AN EMPIRICAL STUDY OF THE DEBT MATURITY STRUCTURE OF MALAYSIAN FIRMS

By

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ABSTRAK

Kajian ini dijalankan untuk mengenalpasti faktor-faktor yang menentukan struktur kematangan hutang korporat bagi 788 buah syarikat bukan kewangan di Malaysia dengan menggunakan *Panel Data method of Pooled Estimated Generalized Least-Squares (EGLS)* beserta dengan *Autoregressive (AR 1)* bagi semua jenis uji kaji regrasi. Kajian ini melibatkan teori-teori yang berkaitan dengan kos agensi (*agency cost*), isyarat (*signaling*), pertimbangan cukai (*tax considerations*) dan prinsip penyamaan (*matching principle).* Keputusan daripada kajian yang menyeluruh mendedahkan bahawa teori agensi mengandungi keputusan yang bercampur iaitu proksi pertumbuhan mempunyai keputusan yang tidak signifikan, manakala proksi saiz mengandungi keputusan yang signifikan dalam menentukan struktur kematangan hutang syarikat tersebut. Seterusnya, proksi kualiti syarikat, kekuatan kewangan dan kecairan mempunyai keputusan yang signifikan bagi menyokong teori isyarat. Tambahan pula, proksi pertimbangan cukai dan kematangan aset tidak mempunyai bukti untuk menyokong teori cukai serta prinsip penyamaan. Selain daripada itu, kajian yang dilakukan terhadap tujuh jenis industri mendedahkan pelbagai keputusan yang diperolehi dalam menyokong teori-teori tersebut kecuali proksi kecairan mempunyai kesan yang signifikan terhadap kematangan hutang bagi uji kaji yang dijalankan terhadap semua industri. Kajian ini juga membuktikan bahawa proksi Shariah mempunyai kesan signifikan yang negatif dalam menentukan kematangan hutang syarikat. Uji kaji '*robustness*' yang dijalankan mempunyai keputusan yang pelbagai iaitu proksi-proksi yang berkaitan dengan teori isyarat mendedahkan keputusan yang bertentangan seperti yang telah ditetapkan oleh teori tersebut. Kajian yang dijalankan terhadap saiz syarikat bagi semua jenis uji kaji mendedahkan bahawa semakin besar saiz sesebuah syarikat, maka semakin panjang jangka masa hutang bagi syarikat tersebut.

Kata kunci : Struktur kematangan hutang, *kos agensi, isyarat, cukai, prinsip penyamaan*

ABSTRACT

This study examines the empirical determinants of corporate debt maturity structure for the data set of 788 non-financial firms in Malaysia and employs a Panel Data method of Pooled Estimated Generalized Least-Squares (EGLS) with Autoregressive (AR1) for all the regression tests. The models in this study incorporate factors representing the theories of agency cost, signaling, tax considerations and matching principle. The findings of the general test reveal that the agency cost theory provides mixed results where growth proxy is not significant but the proxy of size is significant to determine the debt maturity structure. The proxies of firm quality, financial strength and liquidity have significant effects to support the signaling theory. In addition, the proxies of tax and asset maturity have no evidence to support the tax theory and matching principle respectively. The findings of test across seven industry groups document that the results are varied, except for liquidity which has significant effects on all industries. This study also discovers that Shariah-compliance has negative and significant effects. In the robustness test, the findings produce mixed results where the proxies of signaling theory in particular present contradictory results. Lastly, this study generally finds strong evidence that the larger the firm size, the longer the maturity of debt.

Keywords: Debt maturity structure, agency cost, signaling, tax, matching principle

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LIST OF ABBREVIATIONS

AAOIFI	: Accounting and Auditing Organization for Islamic Financial Institution
ASM	: Assets Maturity
ALR	: Average Lending Rate
ABEARN	: Abnormal Earnings
AR	: Autoregressive
BLR	: Base Lending Rate
BNM	: Bank Negara Malaysia
CATA	: Ratio of Current Assets Divided to Total Assets
CAP	: Capitalization
DEBM	: Debt Maturity
EGLS	: Estimated Generalized Least-Squares
EBIT	: Earnings before Interest and Taxes
EPS	: Earnings per Share
ETF	: Exchange Traded Fund
FDI	: Foreign Direct Investment
FBMKLCI	: Kuala Lumpur Composite Index
GII	: Government Investment Issues
GNI	: Gross Net Income
GDP	: Gross Domestic Products
GROW	: Growth Opportunities
ICM	: Islamic Capital Market
IRV10	: Interest Rate Volatility
IPOs	: Initial Public Offerings
LEV	: Leverage
LIQUID	: Liquidity
LNMV	: Natural Logarithm of Market Value of the Firm
MGS	: Malaysian Government Securities
OPR	: Overnight Policy Rate
OLS	: Ordinary Least Squares
PDS	: Public Debt Securities
PROFIT	: Profitability
PPETA	: Property, Plant and Equipment Divided to Total Assets
PPE	: Property, Plant and Equipment
QUAL	: Firms Quality
RAM	: Rating Agency Malaysia
RE	: Retained Earnings
REITs	: Real Estate Investment Trusts
SIZE	: Firms Size
SAC	: Shariah Advisory Council
SC	: Security Commission
T-bills	: Treasury Bills
TAX	: Effective Tax Rate
TERM10_3	: Term Structure
US	: United States of America
WC	: Working Capital
ZSCORE	: Financial Strength
e.g	: Example
et.al	: With Friends
Prob	: Probability

CHAPTER ONE

INTRODUCTION

1.0 Background of Study

Debt is one of the choices of capital structure to finance the assets of firms, and it is recorded under liability in the firm's balance sheet. Capital structure is a mixture of firms' debt, hybrid securities and common equity for firms to finance their assets (Saad, 2010; San & Heng, 2011). Maturity means the terms of debt or the date a loan must be repaid in full. Debt maturity can be categorized into short-term and long-term debt.

Short-term debt is a type of debt which has maturity tenure usually of one year or less, and it is recorded as current liabilities in the firm's balance sheet. Meanwhile, long-term debt is defined as loans or obligations that have a maturity period of more than one year such as bonds and notes. Loans such as Treasury Bills (T-Bills) and commercial papers are not considered as long-term debts because of they mature in less than one year.

Debt maturity structure is considered important for firms since short-term debt is more effective than long-term debt in order to solve the agency costs (Myers, 1977; Barnea *et al.*, 1980) and the debt maturity mix is one of the strategies for firms to signal the quality of earnings to the investors. Flannery (1986) predicted that debt

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