

CHAPTER I

Introduction

1.1 Background and Problem Review

When discuss about how firms do financing. A lot of theories are available to explain how firm finance itself. None of them are perfect. There are always new theories come up to explain the firm capital structure and one research is interested.

Kisgen (2006) introduce the use of credit rating in determining the change in capital structure. He shows that the change in capital structure can be observed or determined via the credit rating of firms. He suggest that the firms which its rating have the sign whether plus (+) or minus (-) will be more likely to have change in their capital structure than the firms that have rating with no sign¹. Moreover, he do test the change within each broad rating which he calculates credit score and rank firm into 3 levels, high, middle, and low. He suggests that firms that ranked in high and low level will be more likely to have change in their capital structure than the firms in the middle. This paper gives me motivation to extend the uses of credit rating to the uses of the probability of default to determine firms' capital structure since there are some problems in using credit rating.

There are reasons for replacing credit rating by other determinants. Kisgen (2006) did not observe the real change in credit rating but did assume the condition of credit rating change by assume from the sign of firm rating, firms with plus or minus in its rating will be more likely to change in their rating than firms that have no sign. This indicate that using credit rating in determining the change in capital structure is

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He found that these change are depend on the discrete costs and benefits on the various credit rating levels. Based on the trade-off theory and discrete cost and benefit of different rating levels, firms with the sign will be the firms that are likely to change in rating will either obtain an upgrade or prevent to be downgraded by issuing less debt. He found that credit rating directly affect capital structure decision since the manager view the rating as the signal of firm quality to outsider.

not dynamic and need a lot of assumptions to perform the test. Moreover, he claims that there is the evidence of managers' high concern on credit rating. But the performance of credit rating agencies has been doubted for the accuracy of giving rating and has been criticized for missing corporate scams, for example, the case of Enron and WorldCom, before this two company collapse both of them have an investment grade rating. Moreover, There is the report from CFO Magazine² states that managers' confidence on the rating are decreased and vice versa.

In this paper, the credit rating and capital structure will be reexamined using the data in G7 nations. Then, I will take further step by using the probability of default in place of the credit rating. In other word, the capital structure will be examined by the probability of default, because probability of default is easier in the sense of calculation, data availability, and more dynamic than credit rating. I expect that the probability of default will have more explanatory power on capital structure than credit rating and using probability of default will provide the convenience in observing the behavior and movement of firms' capital structure and make the study of capital structure change become easier.

This paper will be roughly divided into two parts. Firstly, the study of credit rating effect on capital structure will be extended to G7 Nations. Secondly, probability of default will be used to examine the capital structure using G7 Nations data as first part. G7 Nations data will be used to perform the test because of the similarity in economic level among these countries and the availability of credit rating data. Moreover, the retest of credit rating effect on capital structure is needed because the result from USA can not be implied to G7 Nations since there are still some

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CFO: Magazine for Senior Financial Executives, Dec, 2004 by Joseph McCafferty

difference among these countries, for example, culture, law, and especially firms' capital structure³.

1.2 Statement of Problem / Research Questions

To bridge the gap that discussed above, the problem to be investigated in this thesis can be stated as follows:

1. How the credit rating effects on capital structure behave in G7 nations?
2. What will be the result of obtaining the change in firms' capital structure by using the probability of default instead of credit ratings?

1.3 Objective of the Study

To provide the empirical evidence of the behavior of credit ratings effect on capital structure in G7 nations.

To provide the empirical evidence of using probability of default in determines firms' capital structure in G7 nations.

To encourage the use of probability of default in cooperate with securities issuance instead of credit rating since it is more dynamic than credit rating, more convenient to be calculated by ourselves, independence from rating agencies bias, and easier in obtaining the data.

1.4 Scope of the Study

This thesis sample contains the data of G7 nations' firms provided by Reuters by focusing on the prime stock market in each country from 1997 to 2006. Then, classify only the firms that rated by S&P as samples. Accounting data was obtained from DataStream.

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Kenneth G. McClure, Ronnie Clayton, and Richard A. Hoffler (1999) they found that company capital structures are still significantly differences by nationality in G7 countries both for book and market value.

1.5 Contribution

Firstly, this research extends the previous study of credit rating and capital structure of Kisgen (2006) by study credit rating effect on the firms' capital structure in the G7 countries besides USA. Next, this research proposes the alternative determinant of capital structure, the use of probability of default in investigating the change in capital structure in believe that the probability of default have more explanatory power on firms' capital structure than credit rating, and provides the empirical evidence of the use of probability of default in investigating the firm capital structure change. In addition, there is no previous paper study about using the probability of default to determine the change in firms' capital structure. Finally, the research provides better understanding on the signal of firms' equity issuance for the analysts and investors when doing an analysis on firm that have an equity issuing.

1.6 Organization of the study

The remaining of this paper is organized as following. Chapter 2 discusses the literature reviews, the theoretical background of the study. It reviews the foundation of the capital structure theories, the effect of credit rating on firms' capital structure, the relationship between credit rating and probability of default, and the relationship between the probability of default and capital structure.