

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

**Fumiharu Mieno**

**Discussion Paper No. 64**

Fumiharu Mieno  
Professor, Kobe University



**Asia-Pacific  
Economic Cooperation**

Discussion Paper Series  
APEC Study Center  
Columbia University

June 2008

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

Fumiharu Mieno,

Kobe University

Email: [fmieno@kobe-u.ac.jp](mailto: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 the shift from financial intermediation to the capital and bond markets.

**Keywords:** Financial System, Corporate Finance, Southeast 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 (JBIC) in 2006-08. The author thanks for JBIC institution for realizing such uneasy research attempt, and for project colleagues at the institute: Mr. Toshiro Nisizawa, Mr. Masahiro Shimobachi, Ms. Qun Liu, Ms. Akiko Sugiyama and Mr. Shinya Handa, for the overall cooperation and support. Remaining errors are mine.

## 1. Introduction

Conventional policy discussions 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. At the same time, 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 generally 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 vary 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, focusing on Thailand and Malaysia, and to expand the focus from the major listed firms, which have been referred in the most of previous studies, to other types of firms, including unlisted firms and foreign subsidiaries.

Based on the financial statement of the listed firms in 9 countries, Claessens et al. (1999,2000), in one of the representative studies on the corporate finance and governance in the East Asia, pointed out the high debt ratio of the firms and their increasing trends during the early 90s, the period preceding the financial crisis. They also assert that 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 found the equity dependent features, instead of debt, in developing countries.

Studies of individual countries in East Asia - 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 capital structures in each country. The results of the estimations vary across the countries and the approaches. However, the debt ratio observed in all the studies are generally lower than those of Classens's studies<sup>1</sup>, and find only very partial relationships among debt ratio, ownership and weakness of governance.

One possible research breakthrough on this issue may lie in examining 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 excessively criticizing the underdeveloped financial and corporate system itself, or excessively emphasizing the significance of capital inflow in the macroeconomic view point. Looking back on the last decade, the process of recovering from the crisis was characterized by the evolving transformation of the real sectors in spite of the prolonged distress in the financial sector. This suggests that the current financial sectors in East Asia may not play a major role in providing funds to leading industrial sectors, in spite that it appears so, and that industrial sectors behave more independently in their fund raising.

Surprisingly, in a sense, the largest obstacle in examining the situation of financial intermediation from the micro or sectoral perspective is the fact that the basic information or statistics on the major firms which currently exist and operate is not easily available in East Asia. This is in part because many firms still stay unlisted and do not participate in the organized capitals market, i.e. stock exchange organizations, 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 reality, no one really knows how the major firms are distributed in the East Asian countries, and no one knows where the listed firms - the principal objects of analysis in most studies - are actually located in these

---

<sup>1</sup> The ratios seem consistent only in Korea.

distributions.

The research question in this paper is rather simple: does the financial sector really play a sufficient role of intermediation to the corporate sector, and how much? The question can be expressed in alternative words; does the corporate sector really depend on the financial sector for their fund raising, and how much? In order to find the answer, we will start with a very basic work of constructing a higher-coverage firm database and of examining the picture of the distribution of firms in the economies. To acquire the better-covered sample data, we collected the firm information 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 government<sup>2</sup>.

The structure of the paper is 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 a focus on firms' 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. 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

---

<sup>2</sup> 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.

stock exchanges, we completed a “firm profile database” of 1,301 firms for Thailand and 1,860 firms for Malaysia. Setting the minimum size at the smallest total asset size of the unlisted firms, 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 source.

Third, we collected and compiled the financial statements (e.g. 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 2000-04<sup>3</sup>. Adding the same information of listed firms in the same ranges of the 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 based on 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

---

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

also shows that the listed firm sample includes very small-sized firms. 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 the 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 adopted the following typology of foreign ownership.

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.

#### (1) 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 shows several remarkable facts. First, many firms in fact accept foreign capital; e.g. foreign shares are found in as much as 52.3% of firms (62.1% in the listed,

and 54.5% in the unlisted) in various forms among the top 400, and the percentage still stays at 31.8% (14.7% and 40.5% respectively) even if only more than 10% of foreign shares are focused on.

Second, the main form of the investment contribution can be classified into two types; (1) financial investment (A), less than 10% share, to the listed firms; (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. While Thai securities market recovered from 2003 and portfolio investment restored to be active recently, the fact suggests that the inflow of foreign portfolio investment is largely biased to the layer of large listed firms.

Fourth, the wide prevalence and significance of type (2) investment is unexpected. 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.

## (2) 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 has 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, and some of these hold more than 50% of the foreign share. Secondly, while the unlisted firms are rarely found in the top 200, they occupy a substantial portion in the 200-1000<sup>th</sup> 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 the 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.

To summarize, portfolio investment at the organized capital markets are popular in Thailand to some degree. However, 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

Table 2 shows the classification of nationality of the largest shareholders (and the second

largest shareholders in the case of Thailand) of the sample firms. In Thailand, the existence of Japanese capital is striking, followed by the U.S. and Singapore, of which the presence is much smaller. Among the largest shareholders of 1,093 firms available for information, 206 are Japanese, 78 are from the U.S., and 63 from Singapore. Among the firms whose largest shareholders are Japanese, those also with Japanese shareholders as the second largest shareholders represented 47.3%, while their Thai counterpart came to 42.6%, suggesting that around half of Japanese capital is in the form of joint ventures. The tendency is similar in U.S. and Taiwanese firms. In most cases, Singaporean, Hong Kong and Malaysian firms are joint ventures, and Korean firms are local subsidiaries. In Malaysia, like Thailand, the largest percentage of foreign firms are Japanese, but Japan's presence is not overwhelming compared with Thailand. Other major foreign investors are Singapore and the EU countries, with comparatively fewer U.S. firms. Firms from the Virgin Islands and the Cayman Islands are uniquely found in Malaysia.

### 3. Capital Structure

#### *3.1. Thailand*

Table 3 summarizes the capital structure of the top 447 Thai firms in the year averages classified by their listed status. Since, as pointed in Section 2, samples are selected in a common criteria based on total assets, the figures in the table are controlled for the total assets<sup>4</sup>. The available sample size 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%,

---

<sup>4</sup> The available sample size varies across years. Also, we omitted the firms where the data are not available at least three years.

which falls into a substantially low category in international comparison<sup>5</sup> 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 firms particularly in 2000-01, suggesting the listed firms which depend more on external finance were damaged more seriously from the 1997 financial crisis.

Third, the decomposition of the debt - the bank borrowings and the non-bank debt - teaches us more. Although the 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 substitutionality, 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

---

<sup>5</sup> 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.)

the internal market, while the latter coped by self-financing.

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 fund raising. And the dependence on the financial intermediation is shrinking recently in both the listed and the unlisted firms.

### *3.2. 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 debt<sup>6</sup>.

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 together while observing descriptive statistics on the

---

<sup>6</sup> However, bank borrowing ratio tends to increase in the early 2000s, though the level is still small.

major components of the capital structure.

In the relevant previous studies, four indicators are known to be basic factors to influence the capital structure: size of the firm, cash flow, risk factor and tax-saving by debt. Although the theoretical justification is not necessarily apparent, the firm size has been thought to be a proxy for the potential capacity of repayment and been significant in many studies. Likewise, the risk factor is regarded as another basic factor, and is usually thought to be negatively correlated to the debt since the risk is mainly shouldered on the creditor side under the debt contract. Also, cash flow usually loosens the necessity of external finance, and in fact, previous studies obtained positive correlations between cash flow and debt ratio. We adopt total asset (*Asset*), average of ROA (*Cash*), and standard deviation of ROA (*Risk*) in the past two years as proxies of firm size, cash flow and risk, respectively.

Lastly, the non-debt tax shield is known to be a primary influence on tax saving through debt. Debt incurs tax saving because interest expenses are treated as deductions from taxable income. However, the magnitude of the effect depends on the scope of accounting for it, or on the residual of the total tax shield minus the non-debt tax shield. Therefore, the tax-saving effect through debt is influenced by the non-debt tax shield. We directly calculate the non-debt tax shield by following the method presented in Titman and Wessels (1988); i.e.  $NDT = OI - I - T / \tau$ <sup>7</sup>

In addition to such control variables, we adopt a dummy variable for the listed firms (*List*), and for manufacturing (*Ind*). The basic estimation formula is as follows:

---

<sup>7</sup> The formula is deduced from the simple relation; corporation tax T is  $T = \tau (OI - I - NDT)$ , where  $\tau$  is the tax rate, OI is operating income, I is interest expenses and NDT is the non-debt tax shield.

$$Dep = \alpha_0 + \alpha_1 Asset + \alpha_2 Cash + \alpha_3 Risk + \alpha_4 NDT + \alpha_5 List + \alpha_6 Ind + \alpha_7 D + u$$

where  $u$  is an error term.

We focus on three types of debt, which are our dependent variables ( $Dep$ ),

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

$D$  is a vector representing various indices about foreign share. We prepare three variations. The first is a plain value of foreign share. We introduce the squared variable for foreign share in addition to the liner variable. The second is a dummy variables for the six classes of foreign share: 0%, 1-10%, 10-33.3%, 33.3-50%, 50-95%, 95% and more. Third, we also use the listed dummy ( $List$ ) as a coefficient dummy, regarding the possibility that the effect of foreign share may be different between the listed and the unlisted firms.

## 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 2001-2004. The estimation results in Table 5 show that the coefficients of firm size, risk and tax saving effect by debt indicate consistent signs in all the three dependent variable cases, and significant in some cases. Whereas, the coefficients of cash flow are not significant, whether in positive or negative signs<sup>8</sup>. The estimation

---

<sup>8</sup> Stock value such as retained earnings might be better fitted as proxy than cash flow.

results of control variables seem fair, even though they are not very well fitted, which at least allows us tentative interpretation on general tendency.

The coefficients of the *List* dummy in the estimations on debt ratio and bank borrowing ratio are significant with positive sign, confirming our observation in Section 4. The result indicates that non-bank debt is also high in the listed firms. Manufacturing dummy has a negative effect on non-bank debt, but is indifferent in debt ratio and bank borrowing.

## (2) Foreign Ownership and Capital Structure

This section will add our interpretation on the relationship between foreign ownership and capital structure step by step, by combining the descriptive statistics and the estimation results. Table 6 compares the average value of major indices such as debt ratio and bank borrowing ratio, classified by listed status and foreign share classes. We can obtain important tendencies from it. 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 lower<sup>9</sup>. Non-bank debt ratio shows an adverse tendency that the ratio is remarkably high in 'up to 33.3% foreign share' firms, while almost constant in the other classes. Roughly summarizing, bank borrowing and non-bank debt correspond to each other in the opposite directions, reaching the bottom and the roof respectively at the joint venture ownership, up to 33.3%.

---

<sup>9</sup> However, the changes occurs in the ratios during the early 2000s, resulting the orders reversed in 2004

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 (or at least not contradictory to) the tendency of unlisted firms. Debt ratio itself is indifferent to foreign ownership, probably because the two components cancel out each other.

Estimation results also confirm this tendency. In Table 6, in the cases of bank borrowing ratio and non-bank debt ratio, the coefficients of foreign share are significant in 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 adverse U-shaped along foreign share. Likewise, in the dummies for foreign share classes, the dummy for 50-95% are significant in positive to bank borrowing, and negative for non-bank debt, which suggest that joint ventures with strong foreign control (type B-b) are located at the bottom (roof) in U-shape (adverse U-shape).

Descriptive statistics in Table 6 show the increasing trend of retained earnings along foreign share in the unlisted firms.

To summarize the findings, the following facts are captured. First, foreign subsidiaries with high foreign share generally depend on financial intermediation to the degree same as local firms in their fundraising, while being dependent on self-financing with rich retained earnings. Second, joint ventures with high foreign share (type B-b) are relatively independent of financial intermediation and tend to mobilize the fund mainly through internal market and self-financing. Lastly, local firms are more dependent on financial intermediation, and less dependent on self-financing.

### (3) Interpretation

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 are less dependent on financial intermediation than local firms or foreign subsidiaries. On the other hand, 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.

In contrast to joint ventures, foreign subsidiaries utilize bank borrowing actively as much as local firms. This suggests that agency costs for foreign subsidiaries are not very serious compared with joint ventures. One possible interpretation for this would be that foreign subsidiaries obtained the most loans from the local branches of the foreign banks of the same nationality (i.e. Japanese affiliations to Thai branches of Japanese banks), and the loan process was conveyed mostly through the network between the parent companies and bank headquarters at their home countries, where the information is well stored and shared. These processes are frequently pointed out regarding the relationship of the Japanese subsidiaries and Japanese banks. On the other hand, the empirical results show that the agency problem seems the most serious in the case of the foreign-led joint ventures. This finding is unexpected and interesting, and should be further examined in the future.

## 6.2. Malaysia

### (1) Overall Results

The sample of estimation is 3346 unbalanced panel data (2593 listed, 753 unlisted firms), covering 2001-04. The estimation results in Table 7 show that the signs of coefficients of control variables are common across the estimations of the three dependent variable cases, and those of firm size are significant. The coefficients of risk factor, however, are not significant, and of tax saving by debt are significant in unexpected sign. Also, the coefficients of cash flow show unexpected signs, with the same result in Thailand. The estimation results should be seen as substantially incomplete, even compared with those in Thailand. Here we will interpret the features in Malaysia by mainly observing the descriptive statistics (Table 8), and treating the estimation results as supplemental information.

In the estimation results, debt tends to be higher in the listed firms in all the indices: debt ratio, bank borrowing and non-bank debt. In the descriptive statistics in Table 8, the high debt ratio is brought by the high bank borrowing, while the estimations show non-bank debt also contributes to it.

### (2) Foreign Ownership and Capital Structure

Table 8 compares the average value of major debt indices such as 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 both in the listed and unlisted firms. Moreover, different from Thailand, the relationship seems rather linear, not an adverse

U-shape, since the squared values of the foreign shares are not significant. When we looked closer, however, the relationship does not appear to be simply linear. In the estimation results, the absolute value of the coefficient is the largest in the dummy for 33.3 - 50%, meaning that debt ratio is the lowest at this point, while the coefficient of the dummy for foreign subsidiaries (95% or more) is slightly smaller.

Both the results of the estimations and descriptive statistics show that firms with foreign shares are lower in bank borrowing than local firms. The higher the foreign shares, the lower the bank borrowing ratio is in unlisted firms. Table 8 shows extremely low bank borrowing ratios are found in the listed firms with 50% or more foreign shares. While negative and linear correlations between bank borrowing ratios and foreign shares are found in the estimations, the coefficient was negatively significant only for the dummy for foreign subsidiaries (95% or more). The bank borrowing ratio seems clearly low only in the larger foreign share groups.

Although no particular tendency is found in the descriptive statistics on non-bank debt, the estimation results tell us that in the class of relatively low foreign share such as 33.3-50%, the ratio seems lower. We also found interesting trends on the retained earnings in the descriptive statistics: they are higher in both local firms and foreign subsidiaries in the unlisted firms, and are higher in the firms listed and with higher foreign shares, suggesting the U-shaped relationship.

In sum, the debt ratio and bank borrowing ratio tend to be higher in higher foreign share firms. Debt ratio is lowest in the firms of 33.3 - 50% foreign share class, and bank borrowing is extremely low in the foreign subsidiaries. On the other hand, the firms with high foreign share tend to be highly dependent on retained earning, e.g. self financing, instead of intermediation or internal market.

Tendency of the tick retained earnings at the foreign subsidiaries is common in Thailand and Malaysia, while a certain difference is observed in the dependence on financial intermediation.

### (3) Interpretation

Similar to Thailand, the average debt ratio and bank borrowing ratio of the local firms are higher than those of the firms with foreign shares. The low debt ratio of firms with high foreign shares, such as foreign subsidiaries, largely contribute to this difference. The gap is, however, never crucial enough to explain the overall trend of low debt ratio in firms in Malaysia.

The strongest characteristic in Malaysia, compared with Thailand, is that foreign subsidiaries which occupy substantial weight in the unlisted firms pursue only self-financing rather than deeper financial intermediation. The reason is not yet clear. One possible interpretation might be that it relates to the strong regulation of foreign banks in Malaysia, and resulting limited capacity of foreign banks in Malaysia.

## 7. Discussions and Concluding Remarks

In this paper, we examined corporate finance in Thailand and Malaysia based on the originally compiled and very 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.

Taking such basic facts into account, the arguments of seeking to restructure the East Asian financial system by emphasizing the prompt shift from a bank-oriented financial system to a market-based one 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). We also found that firms with a higher foreign share generally hold higher retained earnings, and are therefore dependent on self-financing.

In sum, the firms with a higher foreign share tend to depend on internal markets and self-financing, rather than on financial intermediation. However, we need to note that there are exceptions for the general rule, such as the U-shape relationship in Thailand, and also that the difference between local firms and foreign firms is not large enough to explain completely why debt and bank borrowing ratio are so low in general in both countries.

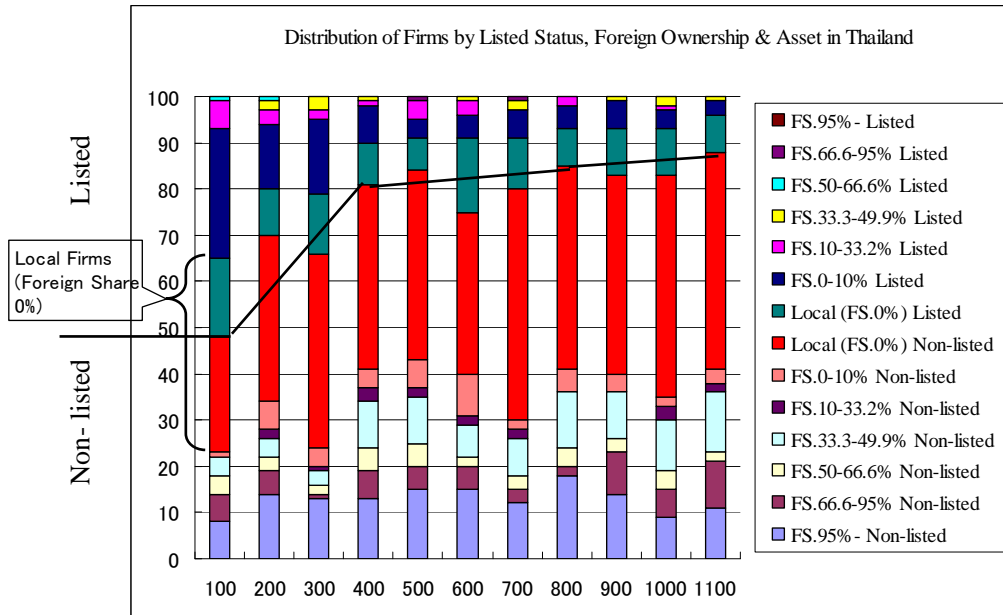
As for foreign subsidiaries, the most important component of non-bank debt source may be a credit channel between parent companies and subsidiaries. However, the information on parent–subsidiary lending was not available in our database, and the analysis on this point remains as a future issue.

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

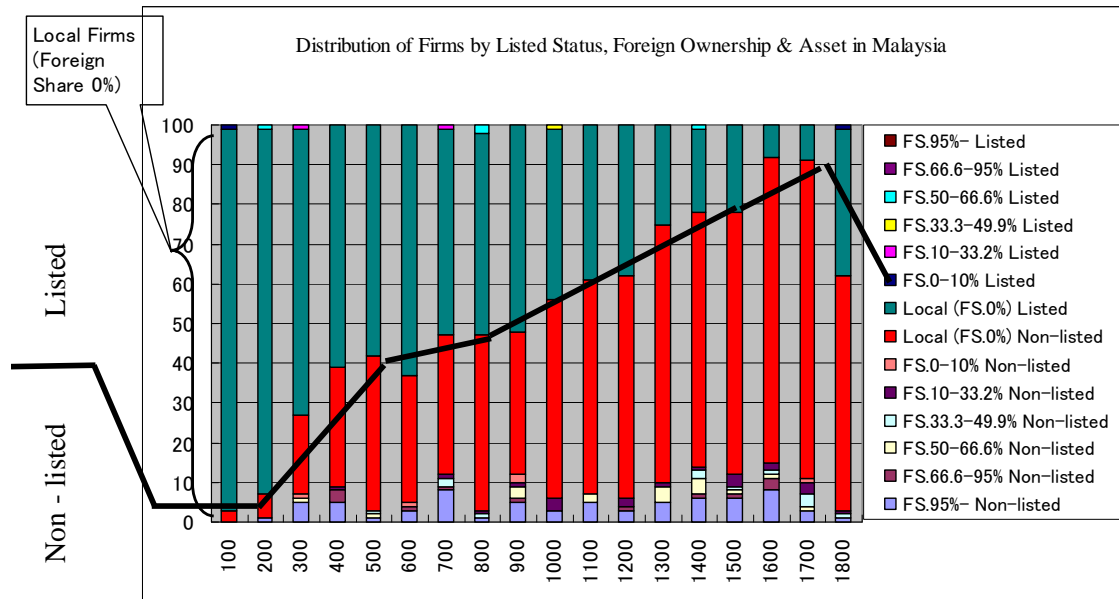
Figure 1



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			501,721	
447th	149 (33.3%)	298	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			12,521,700	
846th	633 (74.8%)	213	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**

Table 2-1 Shareholders' Nationality, Thailand, (Top Two Shareholders)

	(1) The Largest Shareholder	(2) The Largest or the Second Largest Shareholder	(3) The Largest and the Second Largest Shareholder	(4) (3) / (2)	(5) Joint Venture with Thai Capital*1	(6) (5) / (2)
Thailand	696	821	559			
Japan	206	277	131	47.3%	118	42.6%
the U.S.	78	102	42	41.2%	42	41.2%
Singapore	63	133	30	22.6%	63	47.4%
Hong Kong	20	43	2	4.7%	20	46.5%
Malaysia	12	17	1	5.9%	11	64.7%
Korea	10	11	5	45.5%	2	18.2%
Taiwan	5	7	2	28.6%	4	57.1%
Others	3	3	0	0.0%	2	66.7%
Total	1093					

Table 2-1 Shareholders' Nationality, Malaysia, (Top Shareholder)

Malaysia	1430
Japan	119
Singapore	92
EU	85
the U.S.	51
Taiwan	13
Virgin Island	11
Hong Kong	9
Australia	6
Cayman Islands	5
Korea	5
Others	22
Total	1848

Note

The shareholder information is not available for 225 firm on Thailand, and for 9 firms in Malaysia.

\*1 Firms whose shareholders of the top and the second are composed of the foreign and Thai capital respectively

Note: Shareholders information is unavailable in 9 firms

**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 Estimation Results, Thailand**

Dependent Variables	Debt Ratio			Bank Borrowing Ratio		
Constant	-0.1050	-0.1024	-0.1383	-0.9044 ***	-0.9334 ***	-0.9196 ***
	-0.6914	-0.6740	-0.9041	-6.9005	-7.1077	-6.9668
Total Asset	0.0295 ***	0.0293 ***	0.0306 ***	0.0478 ***	0.0496 ***	0.0487 ***
(Firm size)	4.3656	4.3405	4.4922	8.1999	8.4907	8.2985
ROA	12.4497 ***	12.4828 ***	13.0688 ***	3.9159	3.6589	3.3199
(Cash Flow)	2.0679	2.0732	2.1651	0.7535	0.7029	0.6376
Standard Deviation of ROA	-0.0053	-0.0053	-0.0047	0.0004	0.0001	0.0000
(Risk)	-0.7318	-0.7354	-0.6515	0.0706	0.0173	0.0077
Non Debt Tax Shield	-12.5375 ***	-12.5707 ***	-13.1552 ***	-3.9396	-3.6789	-3.3411
	-2.0813	-2.0866	-2.1781	-0.7576	-0.7063	-0.6413
List Dummy	0.2149 ***	0.2147 ***	0.2289 ***	0.3843 ***	0.3740 ***	0.3900 ***
	4.6424	4.6632	4.5418	9.6182	9.3931	8.9687
Manu. Dummy	-0.0113	-0.0115	-0.0119	0.0204	0.0208	0.0248 **
	-0.7986	-0.8153	-0.8308	1.6742	1.6997	2.0080
Foreign Share	-0.0002	0.0001		0.0000	-0.0021 ***	
	-0.9307	0.0919		0.2718	-3.2282	
[List Dummy] * [Foreign Share]	0.0001			-0.0029 ***		
	0.1601			-3.8797		
[Foreign Share] ^2		-2.7405E-06			2.1811E-05 ***	
		-0.3492			3.2140	
0 < [Foreign Share] <= 10%			0.0560			-0.0233
			1.7381			-0.8394
10 < [Foreign Share] <= 33.3%			0.0586			-0.0717
			0.7415			-1.0517
33.3% < [Foreign Share] <= 50%			0.0215			-0.0191
			0.7824			-0.8070
50% < [Foreign Share] <=95%			-0.0395			-0.0427 **
			-1.6180			-2.0292
95% < [Foreign Share]			0.0073			0.0246
			0.3243			1.2742
(0 < [Foreign Share] <=10%)			-0.0519			0.0030
* [List Dummy]			-1.2609			0.0843
(10< [Foreign Share] <= 33.3%)			-0.0725			0.0236
* [List Dummy]			-0.8282			0.3122
(33.3% < [Foreign Share] <=50%)			0.0316			-0.1390 ***
* [List Dummy]			0.5416			-2.7566
(50% < [Foreign Share] <=95%)			-0.0567			-0.1502 *
* [List Dummy]			-0.5768			-1.7708
(95% < [Foreign Share])						
* [List Dummy]						
Adjusted R-square	0.0249	0.0249	0.0264	0.0665	0.0635	0.0693

**Table 5 Estimation Results, Thailand (continued)**

Dependent Variables	Non-Bank Debt		
Constant	0.7994 *** 5.4675	0.8310 *** 5.6764	0.7812 *** 5.3170
Total Asset (Firm size)	-0.0183 *** -2.8168	-0.0203 *** -3.1131	-0.0181 *** -2.7767
ROA (Cash Flow)	8.5338 1.4720	8.8238 1.5204	9.7490 1.6820
Standard Deviation of ROA (Risk)	-0.0057 -0.8233	-0.0054 -0.7785	-0.0048 -0.6854
Non Debt Tax Shield	-8.5979 -1.4822	-8.8918 -1.5312	-9.8140 -1.6923
List Dummy	-0.1694 *** -3.8007	-0.1592 *** -3.5878	-0.1610 *** -3.3271
Manu. Dummy	-0.0317 ** -2.3301	-0.0323 ** -2.3704	-0.0367 *** -2.6691
Foreign Share	-0.0002 -1.2102	0.0022 *** 2.9911	
[List Dummy] * [Foreign Share]	0.0031 *** 3.6440		
[Foreign Share] ^2		-2.4551E-05 *** -3.2452	
0 < [Foreign Share] <= 10%			0.0793 ** 2.5642
10 < [Foreign Share] <= 33.3%			0.1304 1.7170
33.3% < [Foreign Share] <= 50%			0.0407 1.5397
50% < [Foreign Share] <=95%			0.0032 0.1379
95% < [Foreign Share]			-0.0173 -0.8070
(0 < [Foreign Share] <=10%) * [List Dummy]			-0.0549 -1.3889
(10< [Foreign Share] <= 33.3%) * [List Dummy]			-0.0961 -1.1430
(33.3% < [Foreign Share] <=50%) * [List Dummy]			0.1706 *** 3.0404
(50% < [Foreign Share] <=95%) * [List Dummy]			0.0935 0.9900
(95% < [Foreign Share]) * [List Dummy]			
Adjusted R-square	0.0219	0.0201	0.0290

Note: \*, \*\*, and \*\*\* represent the coefficients are significant in 1%, 5%, 10% level, respectively

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

	2000	2001	2002	2003	2004	Average	No. of Sample
<b>Non-listed</b>							
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
<b>Listed</b>							
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
<b>Non-listed</b>							
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
<b>Listed</b>							
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
<b>Non-listed</b>							
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
<b>Listed</b>							
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
<b>Non-listed</b>							
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
<b>Listed</b>							
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
<b>Non-listed</b>							
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
<b>Listed</b>							
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 Estimation Results, Malaysia**

Dependent Variables	Debt Ratio			Bank Borrowing Ratio		
Constant	-0.3556 *** -5.4397	-0.3485 *** -5.3309	-0.3563 *** -5.4618	0.1236 *** 3.0379	0.1278 *** 3.1415	0.1235 *** 3.0404
Total Asset (Firm size)	0.0372 *** 11.1553	0.0372 *** 11.1550	0.0374 *** 11.2468	-0.0041 -1.9744	-0.0041 -1.9667	-0.0041 -1.9929
ROA (Cash Flow)	-12.3786 *** -4.4865	-12.4297 *** -4.5032	-11.7107 *** -4.2394	-8.0491 *** -4.6863	-8.0820 *** -4.7035	-8.1860 *** -4.7578
Standard Deviation of ROA (Risk)	0.0051 1.0666	0.0051 1.0611	0.0052 1.0985	-0.0008 -0.2813	-0.0008 -0.2838	-0.0009 -0.2927
Non Debt Tax Shield	12.3612 *** 4.4820	12.4123 *** 4.4987	11.6937 *** 4.2349	8.0336 *** 4.6792	8.0665 *** 4.6964	8.1709 *** 4.7510
List Dummy	0.3235 *** 13.7890	0.3150 *** 13.5982	0.3224 *** 13.6464	0.0649 *** 4.4418	0.0597 *** 4.1408	0.0660 *** 4.4840
Manu. Dummy	0.0229 *** 2.8737	0.0222 *** 2.7923	0.0238 *** 2.9908	0.0369 *** 7.4356	0.0365 *** 7.3573	0.0382 *** 7.7227
Foreign Share	-0.0008 *** -4.6375	-0.0015 *** -3.7660		-0.0004 *** -3.9942	-0.0009 *** -3.3723	
[List Dummy] * [Foreign Share]	-0.0009 *** -2.3373			-0.0005 *** -2.2714		
[Foreign Share] ^2		6.1965E-06 1.5680			3.5465E-06 1.4416	
0 < [Foreign Share] <= 10%			0.0251 0.3628			-0.0569 -1.3197
10 < [Foreign Share] <= 33.3%			0.0468 1.0355			0.0326 1.1588
33.3% < [Foreign Share] <= 50%			-0.1600 ** -2.5387			-0.0138 -0.3508
50% < [Foreign Share] <=95%			-0.1185 *** -3.9943			-0.0359 -1.9407
95% < [Foreign Share]			-0.0726 *** -4.1270			-0.0445 *** -4.0656
(0 < [Foreign Share] <=10%) * [List Dummy]			-0.0690 -0.9530			0.0213 0.4713
(10< [Foreign Share] <= 33.3%) * [List Dummy]			-0.0302 -0.5979			-0.0204 -0.6475
(33.3% < [Foreign Share] <=50%) * [List Dummy]			0.0934 1.3108			-0.0611 -1.3779
(50% < [Foreign Share] <=95%) * [List Dummy]			-0.0164 -0.4387			-0.0330 -1.4182
(95% < [Foreign Share]) * [List Dummy]						
Adjusted R-square	0.1485	0.1051	0.1059	0.1031	0.1023	0.1084

**Table 7 Estimation Results, Malaysia (Continued)**

Dependent Variables	Non-Bank Debt		
Constant	-0.4792 ***	-0.4763 ***	-0.4798 ***
	-9.0922	-9.0406	-9.1118
Total Asset	0.0413 ***	0.0413 ***	0.0415 ***
(Firm size)	15.3600	15.3591	15.4699
ROA	-4.3295	-4.3477	-3.5248
(Cash Flow)	-1.9462	-1.9543	-1.5807
Standard Deviation of ROA	0.0059	0.0059	0.0061
(Risk)	1.5401	1.5357	1.5867
Non Debt Tax Shield	4.3276	4.3458	3.5228
	1.9461	1.9542	1.5804
List Dummy	0.2586 ***	0.2553 ***	0.2564 ***
	13.6727	13.6732	13.4450
Manu. Dummy	-0.0140 ***	-0.0142 ***	-0.0145 ***
	-2.1768	-2.2182	-2.2537
Foreign Share	-0.0004 ***	-0.0007 *	
	-2.6678	-2.0678	
[List Dummy] * [Foreign Share]	-0.0004		
	-1.1452		
[Foreign Share] ^2		2.65E-06	
		0.8320	
0 < [Foreign Share] <= 10%			0.0820
			1.4676
10 < [Foreign Share] <= 33.3%			0.0142
			0.3887
33.3% < [Foreign Share] <= 50%			-0.1462 ***
			-2.8742
50% < [Foreign Share] <=95%			-0.0826 ***
			-3.4506
95% < [Foreign Share]			-0.0280 *
			-1.9755
(0 < [Foreign Share] <=10%)			-0.0903
* [List Dummy]			-1.5442
(10< [Foreign Share] <= 33.3%)			-0.0098
* [List Dummy]			-0.2411
(33.3% < [Foreign Share] <=50%)			0.1545 ***
* [List Dummy]			2.6869
(50% < [Foreign Share] <=95%)			0.0166
* [List Dummy]			0.5508
(95% < [Foreign Share])			
* [List Dummy]			
Adjusted R-square	0.0778	0.7765	0.8202

Note: \*, \*\*, and \*\*\* represent the coefficients are significant in 1%, 5%, 10% level, respectively

**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