

# CHAPTER 1

## INTRODUCTION



### 1.1 Rationale

The responsibilities of a financial manager can be classified into three broad categories based on the balance sheet structure as the planning and controlling decisions, investing decisions and financing decisions. Financing decisions involve the management of the right-hand side items of balance sheet. One of the important financing decisions is to set the targeted capital structure. The optimal capital structure will lead to the lowest cost of capital. Assuming that the capital structure does not change the free cash flow of firm's projects, the lowest cost of capital will result in the highest value of firm. On the other hand, if we accept the interaction of financing decisions and investing decisions, the proper capital structure can mitigate both the overinvestment and the underinvestment problems. Furthermore, the role of capital structure as one of the corporate governance mechanisms can be used to reduce the agency problems. Therefore, capital structure decision is one of the core responsibilities of a financial manager, which cannot be ignored.

More than hundreds of research papers directed toward the capital structure since the publication of the capital structure irrelevance paper as suggested by Modigliani and Miller (1958). Many capital structure theories have been proposed to explain the financing decisions such as the tax advantage theory, the agency theory and the pecking order theory. However, most of these theoretical models are separately developed without considering the changes of other capital structure determinants simultaneously. Therefore, empirical research is needed, in addition to

the theoretical study, to suggest the proper capital structure for specific firm with particular firm-specific characteristics.

The empirical evidences about capital structure are ambiguous. One possible explanation is due to the use of actual leverage as the optimal leverage in the static model. The capital structure theories suggest the relationship between capital structure determinants and optimal leverage. These theories do not suggest the relationship between capital structure determinants and observed or actual leverage. Therefore, the empirical study using the actual leverage ratio as the dependent variable may not reveal the results as expected from the theoretical models. The empirical studies with the use of the dynamic model, which does not have to assume the actual capital structure to be the optimal capital structure, showed the results more consistent with the capital structure theories than the static model. However, few researches have been conducted via the use of dynamic model.

Many empirical evidences about capital structure are conducted mostly among U.S. firms. Until recently, the subject of study is expanded to cover the empirical evidences among firms in both developed and developing countries. In addition to the firm-specific factors, the country-specific factors or the institutional features are cast doubt to affect the different capital structure decisions among different countries as suggested by Rajan and Zingales (1995) and Booth et al. (2001). We would like to investigate whether the theory of capital structure found in other countries especially in the U.S. can be applied to firms in Thailand that have a different tax system, bankruptcy law and enforcement, corporate governance structure and corporate culture.

Considering the capital structure empirical evidences among Thai firms, the few existent research papers are all directed toward the public firms. There has never

been any research conducted investigating the capital structure of Thai private (or non-listed) firms. In 2003, Thai economy consisted of less than 400 firms listed on the Stock Exchange of Thailand (SET) but more than 400,000 non-listed firms. Due to the much larger numbers of non-listed firms and the differences in firms' characteristics of non-listed firms compared with listed firms, there should be extensive investigation of the capital structure decisions especially toward non-listed Thai firms<sup>1</sup>.

The main reason for investigating the capital structure of the private firms is due to the fact that there may be different financial patterns and behaviors between the public and the private firms. The traditional theory of finance usually assumed investors in the firm to be dispersed and unable to coordinate. However, private firms usually have few investors, which also are relatives or have closed relationship. As proposed by Zingales (2000), the understanding of the firm should be the central origin of corporate finance since it affected all theories about financing, investing and dividend policies. Furthermore, the definition of firm would affect the research of empirical evidences as well.

In financing policy, private firms were suggested by Damodaran (1997) to be typically exposed to greater bankruptcy costs and stricter bond covenants, when they borrowed. This tendency, in turn, would operate as an incentive to keep debt much lower at private firms than at otherwise similar publicly traded firms. However, the sample statistics show that the average leverage of SET (Stock Exchange of Thailand) listed firms is lower than that of the non-listed matched firms, which is contradictory

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<sup>1</sup>In 2001, there are 365 SET-listed firms and 156,450 private firms that are active and submit the financial statement to the Ministry of Commerce. Among these firms, the total annual sales of the listed and non-listed firms are approximately 2,267 billion baht and 8,507 billion baht respectively. Furthermore, the total assets of the listed and non-listed firms are approximately 9,114 billion baht and 9,905 billion baht respectively.

to the proposition by Damodaran (1997)<sup>2</sup>. Therefore, there should be investigations to explain the more conservative capital structure of SET-listed firms relative to non-listed matched-firms in Thailand. Furthermore, it would be interesting to investigate whether there are different effects from capital structure toward performance of listed and non-listed firms.

In conclusion, there are several rationales in conducting the comparative study of capital structure of listed and non-listed firms in Thailand. Capital structure decisions are important activities that every financial manager cannot ignore. The study of capital structure decisions from theoretical models is not sufficient due to the interactions of several capital structure determinants. Therefore, the empirical research of capital structure decisions especially via the dynamic model is needed. Almost all research papers are directed toward the public firms and employ the static approach and few empirical studies are investigated among Thai firms. Since Thai firms operate under the unique institutional features and the determinants of capital structure are both firm-specific and country-specific, it is attractive to study Thai capital structure empirical evidences. Furthermore, due to the differences in capital structure between listed and non-listed Thai firms, there should be additional investigation into whether the capital structure decisions are proper between these two groups of Thai firms. Finally, it is interesting to examine the effects of different financial leverage toward firm performance between listed and non-listed Thai firms.

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<sup>2</sup> The sample in this study is limited to firms that have TSIC industry classification, have positive equity and sales, are not financial institutions and are not defaulted. Furthermore, non-listed matched firm is selected to have similar industry and closest total assets with each SET-listed firm. During 1998 and 2001, the average (median) ratio of total debt to total capital of SET listed firms is found to be 0.35 (0.31) compared to 0.41 (0.42) of non-listed matched firms.

## 1.2 Research Objective

The purpose of this study is to provide additional international empirical evidence on capital structure in three aspects. The first objective is to investigate whether the capital structure determinants suggested among the literature reviews can explain the capital structure among Thai firms. We provide the empirical evidence on capital structure determinants among Thai firms both listed and non-listed which have significant differences in the institutional characteristics from other studies. Furthermore, the dynamic approach is employed in order not to assume the observed capital structure to be the optimal capital structure. The use of dynamic model will take into account the costs involving the leverage adjustment process.

The comparative statistics of the actual leverage ratios between SET listed firms and non-listed matched firms reveal that non-listed matched firms have higher leverage with statistical significance<sup>3</sup>. Furthermore, by looking at the ratio between the interest that makes zero tax payment and the actual interest, non-listed firms are found to utilize all corporate debt tax shields while listed firms are found to utilize only 50% of the corporate debt tax shields. Due to the empirical results of the conservative financial policies among U.S. listed firms and the findings that the leverage ratios of listed Thai firms are statistically lower than those of non-listed Thai firms, the second objective will then be to investigate why SET-listed firms use less leverage than non-listed matched firms. We question whether listed firms do intentionally use conservative leverage or non-listed firms have to borrow aggressively due to the lack of access to stock market.

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<sup>3</sup> The criteria to match the non-listed firms with the listed firms will be explained in the next section. The comparative statistics in Chapter 3 show that non-listed matched firms borrow total debt 0.41 times of total capital while SET listed firms borrow total debt 0.35 times of total capital. Total debt is equal to total liabilities minus accounts payable. Total capital is equal to total debt plus shareholders' equity.

Finally, we present the effect of leverage toward firm performance. The comparisons of capital structure decisions between the evidence of Thai firms and the evidence of other countries both developed and developing may shed light on the advantages and disadvantages of the institutions in Thailand and yield the significant implication to improve the value of the business sector in Thailand.

### **1.3 Research Contribution**

By looking at all the above objectives, there comes the contribution of this dissertation as followings. The first contribution is to increase the understanding of capital structure decisions among listed and especially non-listed Thai firms. The dynamic model that is used in this study takes into account the leverage-adjustment costs. We do not have to assume the observed leverage to be optimal. The use of sample of Thai firms will capture the financing decisions that are influenced by Thai unique institutional features.

As suggested by Giannetti (2003) that the samples among listed firms which had easier access to international financial markets would not yield the understanding of the institutional constraints imposed by domestic markets toward financing decisions. By understanding the differences of the institutional factors and capital market access between Thai listed and non-listed firms, the second contribution is to determine the appropriate policies to develop Thai financial systems in the future. The last, but not least, contribution of this study belongs to the knowledge of the net effects from capital structure decisions toward firm performance.

The remainder of this paper is organized as follows: Chapter 2 summarizes the comprehensive literature reviews involving the capital structure theories. Chapter 3 discusses the sample selection criteria and describes the sample statistics. Chapter 4

investigates capital structure determinants by using both the static and dynamic model. Chapter 5 studies the capital structure differences between listed and non-listed firms. Chapter 6 presents the relationship between capital structure and firm performance. Finally, we summarize the key findings and offer the policy implications together with further research investigation in Chapter 7.