bank Borrowing) / Total Assets;

6. The Result and interpretation

6.1. Thailand

(1) Overall Results

The sample for the estimation is 1451 unbalanced panel data (449 listed, 952 unlisted firms), covering 2000-2004. The estimation results in Table 5-1 show that the coefficients of firm size, tangible asset, tax saving effect through debt, indicate consistent signs, and significant in most cases. Only the coefficients of risk are inconsistent and insignificant.

The coefficients of cash flow for all the cases, and those of bank borrowing for the case of debt ratio as dependent variable show significant in negative sign. These results suggest the existence of agency cost associated with external finance, and the role of financial intermediary for information processing. Roughly, the estimation results of control variables seem reasonable, which ensures that the agency cost approach makes sense as methodology, and allows us further interpretation on our concerning points in this framework.

Manufacturing dummy is not significant on any dependent variable. Time trend clearly is significant with negative sign on debt ratio and bank borrowings, which means the debt financing has been shrunk during early 2000s.

(2) Listed Status

The coefficients of the list dummy in the estimations on debt ratio and bank borrowing ratio shows positive sign in the estimations on bank borrowing and negative, on debt and non-bank debt. However, all the coefficients are not significant. The estimation results do not confirm our observation in Section 4⁹.

(3) Foreign Ownership and Capital Structure

Before examine the estimation results, we will overview the descriptive statistics for the foreign ownership issue. Table 6 compares the average value of major indices such as debt and bank borrowing ratio classified by listed status and foreign share classes. This shows us certain tendencies. With the unlisted firms, debt ratio is almost similar across the classes of ownership structure, though slightly high at 33.3-95%. On the other hand, while in both local firms and foreign subsidiaries the bank borrowing ratio is around 19%, the ratio of joint ventures of 'up to 33.3% foreign share' is 14-15%, substantially lower¹⁰. Non-bank debt ratio shows an adverse tendency that the ratio is remarkably high in 'up to 33.3% foreign share' firms, while the ratio is almost constant in the other classes. To sum, bank borrowing and non-bank debt seems oppositely shaped along foreign shares, reaching the bottom and the roof respectively at the point of joint venture ownership, up to 33.3%.

In the listed firms, most samples are distributed within a range of 0-10% foreign ownership. In this range, there seems to be a negative relationship between bank borrowing ratio and foreign ownership, and a positive relationship between non-bank debt ratio and foreign ownership, which is consistent to the tendency of unlisted firms. Debt ratio itself is indifferent to foreign ownership, probably because the two components cancel out each other.

Now, estimation results also confirm these tendency. In Table 5-1, in the cases of bank borrowing ratio and non-bank debt ratio, the coefficients of foreign share are significant in

⁹ The results is inconsistent with Mieno(2006), which examined the nature in early 1990's and found listed firms are significantly high in bank borrowings.

¹⁰ However, the changes occurred in the ratios during the early 2000s, resulting the orders reversed in 2004.

negative and positive signs respectively, and the coefficients of its squared values are significant in the adverse signs, implying that the slope of bank borrowing ratio is U-shaped, while that of non-bank debt is inverse U-shaped along foreign share.

However, the detailed observation by class dummies dose teach us that the picture is not so straightforward, i.e. consistent but unclear. Table 5-2 shows the results of the estimation with class dummies, instead of foreign share itself. Most coefficients of control variables are unchanged. Here we adopt two different types of class dummy: the same classification of Section 3.2, and more detailed classification. The benchmark (the omitted dummy variables) is local firms, i.e. firms with zero percent foreign shares. In these estimation, we could not find any significant result in bank borrowings, though coefficient itself forms U-Shape, suggesting that the U-shape correlation is relatively weak even if though exists. Meanwhile, only the evidence consistent to inverse U-shape in non-bank debt is positive sign type B-a joint venture.

On the other hand, on debt ratio estimation, the coefficient of foreign subsidiary is significant in positive sign, and on bank borrowing estimation, nearly significant in the same sign. Foreign subsidiaries seem relatively high in debt and bank borrowing ratio compared with joint ventures, and even with local firms, which may be a main factor to forms the U-shape in bank borrowing ratio.

6.2. Malaysia

(1) Overall Results

The sample of estimation is 3346 unbalanced panel data (2593 listed, 753 unlisted firms), covering 2000-04. The estimation results in Table 7-1 show that the signs of coefficients of most control variables, namely size, tangible asset, NDTs are consistent and significant in most cases, and that of risk factor is insignificant. The coefficient of cash flow and bank borrowing is also consistent and highly significant. The results are almost same as in the case of Thailand,

and show that agency approach seems to capture the nature of corporate finance also in the case of Malaysia.

Different from Thai's case, the manufacturing sector borrow from bank more, and is less dependent on non-bank debt. Debt ratio as total sum of the two components is rather lower in the sector. Time trend also shows the opposite tendency to Thailand, firms have increased bank borrowing, and decreased non-bank debt during the early 2000s. The pace of change, however, seems very slow.

(2) Listed Status

As to the listed status, the clearer results are obtained from estimation. The bank borrowings are significantly high in listed firms, and the non bank debt seems lower in listed firms, although the coefficient does not clear the 10% significance criteria in the latter case. Contrasted to the case of Thailand, the estimation results clearly support the difference shown in descriptive statistics in Section 4.

(3) Foreign Ownership and Capital Structure

Table 8 compares the average value of debt ratio, bank borrowing ratio, classified by listed status and grouping of the classes in foreign ownership. In Malaysia, the negative relationship between foreign shares and debt ratio is more clearly observed, which is common in the listed and unlisted firms.

The estimation results suggest that the relationship between foreign share and capital structure is significant but non-linear in Malaysia. Table 7-1 tells us that debt ratio is U-Shaped along foreign share. The bank borrowing ratio is negatively correlated to foreign share, but unclear about whether the relationship is linear or non-linear. On the other hand, non-bank debt is clearly U-Shaped, which is the same nature as debt, and opposite for the case of Thailand.

Table 7-2, which tests with class dummies for foreign share, give us richer information. On the estimations for bank borrowing ratio, the firms accepting foreign share 0-10% (Type A, Financial Investment), the debt ratio is significantly lower. And ignoring this case, the bank borrowing ratio forms clear U-shape along the foreign share (10-100%). The estimation confirms the U-shaped form in debt ratio and non-bank debt; the ratios are lowest at joint venture case (Type B-b), and subsidiaries are lower than local firm or financial investment firms, but higher than joint ventures.

6.3. Interpretation

(1) Listed Status

Different from the descriptive statistics in Section 4, the relationship between external finance and listed status remains unclear, and uncommon in two countries. In Malaysia, bank borrowing ratio is significantly high, and non bank borrowing ratio is seemingly low. In Thailand, however, listed status is not significant in any dependent variables, though the signs of coefficient (positive in bank borrowing, negative in non bank debt), seemingly same in Malaysia.

(2) Foreign Ownership

Although the estimation results in Thailand and Malaysia include different natures associated with foreign ownership in detailed facts, we can find certain common characteristics. Minor difference lies rather in the pole cases. In Thailand, foreign subsidiaries show high dependence on external finance, even higher than local firms. In Malaysia, the firms accepting financial investment from foreigners (within 10%) are especially less dependent on bank borrowing. Ignoring such exceptions, the results show us that bank borrowing ratio is U-shaped in both countries; a certain type of joint-venture firms are the lowest on the dependence on external finance.

On the other hand, there is major difference between two countries in the nature of non-bank debt. Whereas it shows inverse U-shape along foreign share, opposite to the shape of bank borrowing in Thailand, in Malaysia it is U-shaped, a nature same as the bank borrowing. This seems to suggest that the alternative fund sources for substitution of bank loan are different in two countries. Namely, the firms less dependent on bank borrowing tend to utilize the internal capital market in Thailand, and tend to depend on self-financing in Malaysia.

One of the main research questions in the paper is whether or not the large presence of foreign firms under the FDI-led industrialization in East Asia influences the local financial system. In Sections 3 and 4, we observed that foreign ownership is distributed mainly in the unlisted firm groups and that firms are generally less dependent on external finance, or financial intermediation, than developed countries. Our estimations show that certain forms of joint ventures in Thailand and Malaysia are less dependent on financial intermediation than local firms or foreign subsidiaries. While, the relationship between debt, bank borrowing and foreign ownership is neither linear nor large enough, suggesting that foreign ownership does not seem to be a solo factor to bring about weak financial intermediation in Thailand.

7. Discussions and Concluding Remarks

In this paper, we examined corporate finance in Thailand and Malaysia based on the originally compiled rich company database covering unlisted firms, which enabled us to examine the issue in light of listed status and foreign ownership.

We found that financial intermediation is pretty inactive as a method for firms' fundraising, as far as debt ratio or bank borrowing ratio shows, particularly in Malaysia. In fact, these ratios are much lower than in developed countries, where the securities market is better developed. This fact sharply contradicts the conventional view that excess debt financing is one of the core problems in East Asia and is a major cause of financial distress in 1997-8.

We also found that a large portion of the major firms still remain unlisted, i.e. they choose not to participate in organized capital markets. This is a common practice in Thailand.

The arguments to restructure the East Asian financial system have been emphasizing the prompt shift from a bank-oriented financial system to a market-based one. Taking such basic facts of our finding into account, these policy stances are probably misleading, and are insulated from the real circumstances. Thailand and Malaysia, and probably most East Asian countries, currently stand on a much earlier phase of financial development, where the core policy issues should be how inactive financial intermediation can be overcome, and how the firms can be encouraged to participate in organized capital markets.

It is noteworthy that this situation has not been brought about by the recent financial crisis or financial liberalization policy of the preceding period, but is rooted in the features of FDI-led industrialization, or the real sector growth in East Asia.

We examined the relationship between foreign ownership and financing, searching for the significance of the FDI-led industrialization on the financial system. As a result of this observation and estimation, we found a general rule: in firms whose foreign shares are higher, bank borrowing ratio is lower and non-bank debt is higher. However, the relationship is not necessarily linear; i.e. in Thailand, the bank borrowing ratio of foreign subsidiaries is higher than that of joint ventures (U-shape), and in Malaysia firms accepting financial investment from foreigners is especially low in bank borrowing. Also, the firms with a higher foreign share tend to depend on internal markets (Thailand) and self-financing (Malaysia).

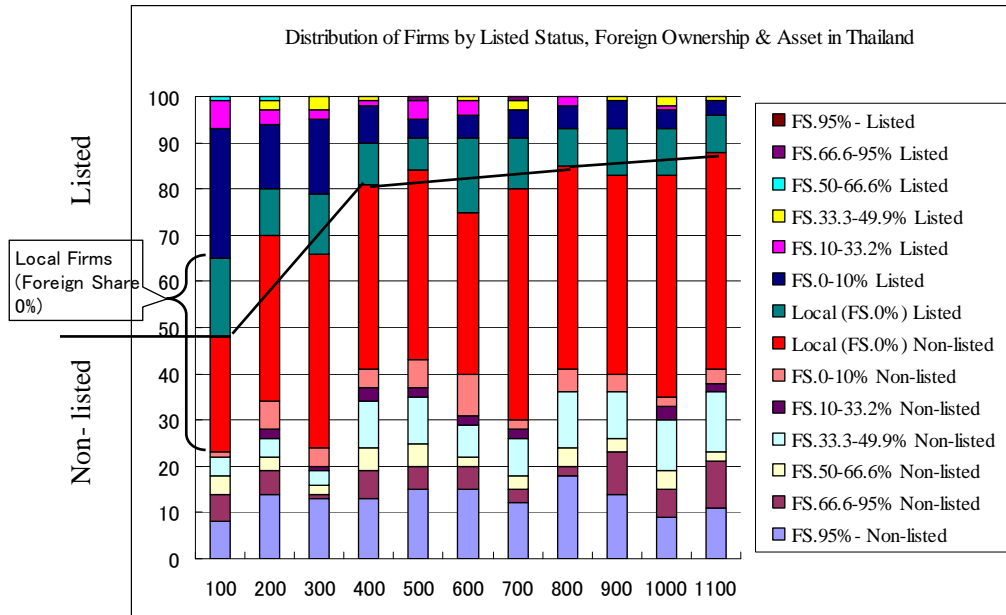
As for foreign subsidiaries, the most important component of non-bank debt source may be a credit channel between parent companies and subsidiaries. However, the information on parent–subsidiary lending was not available in our database, and not easily available in any database. The analysis on this point remains as a future issue.

We attempted to raise a new discussion on the financial system in East Asia, and the work is still in a primitive stage. There remains much incompleteness in hypothesis setting, estimation methodology and results, which should be solved in future analysis.

Bibliography

- Antra, Pol, Mihir A. Desai and C. Frit Foley, 2007, "Multinational Firms, FDI Flows and Imperfect Capital Markets", *NBER Working Paper*, 22855
- Booth, Laurence, Varouj Aivazian, Asli Demirguc-Kunt, and Vojislav Maksimovic, 2005, Capital Structures in Developing Countries, *Journal of Finance* LVI(1): 87-130.
- Claessens, Stijin, Simeon Djankov and Larry Lang, 1998, "Corporate Growth, Financing, and Risks in the Decade before East Asia's Financial Crisis", *Policy Research Working Paper*, WPS2017, World Bank
- Claessens, Stijin, Simeon Djankov, and Larry Lang, 2000, "The separation of ownership and control in East Asian Corporations", *Journal of Finance*, 58, pp. 81-112.
- Daude, Christian and Marcel Fratzscher, 2008, "The pecking order of cross-border investment", *Journal of International Economics* 74, pp.94-119
- Lee, Jong-Wha and Young Soo Lee, Byung-Sun Lee, 2000, "The Determination of Corporate Debt in Korea", *Asian Economic Journal* 14(4):333-56
- Mieno, Fumiharu 2006 "Fund Mobilization and Investment Behavior in Thai Manufacturing Firms in the Early 1990s", *Asian Economic Journal* 20.1
- Mieno, Fumiharu and Shinya Handa, 2006, "Distributional Features and Fund Raising of Major Firms in Thailand and Malaysia: The Location of Foreign and Japanese Affiliation", *JBIC Review*, Vol.31, JBIC Institution, (Japanese).
- Mieno, Fumiharu and Hiroshi Gunji, 2004, "Firm's IPO Behavior and its financial impacts in Developing Financial Market: A Case of Thai Security Market in Early 1990", a paper presented at Annual Conference of East Asian Economic Association at Chinese Hong Kong University, November 2004
- Rajan, Raghuram. G and Luigi Zingales, 1995, "What Do We Know about Capital Structure? Some Evidence from International Data", *The Journal of Finance* 1(5)
- Suto, Megumi, 2003, "Capital structure and investment behavior of Malaysian firms in the 1990s – a study of corporate governance before the crisis", *Corporate Governance: an International Review*, 11, 1

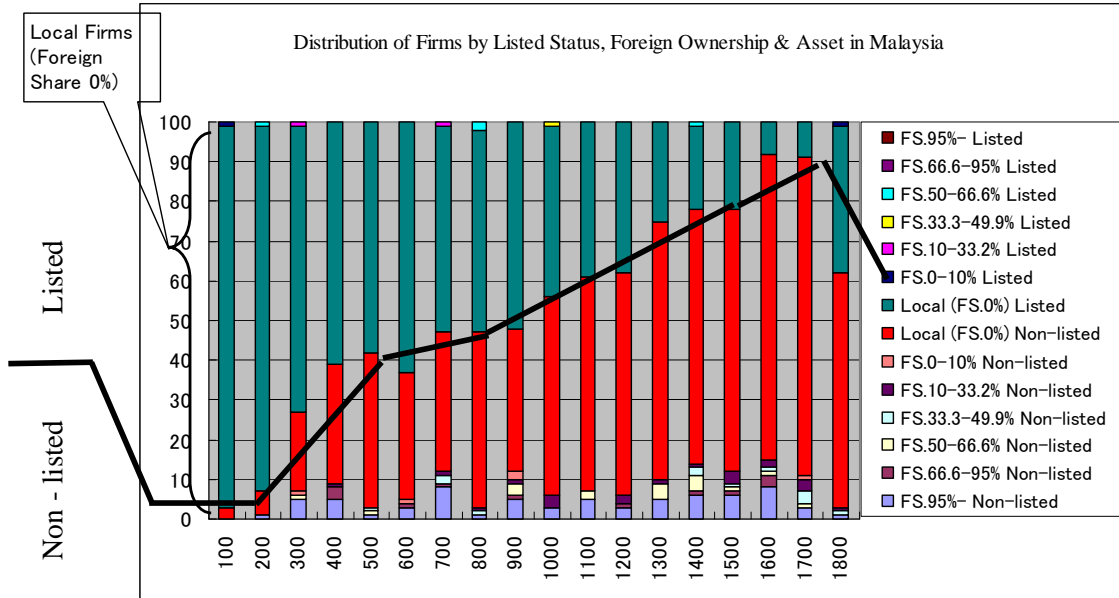
Figure 1



Rank by Size	Listed			Unlisted		
	1-400	401-800	801-1100	1-400	401-800	801-1100
No. of Firms	135	76	46	265	324	254
Total of 10% or more	14.8%	18.4%	10.9%	40.4%	40.7%	42.1%
Foreign Share 95% -	0.0%	0.0%	0.0%	18.1%	18.5%	13.4%
Foreign Share 50-95%	1.5%	2.6%	0.0%	12.1%	9.0%	13.4%
Foreign Share 10-50%	13.3%	15.8%	10.9%	10.2%	13.3%	15.4%
Foreign Share -10%	48.9%	26.3%	28.3%	5.7%	6.8%	3.5%
Foreign Share 0%	36.3%	55.3%	97.8%	54.0%	52.5%	54.3%

Note: The percentages present the shares in number in the listed and the unlisted firms respectively

Figure 2



Rank by Size	Listed			Unlisted		
	1-600	601-1200	1201-1800	1-600	601-1200	1201-1800
No. of Firms	445	279	124	155	321	476
Total of 10% or more	0.4%	1.4%	0.8%	14.2%	12.8%	11.8%
Foreign Share 95% -	0.0%	0.0%	0.0%	9.7%	7.8%	6.1%
Foreign Share 50-95%	0.2%	0.7%	0.8%	3.9%	2.5%	3.4%
Foreign Share 10-50%	0.2%	0.7%	0.0%	0.6%	2.5%	2.3%
Foreign Share -10%	0.2%	0.0%	0.8%	1.3%	0.6%	0.2%
Foreign Share 0%	99.3%	98.6%	98.4%	83.9%	85.7%	86.3%

Note: The percentages present the shares in number in the listed and the unlisted firms respectively

Table 1 Sample Design and Distribution

(1) Thailand

Rank by Asset	Listed Firms	Non-listed Firms	Asset Size	
1st	149 (33.3%)	298	501,721	
447th			2,586	↑ 'Financial Statement Sample'
1189th	119 (16.0%)	623	1,040	↑ 'Company Profile & Shareholders Inf. Sample'
Sub total 1189	268 (22.5%)	921		
	112			Omitted from Observation
Total 1,301	380	921		

Note: Total Asset in 2004, Million Baths

Parentheses represent the % of no. of listed firms in each class.

(2) Malaysia

Rank by Asset	Listed Firms	Non-listed Firms	Asset Size	
1st	633 (74.8%)	213	12,521,700	
846th			117,011	↑ 'Financial Statement Sample'
1824th	254 (22.7%)	724	30,531	↑ 'Company Profile & Shareholders Inf. Sample'
Sub total 1,824	887 (48.6%)	978		
	36			Omitted from Observation
Total 1,860	923	937		

Note: Total Asset in 2004, Thousand Ringgt

Parentheses represent the % of no. of listed firms in each class.

Table 2 The largest Shareholders' Nationality

Thailand

	Number	% to total
Thailand	696	63.7%
Japan	206	18.8%
the U.S.	78	7.1%
Singapore	63	5.8%
Hong Kong	20	1.8%
Malaysia	12	1.1%
Korea	10	0.9%
Taiwan	5	0.5%
Others	3	0.3%
Total	1093	

Malaysia

	Number	% to total
Malaysia	1430	77.4%
Japan	119	6.4%
Singapore	92	5.0%
EU	85	4.6%
the U.S.	51	2.8%
Taiwan	13	0.7%
Virgin Island	11	0.6%
Hong Kong	9	0.5%
Australia	6	0.3%
Cayman Islands	5	0.3%
Korea	5	0.3%
Others	22	1.2%
Total	1848	

Note. Calculated from the sample data in 2005. The classifications follows each definition of original data.

Table 3 Capital Structure of the sample firms, Thailand**(1) Non-listed**

		2000	2001	2002	2003	2004	Average
	No. of Sample	201	197	204	208	207	
1	Liabilities	57.5%	55.3%	54.7%	54.4%	51.7%	54.7%
2	Current Liabilities	39.0%	37.1%	37.3%	37.8%	37.4%	37.7%
3	Account payable	10.3%	10.7%	11.0%	12.8%	12.7%	11.5%
4	Short term borrowings	11.9%	11.3%	11.8%	10.6%	9.8%	11.1%
5	Other Current Liabilities	13.3%	11.2%	12.6%	13.1%	13.0%	12.6%
6	Non Current Liabilities	18.4%	18.2%	17.4%	16.6%	14.3%	17.0%
7	Long term Borrowings	5.6%	7.5%	7.5%	6.9%	6.6%	6.8%
8	Other Non Current Liabilities	4.3%	4.3%	3.3%	3.4%	2.3%	3.5%
9	Capital Accounts	42.5%	44.5%	45.3%	45.6%	48.3%	45.3%
10	Paid in Capital	32.3%	30.1%	30.9%	28.5%	26.3%	29.6%
11	Retained Earnings	3.7%	7.4%	8.4%	11.0%	16.3%	9.4%
12	Capital Surplus	6.5%	7.1%	6.0%	6.1%	5.7%	6.3%
13	Total bank borrowings (4)+(7)	17.5%	18.8%	19.3%	17.5%	16.4%	17.9%
14	Non-bank debt (1)-(13)	39.9%	36.5%	35.4%	36.9%	35.3%	36.8%

(2) Listed

		2000	2001	2002	2003	2004	Average
	No. of Sample	84	101	116	131	136	
1	Liabilities	60.6%	59.0%	56.3%	53.1%	53.4%	56.5%
2	Current Liabilities	32.5%	30.0%	32.3%	28.2%	30.2%	30.7%
3	Account payable	7.2%	6.9%	8.6%	6.9%	7.2%	7.4%
4	Short term borrowings	5.8%	4.4%	4.4%	3.4%	4.1%	4.4%
5	Other Current Liabilities	19.5%	18.7%	19.3%	17.9%	18.9%	18.9%
6	Non Current Liabilities	28.1%	29.0%	23.9%	24.9%	23.1%	25.8%
7	Long term Borrowings	19.9%	20.7%	16.9%	17.7%	16.0%	18.2%
8	Debentures	3.8%	2.7%	2.0%	2.2%	2.7%	2.7%
9	Other Non Current Liabilities	4.4%	5.6%	5.0%	5.1%	4.5%	4.9%
10	Capital Accounts	39.4%	41.0%	43.7%	46.9%	46.6%	43.5%
11	Paid in Capital	23.4%	25.9%	24.0%	68.3%	26.1%	33.5%
12	Retained Earnings	-8.7%	-4.2%	4.6%	6.3%	9.9%	1.6%
13	Capital Surplus	24.6%	19.4%	15.1%	-27.8%	10.6%	8.4%
14	Total bank borrowings (4)+(7)	25.7%	25.1%	21.3%	21.1%	20.0%	22.7%
15	Non-bank debt (1)-(13)	35.0%	33.9%	34.9%	32.0%	33.3%	33.8%

Table 4 Capital Structure of the sample firms, Malaysia**(1) Non-listed**

		2000	2001	2002	2003	2004	Average
	No. of Sample	182	204	206	208	212	
1	Liabilities	37.9%	39.4%	40.1%	39.0%	39.0%	39.1%
2	Current Liabilities	32.0%	31.8%	32.7%	32.3%	32.2%	32.2%
3	Account payable	19.2%	19.0%	22.6%	19.8%	20.8%	20.3%
4	Short term borrowings	2.8%	3.2%	2.5%	3.2%	3.3%	3.0%
	Borrowings from Related Parties	3.2%	2.8%	2.7%	2.5%	2.1%	2.7%
5	Other Current Liabilities	6.8%	6.9%	4.9%	6.8%	5.9%	6.2%
6	Non Current Liabilities	6.0%	7.5%	7.4%	6.7%	6.8%	6.9%
7	Long term Borrowings	1.8%	3.1%	2.0%	2.1%	2.4%	2.3%
8	Other Non Current Liabilities	4.2%	4.4%	5.4%	4.6%	4.4%	4.6%
9	Capital Accounts	62.1%	60.6%	59.9%	61.0%	61.0%	60.9%
10	Paid in Capital	33.1%	30.5%	26.9%	30.8%	29.1%	30.1%
11	Retained Earnings	17.0%	17.1%	20.2%	14.3%	20.5%	17.8%
12	Capital Surplus	12.0%	13.1%	12.7%	16.0%	11.5%	13.0%
13	Total bank borrowings (4)+(7)	4.6%	6.3%	4.6%	5.4%	5.7%	5.3%
14	Non-bank debt (1)-(13)	33.3%	33.1%	35.5%	33.6%	33.3%	33.8%

Note: 'Borrowing from Related Parties' are available only for current liabilities.

(2) Listed

		2000	2001	2002	2003	2004	Average
	No. of Sample	479	498	552	609	628	
1	Liabilities	45.7%	43.3%	44.0%	45.8%	46.5%	45.0%
2	Current Liabilities	31.9%	29.2%	28.4%	28.6%	28.7%	29.4%
3	Account payable	7.9%	7.1%	7.2%	7.7%	7.7%	7.5%
4	Short term borrowings	2.2%	2.0%	2.3%	2.6%	2.4%	2.3%
5	Other Current Liabilities	21.8%	20.1%	18.9%	18.4%	18.7%	19.6%
6	Non Current Liabilities	13.8%	14.1%	15.5%	17.1%	17.7%	15.7%
7	Long term Borrowings	7.7%	8.0%	9.3%	9.6%	10.4%	9.0%
8	Debentures	0.7%	0.9%	0.9%	1.0%	1.1%	0.9%
9	Other Non Current Liabilities	5.3%	5.2%	5.3%	6.5%	6.3%	5.7%
10	Capital Accounts	54.3%	56.7%	56.0%	54.2%	53.5%	55.0%
11	Paid in Capital	30.6%	32.3%	33.9%	34.2%	34.9%	33.2%
12	Retained Earnings	5.2%	6.4%	5.2%	7.6%	6.7%	6.2%
13	Capital Surplus	18.6%	18.0%	16.9%	12.5%	11.9%	15.6%
14	Total bank borrowings (4)+(7)	9.9%	10.0%	11.6%	12.2%	12.7%	11.3%
15	Non-bank debt (1)-(13)	35.8%	33.3%	32.4%	33.6%	33.7%	33.8%

Table 5-1 Estimation Result for Thailand

	Debt / T.A.		Bank Borrowing / T.A.		Non-Bank Debt / T.A.	
Size	0.0761 *** 10.34	0.0760 *** 10.32	0.0443 *** 5.65	0.0449 *** 5.73	0.0267 *** 3.16	0.0259 *** 3.07
Tangible Asset	-0.0181 -0.66	-0.0182 -0.66	0.1102 *** 3.68	0.1107 *** 3.70	-0.1142 *** -3.56	-0.1151 *** -3.60
Risk	1.94E-06 1.05	1.94E-06 1.05	-1.14E-06 -0.49	-1.16E-06 -0.49	2.54E-06 1.11	2.55E-06 1.12
NDTS	-0.1356 *** -4.73	-0.1357 *** -4.73	-0.0078 -0.22	-0.0075 -0.21	-0.1300 *** -3.70	-0.1306 *** -3.71
Cash Flow	-0.3157 *** -16.54	-0.3158 *** -16.54	-0.1557 *** -7.22	-0.1547 *** -7.18	-0.1715 *** -7.6	-0.1725 *** -7.65
Bank Borrowing	0.1099 *** 7.50	0.1101 *** 7.51				
List Dummy	-0.0196 -0.74	-0.0203 -0.77	0.0027 0.12	0.0053 0.23	-0.0177 -0.64	-0.0206 -0.75
Foreign Share	0.0006 1.55	0.0011 0.82	0.0002 0.56	-0.0018 * -1.61	0.0004 0.95	0.0027 ** 1.96
(Foreign Share) ^ 2		-5.90E-06 -0.42		2.19E-05 * 1.83		-2.54E-05 * -1.77
Manuf. Dummy	0.0119 0.48	0.0112 0.45	0.0076 0.35	0.0102 0.47	0.0021 0.08	-0.0009 -0.03
Trend	-0.0102 ** -4.97	-0.0102 ** -4.96	-0.0051 ** -2.02	-0.0053 ** -2.07	-0.0039 -1.55	-0.0038 -1.49
Constant	-0.6079 *** -5.38	-0.6078 *** -5.37	-0.5256 *** -4.39	-0.5290 *** -4.42	0.0225 0.17	0.0290 0.22
R-square	0.2014	0.2026	0.1063	0.1065	0.0848	0.0855

Upper column shows coefficients, Lower column shows t values.

Size: log of T. A., *Tangible Asset*: Fixed Asset /T.A., *Cash Flow*: Retained Earnings/T.A., *Risk*: Standard Deviation of ROA during 2000-2004, *NDTS*: calculated Non-Debt Tax Shield, *Bank Borrowing*: Bank Borrowing / T.A., *List Dummy*: = 1 if the sample is of listed firm, *Trend*: Time Trend, *Foreign Share*: Foreign share summed up for 5 top shareholders, *Manuf. Dummy*: =1 if the sample is of manufacturing Sector

Table 5-2 Estimation Result for Thailand

	Debt / T.A.		Bank Borrowing / T.A.		Non-Bank Debt / T.A.	
Size	0.0764 *** 10.36	0.0762 *** 10.34	0.0451 *** 5.75	0.0451 *** 5.76	0.0262 *** 3.09	0.0260 *** 3.07
Tangible Asset	-0.0161 -0.58	-0.0167 -0.60	0.1116 *** 3.71	0.1124 *** 3.75	-0.1131 *** -3.52	-0.1143 *** -3.56
Risk	0.0000 1.06	0.0000 1.06	0.0000 -0.50	0.0000 -0.50	0.0000 1.13	0.0000 1.13
NDTS	-0.1345 *** -4.69	-0.1347 *** -4.70	-0.0071 -0.20	-0.0070 -0.20	-0.1293 *** -3.67	-0.1296 *** -3.68
Cash Flow	-0.3163 *** -16.54	-0.3161 *** -16.55	-0.1539 *** -7.13	-0.1543 *** -7.16	-0.1735 *** -7.68	-0.1730 *** -7.67
Bank Borrowing	0.1099 *** 7.50	0.1099 *** 7.50				
List Dummy	-0.0287 -0.95	-0.0317 -1.10	0.0105 0.40	0.0102 0.40	-0.0335 -1.07	-0.0359 -1.19
0 < [Foreign Share] < 10%	0.0187 0.57		-0.0156 -0.54		0.0319 0.93	
10 <_ [Foreign Share] < 33.3%	0.0401 0.72		-0.0343 -0.71		0.0690 1.19	
33.3 <_ [Foreign Share] < 50%	0.0672 1.54		-0.0333 -0.89		0.0930 ** 2.06	
50 <_ [Foreign Share] < 66.6%	0.0239 0.40		-0.0528 -1.03		0.0679 1.10	
66.6 <_ [Foreign Share] < 95%	-0.0009 -0.02		-0.0272 -0.61		0.0212 0.40	
95% <_ [Foreign Share]	0.0731 * 1.86		0.0489 1.44		0.0247 0.61	
0 < [Foreign Share] < 10% Type A: Financial Investment		0.0204 0.62		-0.0155 -0.55		0.0333 0.98
10 <_ [Foreign Share] < 50% Type B-a: Joint Venture		0.0574 1.59		-0.0337 -1.08		0.0843 ** 2.25
50 <_ [Foreign Share] < 95% Type B-b: Joint Venture		0.0081 0.19		-0.0378 -1.05		0.0394 0.91
95 <_ [Foreign Share] Type C: Foreign Subsidiaries		0.0718 * 1.84		0.0487 1.45		0.0237 0.59
Manuf. Dummy	0.0141 0.56	0.0147 0.59	0.0107 0.49	0.0111 0.51	0.0014 0.05	0.0016 0.06
Trend	-0.0102 *** -4.97	-0.0102 *** -4.96	-0.0053 ** -2.09	-0.0053 ** -2.08	-0.0038 -1.49	-0.0037 -1.49
Constant	-0.6192 *** -5.46	-0.6149 *** -5.43	-0.5325 *** -4.44	-0.5330 *** -4.46	0.0188 0.14	0.0235 0.18
R-square	0.2055	0.2061	0.1141	0.1089	0.0884	0.0892

Upper column shows coefficients, Lower column shows t values.

Size: log of T. A., *Tangible Asset*: Fixed Asset /T.A., *Cash Flow*: Retained Earnings/T.A., *Risk*: Standard Deviation of ROA during 2000-2004, *NDTS*: calculated Non-Debt Tax Shield, *Bank Borrowing*: Bank Borrowing / T.A., *List Dummy*: = 1 if the sample is of listed firm, *Trend*: Time Trend, *Foreign Share*: Foreign share summed up for 5 top shareholders, *Manuf. Dummy*: =1 if the sample is of manufacturing Sector

Table 6 Foreign Shares and Debt, Thailand**(1) Debt Ratio**

	2000	2001	2002	2003	2004	Average	No. of Sample
<u>Non-listed</u>							
Foreign Share = 10%	58.3%	57.5%	56.3%	57.1%	51.8%	56.2%	93-100
0% < Foreign Share <= 33.3%	62.7%	55.5%	55.5%	53.2%	57.5%	56.9%	16-18
33.3% < Foreign Share <= 95%	55.2%	52.5%	51.2%	49.8%	49.5%	51.6%	50
95% < Foreign Share	56.0%	53.4%	54.7%	54.0%	51.5%	53.9%	37-40
<u>Listed</u>							
Foreign Share = 10%	63.6%	59.6%	57.2%	51.0%	51.8%	56.6%	24-48
0% < Foreign Share <= 10%	60.0%	60.2%	55.7%	55.2%	54.3%	57.1%	42-65
10% < Foreign Share	58.4%	54.9%	56.3%	51.7%	54.2%	55.1%	18-23

(2) Bank Borrowing Ratio

	2000	2001	2002	2003	2004	Average	No. of Sample
<u>Non-listed</u>							
Foreign Share = 10%	18.2%	19.3%	21.6%	19.8%	17.7%	19.3%	93-100
0% < Foreign Share <= 33.3%	13.2%	11.7%	13.0%	14.0%	19.3%	14.3%	16-18
33.3% < Foreign Share <= 95%	14.5%	18.6%	17.3%	12.9%	12.7%	15.2%	50
95% < Foreign Share	21.7%	21.3%	18.8%	18.8%	16.6%	19.4%	37-40
<u>Listed</u>							
Foreign Share = 10%	30.2%	27.8%	22.0%	22.8%	22.7%	25.1%	24-48
0% < Foreign Share <= 10%	26.4%	26.4%	23.1%	22.7%	20.5%	23.8%	42-65
10% < Foreign Share	18.1%	17.3%	15.4%	13.5%	13.2%	15.5%	18-23

(3) Non-bank Debt Ratio

	2000	2001	2002	2003	2004	Average	No. of Sample
<u>Non-listed</u>							
Foreign Share = 10%	40.2%	38.2%	34.7%	37.2%	34.1%	36.9%	93-100
0% < Foreign Share <= 33.3%	49.5%	43.8%	42.4%	39.2%	38.1%	42.6%	16-18
33.3% < Foreign Share <= 95%	40.7%	33.9%	33.9%	36.9%	36.8%	36.4%	50
95% < Foreign Share	34.4%	32.1%	35.9%	35.2%	34.9%	34.5%	37-40
<u>Listed</u>							
Foreign Share = 10%	33.4%	31.9%	35.2%	28.2%	29.1%	31.6%	24-48
0% < Foreign Share <= 10%	33.6%	33.8%	32.6%	32.5%	33.8%	33.3%	42-65
10% < Foreign Share	40.3%	37.6%	40.9%	38.2%	41.0%	39.6%	18-23

(4) Current Liability / T.A.

	2000	2001	2002	2003	2004	Average	No. of Sample
<u>Non-listed</u>							
Foreign Share = 10%	38.3%	36.6%	35.8%	37.7%	35.3%	36.7%	93-100
0% < Foreign Share <= 33.3%	36.4%	30.3%	30.3%	28.3%	33.5%	31.8%	16-18
33.3% < Foreign Share <= 95%	37.2%	37.8%	37.9%	37.2%	39.2%	37.9%	50
95% < Foreign Share	44.2%	40.4%	43.2%	43.0%	42.0%	42.6%	37-40
<u>Listed</u>							
Foreign Share = 10%	32.0%	25.0%	31.5%	25.2%	28.4%	28.4%	24-48
0% < Foreign Share <= 10%	30.7%	30.6%	30.2%	27.6%	28.6%	29.5%	42-65
10% < Foreign Share	37.4%	37.0%	39.6%	36.0%	38.8%	37.7%	18-23

(5) Retained Earnings / T.A.

	2000	2001	2002	2003	2004	Average	No. of Sample
<u>Non-listed</u>							
Foreign Share = 10%	-3.1%	1.1%	2.4%	1.7%	8.8%	2.2%	93-100
0% < Foreign Share <= 33.3%	-4.8%	-6.5%	-12.3%	1.8%	7.5%	-2.9%	16-18
33.3% < Foreign Share <= 95%	12.1%	14.7%	18.4%	25.0%	27.0%	19.4%	50
95% < Foreign Share	13.5%	19.5%	19.7%	21.1%	25.5%	19.9%	37-40
<u>Listed</u>							
Foreign Share = 10%	-12.6%	-9.2%	0.5%	0.7%	4.6%	-3.2%	24-48
0% < Foreign Share <= 10%	-7.6%	-2.8%	6.3%	8.4%	12.5%	3.4%	42-65
10% < Foreign Share	-5.9%	0.1%	7.2%	12.1%	13.8%	5.5%	18-23

Table 7-1 Estimation Result for Malaysia

	Debt / T.A.		Bank Borrowing / T.A.		Non-Bank Debt / T.A.	
Size	0.0332 *** 9.56	0.0334 *** 9.60	0.0025 1.09	0.0025 1.11	0.0307 *** 9.84	0.0308 *** 9.87
Tangible Asset	0.0728 *** 12.54	0.0730 *** 12.59	0.0248 *** 6.66	0.0249 *** 6.66	0.0546 *** 10.10	0.0548 *** 10.13
Cash Flow	-0.0192 *** -6.63	-0.0192 *** -6.64	-0.0086 *** -4.59	-0.0086 *** -4.59	-0.0134 *** -5.03	-0.0134 *** -5.03
Risk	-8.9E-06 -1.16	-8.8E-06 -1.15	4.5E-07 0.09	4.6E-07 0.09	-9.6E-06 -1.33	-9.6E-06 -1.32
NDTS	0.0000 -0.01	-0.0002 -0.07	-0.0052 *** -2.95	-0.0052 *** -2.96	0.0024 0.91	0.0022 0.86
Bank Borrowing	0.2656 *** 17.08	0.2659 *** 17.11				
List Dummy	-0.0108 -0.14	-0.0096 -0.13	0.1604 *** 3.07	0.1606 *** 3.07	-0.0996 -1.56	-0.0984 -1.54
Trend	-1.5E-11 -0.29	-1.2E-11 -0.22	1.3E-10 *** 3.76	1.3E-10 *** 3.77	-9.6E-11 ** -1.96	-9.3E-11 * -1.90
Foreign Share	-0.0005 *** -4.63	-0.0011 *** -3.55	-0.0003 *** -4.82	-0.0004 ** -2.02	-0.0003 ** -3.26	-0.0008 *** -2.77
(Foreign Share) ^ 2		5.8E-06 *** 2.10		7.5E-07 0.42		4.6E-06 * 1.76
Manuf. Dummy	-0.0172 -1.99 **	-0.0172 -1.99 **	0.0253 4.47 ***	0.0253 4.46 ***	-0.0277 -3.59 ***	-0.0276 -3.59 ***
Constant	-0.0754 -0.84	-0.0774 -0.87	-0.0735 -1.21	-0.0739 -1.22	-0.0073 -0.10	-0.0089 -0.12
R-square	0.2014	0.2026	0.1063	0.1065	0.0848	0.0855

Upper column shows coefficients, Lower column shows t values.

Size : log of T. A., *Tangible Asset* : Fixed Asset /T.A., *Cash Flow* : Retained Earnings/T.A., *Risk* : Standard Deviation of ROA during 2000-2004, *NDTS* : calculated Non-Debt Tax Shield, *Bank Borrowing* : Bank Borrowing / T.A., *List Dummy* : = 1 if the sample is of listed firm, *Trend* : Time Trend, *Foreign Share* : Foreign share summed up for 5 top shareholders, *Manuf. Dummy* : =1 if the sample is of manufacturing Sector

Table 7-2 Estimation Result for Malaysia

	Debt / T.A.		Bank Borrowing / T.A.		Non-Bank Debt / T.A.	
Size	0.0340 *** 9.75	0.0338 *** 9.76	0.0021 0.91	0.0026 1.13	0.0316 *** 10.10	0.0312 *** 10.01
Tangible Asset	0.0729 *** 12.63	0.0728 *** 12.58	0.0257 *** 6.91	0.0257 *** 6.88	0.0543 *** 10.09	0.0543 *** 10.08
Risk	-9.7E-06 -1.28	-9.7E-06 -1.27	4.4E-07 0.09	5.5E-07 0.11	-1.0E-05 -1.45	-1.0E-05 -1.45
NDTS	-0.0005 -0.19	-0.0009 -0.33	-0.0048 *** -2.69	-0.0049 *** -2.74	0.0017 0.66	0.0014 0.54
Cash Flow	-0.0189 *** -6.56	-0.0190 *** -6.58	-0.0083 *** -4.44	-0.0085 *** -4.51	-0.0132 *** -4.97	-0.0132 *** -4.97
Bank Borrowing	0.2617 *** 16.84	0.2641 *** 16.97				
List Dummy	-0.0165 -0.22	-0.0054 -0.07	0.1615 *** 3.09	0.1621 *** 3.10	-0.1059 * -1.65	-0.0956 -1.49
0 < [Foreign Share] < 10%	0.0098 0.39		-0.0490 *** -2.91		0.0279 1.26	
10 <_ [Foreign Share] < 33.3%	0.0236 1.12		0.0221 1.60		0.0216 1.14	
33.3 <_ [Foreign Share] < 50%	-0.1495 *** -4.71		-0.0359 * -1.72		-0.0982 *** -3.43	
50 <_ [Foreign Share] < 66.6%	-0.1185 *** -5.51		-0.0559 *** -3.97		-0.0859 *** -4.41	
66.6 <_ [Foreign Share] < 95%	-0.1030 *** -4.57		-0.0097 -0.67		-0.1027 *** -4.87	
95% <_ [Foreign Share]	-0.0359 *** -3.31		-0.0338 *** -4.82		-0.0181 * -1.78	
0 < [Foreign Share] < 10%		0.0102		-0.0487 ***		0.0279
Type A: Financial Investment		0.40		-2.89		1.26
10 <_ [Foreign Share] < 50%		-0.0281		0.0047		-0.0141
Type B-a: Joint Venture		-1.58		0.40		-0.88
50 <_ [Foreign Share] < 95%		-0.1110 ***		-0.0336 ***		-0.0935 ***
Type B-b: Joint Venture		-6.90		-3.22		-6.33
95 <_ [Foreign Share]		-0.0358 ***		-0.0344 ***		-0.0176 *
Type C: Foreign Subsidiaries		-3.29		-4.90		-1.73
Manuf. Dummy	-0.0197 ** -2.28	-0.0194 ** -2.24	0.0255 *** 4.50	0.0259 *** 4.56	-0.0297 *** -3.85	-0.0296 *** -3.84
Trend	-2.4E-11 -0.47	-6.9E-12 -0.13	1.2E-10 *** 3.71	1.3E-10 *** 3.82	-1.0E-10 ** -2.13	-9.0E-11 * -1.85
Constant	-0.0736 -0.82	-0.0840 -0.94	-0.0675 -1.11	-0.0753 -1.24	-0.0103 -0.13	-0.0148 -0.19
R-square	0.2055	0.2061	0.1141	0.1089	0.0884	0.0892

Upper column shows coefficients, Lower column shows t values.

Size : log of T. A., *Tangible Asset* : Fixed Asset /T.A., *Cash Flow* : Retained Earnings/T.A., *Risk* : Standard Deviation of ROA during 2000-2004, *NDTS* : calculated Non-Debt Tax Shield, *Bank Borrowing* : Bank Borrowing / T.A., *List Dummy* : = 1 if the sample is of listed firm, *Trend* : Time Trend, *Foreign Share* : Foreign share summed up for 5 top shareholders, *Manuf. Dummy* : =1 if the sample is of manufacturing sector

Table 8 Foreign Shares and Debt, Malaysia**(1) Debt Ratio**

	2000	2001	2002	2003	2004	Average	No. of Sample
<u>Non-listed</u>							
Foreign Share = 10%	36.7%	41.1%	40.6%	40.9%	42.0%	40.3%	89-108
0% < Foreign Share <= 33.3%	40.1%	43.3%	35.8%	36.1%	40.1%	39.1%	14-16
33.3% < Foreign Share <= 95%	34.2%	32.2%	37.8%	38.7%	41.3%	36.8%	13-18
95% < Foreign Share	40.1%	37.2%	37.5%	36.7%	37.0%	37.7%	62-74
<u>Listed</u>							
Foreign Share = 10%	46.7%	44.2%	44.9%	46.3%	46.9%	45.8%	413-551
0% < Foreign Share <= 10%	37.4%	38.1%	40.7%	44.0%	45.1%	41.1%	21-24
10% < Foreign Share <= 50%	44.3%	41.5%	38.5%	45.4%	47.6%	43.5%	26-33
50% < Foreign Share	35.0%	31.3%	31.1%	33.1%	33.3%	32.8%	19-20

(2) Bank Borrowing Ratio

	2000	2001	2002	2003	2004	Average	No. of Sample
<u>Non-listed</u>							
Foreign Share = 10%	5.0%	7.5%	5.8%	7.2%	5.9%	6.3%	89-108
0% < Foreign Share <= 33.3%	4.9%	6.0%	6.1%	3.9%	3.2%	4.8%	14-16
33.3% < Foreign Share <= 95%	3.5%	3.3%	6.1%	5.7%	5.5%	4.8%	13-18
95% < Foreign Share	4.2%	5.1%	4.3%	3.8%	2.7%	4.0%	62-74
<u>Listed</u>							
Foreign Share = 10%	10.4%	10.5%	12.2%	12.6%	13.0%	11.7%	413-551
0% < Foreign Share <= 10%	7.2%	9.0%	11.2%	9.8%	11.1%	9.6%	21-24
10% < Foreign Share <= 50%	8.5%	8.0%	7.4%	13.0%	14.8%	10.3%	26-33
50% < Foreign Share	4.0%	2.6%	2.8%	3.7%	3.4%	3.3%	19-20

(3) Non-bank Debt Ratio

	2000	2001	2002	2003	2004	Average	No. of Sample
<u>Non-listed</u>							
Foreign Share = 10%	31.7%	33.5%	34.7%	33.7%	36.2%	34.0%	89-108
0% < Foreign Share <= 33.3%	35.2%	37.3%	29.7%	32.2%	37.0%	34.3%	14-16
33.3% < Foreign Share <= 95%	30.7%	28.9%	31.7%	33.0%	35.8%	32.0%	13-18
95% < Foreign Share	35.9%	32.2%	33.2%	32.9%	34.2%	33.7%	62-74
<u>Listed</u>							
Foreign Share = 10%	36.3%	33.7%	32.7%	33.8%	33.9%	34.1%	413-551
0% < Foreign Share <= 10%	30.2%	29.1%	29.5%	34.2%	34.0%	31.4%	21-24
10% < Foreign Share <= 50%	35.8%	33.5%	31.1%	32.4%	32.8%	33.1%	26-33
50% < Foreign Share	31.0%	28.7%	28.2%	29.4%	29.9%	29.4%	19-20

(4) Current Liability / T.A.

	2000	2001	2002	2003	2004	Average	No. of Sample
<u>Non-listed</u>							
Foreign Share = 10%	30.9%	31.1%	32.3%	32.1%	31.9%	31.6%	89-108
0% < Foreign Share <= 33.3%	32.7%	36.0%	30.5%	29.9%	33.1%	32.4%	14-16
33.3% < Foreign Share <= 95%	32.0%	30.0%	34.8%	35.2%	35.2%	33.4%	13-18
95% < Foreign Share	33.3%	32.3%	32.1%	32.0%	33.2%	32.6%	62-74
<u>Listed</u>							
Foreign Share = 10%	32.3%	29.5%	28.7%	28.9%	28.9%	29.7%	413-551
0% < Foreign Share <= 10%	27.2%	25.0%	26.2%	26.1%	26.3%	26.1%	21-24
10% < Foreign Share <= 50%	31.1%	29.0%	27.6%	27.6%	29.5%	29.0%	26-33
50% < Foreign Share	28.8%	26.9%	24.9%	25.0%	26.9%	26.5%	19-20

(5) Retained Earnings / T.A.

	2000	2001	2002	2003	2004	Average	No. of Sample
<u>Non-listed</u>							
Foreign Share = 10%	19.3%	19.3%	14.3%	24.6%	20.7%	19.6%	89-108
0% < Foreign Share <= 33.3%	19.4%	3.2%	22.6%	21.4%	15.5%	16.4%	14-16
33.3% < Foreign Share <= 95%	12.4%	22.3%	-6.5%	-2.7%	6.8%	6.5%	13-18
95% < Foreign Share	14.3%	15.9%	17.6%	20.1%	23.6%	18.3%	62-74
<u>Listed</u>							
Foreign Share = 10%	3.8%	5.7%	4.4%	7.9%	6.8%	5.7%	413-551
0% < Foreign Share <= 10%	8.8%	7.4%	3.9%	-0.5%	-1.5%	3.6%	21-24
10% < Foreign Share <= 50%	13.3%	12.0%	15.7%	4.4%	6.2%	10.3%	26-33
50% < Foreign Share	19.7%	12.8%	13.5%	13.0%	16.3%	15.1%	19-20