THE JOINT DETERMINATION OF LEVERAGE AND MATURITY:

EMPIRICAL EVIDENCE FROM MALAYSIA

A Thesis Submitted to the Postgraduate Studies Othman Yeop Abdullah Graduate
School of Business
Universiti Utara Malaysia
In Fulfillment of the Requirement
For the Degree of Master of Science in Finance

By

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DECLARATION

I hereby declare that this thesis entitled “The Joint Determination of Leverage and Maturity: Empirical Evidence from Malaysia” is based on my original research except for quotations and citations that have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Universiti Utara Malaysia of other institutions.

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ABSTRACT

This study empirically investigates the simultaneity between leverage and debt maturity policies and the factors that influence them by using a simultaneous equations framework in which leverage and debt maturity are endogenous variables. Based on a panel data of 788 non-financial firms listed on Bursa Malaysia from 1999 until 2010, this study estimates a single equation model on leverage and debt maturity using an Estimated Generalized Least Squares (EGLS) approach. The simultaneity between leverage and debt maturity is tested by utilizing a two-stage least squares (2SLS) regression model. The results of this study show that leverage and debt maturity policies have a negative simultaneous relationship which indicates that there are strategic complementarities between leverage and maturity. This study also documents different results among the exogenous variables in both equations, in which growth opportunities, regulation, firm size, profitability and tangibility lend considerable support to the proposed hypotheses on the leverage equation. Meanwhile, firm size, regulation, abnormal earnings and tangibility are found to have significant effects on the debt maturity equation.

Keyword: Simultaneity, Capital Structure, Leverage, Debt Maturity
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DECLARATION…………………………………………………………………</td>
</tr>
<tr>
<td>PERMISSION TO USE…………………………………………………………..</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS…………………………………………………………</td>
</tr>
<tr>
<td>ABSTRACT……………………………………………………………………</td>
</tr>
<tr>
<td>TABLE OF CONTENTS…………………………………………………………</td>
</tr>
<tr>
<td>LIST OF TABLES………………………………………………………………</td>
</tr>
<tr>
<td>LIST OF FIGURES………………………………………………………………</td>
</tr>
<tr>
<td>LIST OF ABREVIATIONS………………………………………………………</td>
</tr>
</tbody>
</table>

## CHAPTER ONE : INTRODUCTION

1.1 Background of the Study............................................................. 1
   1.1.1 Overview of the Malaysian Economy................................. 3
   1.1.2 The Malaysian Capital Market ........................................ 6
1.2 Problem Statement........................................................................ 8
1.3 Research Objectives................................................................. 12
1.4 Research Questions...................................................................... 12
1.5 Significance of the Study.......................................................... 13
1.6 Scope and Limitation of the Study............................................. 14
1.7 Organization of the Study......................................................... 14
1.8 Conclusion of Chapter One....................................................... 15

## CHAPTER TWO : LITERATURE REVIEW

2.1 Introduction................................................................................ 16
2.2 Theoretical Literature............................................................... 16
   2.2.1 Theoretical Literature under Capital Structure..................... 17
       A. Trade-off Theory............................................................. 17
       B. Agency Cost Theory..................................................... 18
       C. The Signaling Theory................................................... 20
       D. Pecking Order Theory.................................................. 22
   2.2.2 Theoretical Literature under Debt Maturity......................... 25
       A. Agency Cost Theory..................................................... 25
       B. Signaling Theory......................................................... 27
       C. Tax Theory................................................................. 28
       D. Matching Theory....................................................... 29
2.3 Empirical Literature..................................................................... 31
   2.3.1 Capital Structure.......................................................... 31
   2.3.2 Debt Maturity............................................................. 34
   2.3.3 Simultaneity between Leverage and Debt Maturity.............. 36
2.4 Conclusion of Chapter Two....................................................... 45
LIST OF REFERENCES
APPENDICES

LIST OF TABLE

TABLE 2.1 : Summaries of Theories under Capital Structure.............. 24
TABLE 2.2 : Summaries of Theories under Debt Maturity................. 30
TABLE 2.3 : Summaries of Empirical Studies for Capital Structure.... 40
TABLE 2.4 : Summaries of Empirical Studies for Debt Maturity....... 41
TABLE 2.5 : Summaries of Empirical Studies for Simultaneity between Leverage and Debt Maturity......................... 43
TABLE 2.6 : Summaries of Prior Studies.................................. 44
TABLE 3.1 : List of Sample Data............................................ 47
TABLE 3.2 : Identification of Simultaneous Equation Model............ 72
TABLE 3.3 : Expected Relation............................................. 77
TABLE 3.4 : Summary of Hypotheses..................................... 78
TABLE 4.1 : Descriptive Statistics........................................ 81
TABLE 4.2 : Correlation Matrix for Leverage............................ 84
TABLE 4.3 : Correlation Matrix for the Debt Maturity.................. 85
TABLE 4.4 : Multicollinearity Test of Leverage Equation............... 87
TABLE 4.5 : Multicollinearity Test of Debt Maturity Equation........ 87
TABLE 4.6 : Single Equation without Endogeneity Variables.......... 88
TABLE 4.7 : Single Equation with Endogeneity Variables............. 93
TABLE 4.8 : Two-Stage Least Squares Regression........................ 97
TABLE 4.9 : Summary of Findings........................................ 109
TABLE 4.10 : Hypothesis Testing Summary............................... 110

LIST OF FIGURE

FIGURE 1.1 : Annual Change of GDP..................................... 4
FIGURE 1.2 : Real GDP by Sectors in 2000 and 2010..................... 6
FIGURE 1.3 : Sources of Financing for the Malaysian Economy....... 8
FIGURE 3.1 : Research Framework for Capital Structure under Single Equation Method.................................... 49
FIGURE 3.2 : Research Framework for Debt Maturity under Single Equation Method......................................... 50
FIGURE 3.3 : Research Framework for Simultaneity between Leverage and Debt Maturity (2SLS)......................... 51
**LIST OF ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABNR</td>
<td>Abnormal Earnings</td>
</tr>
<tr>
<td>ASMAT</td>
<td>Assets Maturity</td>
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<tr>
<td>AR</td>
<td>Autoregressive</td>
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<tr>
<td>BNM</td>
<td>Bank Negara Malaysia</td>
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<tr>
<td>CAP</td>
<td>Capitalization</td>
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<tr>
<td>DM</td>
<td>Debt Maturity</td>
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<tr>
<td>EGLS</td>
<td>Estimated Generalized Least-Square</td>
</tr>
<tr>
<td>EBIT</td>
<td>Earnings before Interest and Taxes</td>
</tr>
<tr>
<td>EPS</td>
<td>Earnings per Share</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Products</td>
</tr>
<tr>
<td>GROW</td>
<td>Growth Opportunities</td>
</tr>
<tr>
<td>LEV</td>
<td>Leverage</td>
</tr>
<tr>
<td>MGS</td>
<td>Malaysia Government Securities</td>
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<tr>
<td>NOL</td>
<td>Net Operating Loss Carryforwards</td>
</tr>
<tr>
<td>OLS</td>
<td>Ordinary Least Squares</td>
</tr>
<tr>
<td>REIT</td>
<td>Real Estate Investment Trust</td>
</tr>
<tr>
<td>ROA</td>
<td>Return on Asset (Profitability)</td>
</tr>
<tr>
<td>PPE</td>
<td>Property, Plant and Equipment</td>
</tr>
<tr>
<td>REGUL</td>
<td>Regulated Firm</td>
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<tr>
<td>SC</td>
<td>Security Commission</td>
</tr>
<tr>
<td>SPREAD</td>
<td>Term Structure</td>
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<tr>
<td>TANG</td>
<td>Tangibility</td>
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<tr>
<td>T-bills</td>
<td>Treasury Bills</td>
</tr>
<tr>
<td>TAX</td>
<td>Effective Tax Rate</td>
</tr>
<tr>
<td>SIZE</td>
<td>Firms Size</td>
</tr>
</tbody>
</table>
CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

In principle, every company needs funding and the fulfillment of these funds may come from internal sources or external sources. The selection of the financial structure is a matter which concerns the composition of funding that will be used by a company. This will then determine how much debt will be incurred to finance its assets.

Capital structure which forms the basis for permanent funding consists of long-term debt, preferred stock and shareholders’ equity. The basic element of a corporate financial policy includes the choice of debt level and also the structure of debt maturity (Barclay, Marx, & Smith, 2003). Barclay and Smith (1995) suggest that when firms choose debt as a source of funding, they should also consider other financial factors such as debt maturity, priority and whether to use public debt or private debt. Barclay et al. (2003) further postulate that when it comes to funding, other factors often occur simultaneously.

Leverage and debt maturity are the twin dimensions that cannot be separated from the corporate capital structure, in other words, when a firm issues new debt, it needs to decide the period of maturity and the size of the debt level concurrently (Elyasiani, Guo, & Tang, 2002). In addition, Barclay and Smith (1995) assert that when firms choose debt as a source of funding, they also need to consider the maturity
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