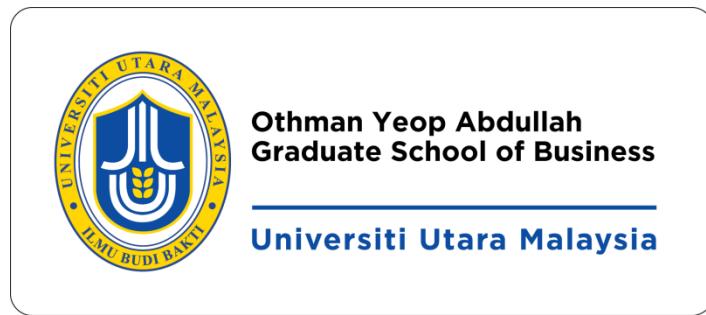


**THE DETERMINANTS OF CAPITAL STRUCTURE:
ANALYSIS OF REAL ESTATE INVESTMENT TRUST (REITs)
AND PROPERTIES COMPANIES LISTED IN BURSA
MALAYSIA**

**By
HUSNIZAM HOSIN**

**Dissertation Submitted to the Othman Yeop Abdullah Graduate
School of Business,
Centre for Graduate Studies, Universiti Utara Malaysia
In Partial Fulfillment of the Requirement for the Master of
Science**



PERAKUAN KERJA KERTAS PROJEK

(Certification of Project Paper)

Saya, mengaku bertandatangan, memperakukan bahawa
(I, the undersigned, certified that)

HUSNIZAM BIN HOSIN (807272)

Calon untuk Ijazah Sarjana
(Candidate for the degree of) **MASTER OF SCIENCE (FINANCE)**

telah mengemukakan kertas projek yang bertajuk
(has presented his/her project paper of the following title)

THE DETERMINANTS OF CAPITAL STRUCTURE: ANALYSIS OF REAL ESTATE INVESTMENT TRUST (REITS) AND PROPERTIES COMPANIES LISTED IN BURSA MALAYSIA

Seperti yang tercatat di muka surat tajuk dan kulit kertas project
(as it appears on the title page and front cover of the project paper)

Bahawa kertas projek tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi
bidang ilmu dengan memuaskan.

(that the project paper acceptable in the form and content and that a satisfactory knowledge of
the field is covered by the project paper).

Nama Penyelia : **DR. MOHD 'ATEF BIN MD YUSOF**
(Name of Supervisor)

Tandatangan : _____
(Signature)

Tarikh : **23 JULY 2012**
(Date)

PERMISSION TO USE

In presenting this dissertation in partial fulfillment of the requirement for a postgraduate degree from Universiti Utara Malaysia, I agree that the University Library make a freely available for inspection. I further agree that permission for copying of this dissertation in any manner, in whole or in part, for scholarly purpose may be granted by my supervisor or, in their absence by the Dean of Othman Yeop Abdullah Graduate School of Business. It is understood that any copying or publication or use of this dissertation or parts thereof for financial gain shall not be given to me and to Universiti Utara Malaysia for any scholarly use which may be made of any material from my dissertation.

Request for permission to copy or make other use of materials in this dissertation, in whole or in part should be addressed to:

Dean of Othman Yeop Abdullah Graduate School of Business

Universiti Utara Malaysia

06010 UUM Sintok

Kedah Darul Aman

ABSTRAK

Struktur modal merujuk kepada bagaimana sesuatu perusahaan atau perbadanan membiayai assetnya sama ada melalui gabungan beberapa ekuiti, hutang atau sekuriti hibrid. Ianya terdiri daripada hutang jangka masa panjang, saham keutamaan dan nilai bersih. Ia juga dapat ditentukan dengan mengambil berapa banyak setiap jenis pembiayaan kewangan setiap syarikat atau perbadanan yang memegang peratusan bagi setiap jenis pembiayaan kewangan. Kebanyakan syarikat atau perbadanan mendapat dana melalui ekuiti atau hutang. Kajian ini dilakukan bagi mengenal pasti penentu struktur modal bagi syarikat perlaburan harta tanah (REITs) dan syarikat harta tanah yang telah disenaraikan di papan utama Bursa Malaysia. Dengan menggunakan teori trade off dan teori pecking order sebagai teori latar dan asas, 54 syarikat telah di analisis. Data telah dikumpulkan selama 10 tahun bermula dari tahun 2001 – 2010. Leveraj telah digunakan sebagai pemboleh ubah bersandar manakala peluang pertumbuhan, keuntungan, saiz syarikat, keketaraan, kecairan dan ketidaktentuan sebagai pemboleh ubah tidak bersandar. Berdasarkan kajian dan analisis yang dijalankan, didapati bahawa keuntungan, saiz syarikat, keketaraan, ketidaktentuan syarikat dan kecairan merupakan penentu struktur modal bagi leveraj bagi syarikat perlaburan harta tanah di Malaysia. Ia membuktikan bahawa syarikat yang kurang menguntungkan, besar, lebih ketara, kurang menentu dan kurang kecairan menghadapi tahap leveraj yang tinggi.

Katakunci: Struktur Modal, Leveraj, Amanah Perlaburan Hartanah

ABSTRACT

Capital structure refers to the way a corporation finance its assets through some combination of equity, debt or hybrid securities. It is primarily comprises of long term debt, preferred stock and net worth. It also can be quantified by taking how much of each type of financing a company holds as a percentage of all its financing. Most of the companies raise funds by equity or debt. This study was set out to focus on the determinants of capital structure for the properties and real estate investment trust (REITs) companies that listed in the Bursa Malaysia. By using trade off and pecking order theories as theoretical background, 54 sample firms were analyzed. The data was collected for a 10 year time period (2001 – 2010). Leverage was used as dependent variable and six market variables were used as independent variable for the analysis; growth opportunities, profitability, size of the firm, tangibility, volatility and liquidity. Result of multiple linear regression found that, profitability, size of the firm, tangibility, volatility and liquidity were determinants of capital structure of Real Estate Investment Trust (REITs) in Malaysia. It appears that less profitable, larger, more tangible, less volatile and less liquid firms are more likely to have higher leverage level.

Keywords: Capital Structure, Leverage, Real Estate Investment Trust (REITs)

ACKNOWLEDGEMENT

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

“In the name of ALLAH, The Most Benevolent and The Most Merciful”

All praises to almighty ALLAH, the most merciful and the most benevolent for giving me the opportunities in completing this dissertation. It would be impossible for me to spent time to complete this dissertation without the grace and help of ALLAH
S.W.T.

I am greatly indebted to Dr. Mohd ‘Atef bin Md Yusof whose excellence in supervision and plays a big role in inspired my work. Without his untiring encouragement, suggestions, ideas and comments throughout this work, this dissertation could not be completed on time.

I also would like to convey my deepest gratitude and indebted to staff in UUM Kuala Lumpur City Campus, librarian of Northern University of Malaysia, Sintok, Kedah, librarian Bank Negara

Malaysia and Bursa Malaysia for their co-operation and help throughout the duration of this research.

I dedicated this research to my beloved parents and for their endless support and understanding and also to the rest of my families for their help and encouragement. Beyond a simple thank you, I want them to know that I really appreciate what they had done to me.

I wish to express my deepest gratitude to all my friends, who shared their valuable experiences, time and commitment. Without their patience, this research cannot be completed and they are very dear to me.

Last but not least, I would like to thank to everyone that involved directly or indirectly for their contribution, invaluable support and encouragement they have place on me. Without everyone continued support, this research would not been the same as presented here.

Thank you.

TABLE OF CONTENTS

TITITLE PAGE	i
CERTIFICATION OF THESIS WORK	ii
PERMISSION TO USE	iii
ABSTRAK	iv
ABSTRACT	v
ACKNOWLEDGEMENT	vi
TABLE OF CONTENTS	viii
LIST OF TABLES	xii
LIST OF FIGURE	xiii
LIST OF ABBREVIATIONS	xiv
 CHAPTER 1 – INTRODUCTION	
1.1 History of Real Estate Investment Trust (REITs)	1
in Malaysia	
1.1.1 Development of Listed Property Trusts	1
in Malaysia.	
1.2 Background of the Study	8
1.3 Problem Statement	
1.3.1 The Issue	10
1.3.2 Problem Statements	10
1.4 Research Questions	11

1.5	Research Objectives	11
1.6	Significant of Study	12
1.7	Scope of Study	13
1.8	Limitation of Study	13
1.9	Chapter Summary	15

CHAPTER 2 – LITERATURE REVIEW

2.1	Introduction	16
2.2	Theories of Capital Structure	
2.2.1	The Trade-Off Theory	17
2.2.2	The Pecking Order Theory	20
2.3	Previous Studies	
2.3.1	Leverage	21
2.3.2	Growth Opportunities	22
2.3.3	Profitability	26
2.3.4	Size of the Firm	29
2.3.5	Tangibility	34
2.3.6	Volatility	37
2.3.7	Liquidity	38
2.4	Theoretical Framework	40
2.5	Key Concepts & the Expected Sign by the Theories	41
2.6	Chapter Summary	42

CHAPTER 3 – METHODOLOGY AND DATA

3.1	Introduction	44
3.2	Data Collection	45
3.3	Sampling Frame	46
3.4	Sources of Data	46
3.5	Variables and Measurement	
3.5.1	Dependent Variable	46
3.5.2	Independent Variables	47
3.6	Research Design	47
3.7	Data Analysis and Treatment	
3.7.1	Descriptive Analysis	47
3.7.2	Ordinary Least Squares (OLS) Regression Model	48
3.7.3	Correlation Coefficient Analysis	49
3.8	Hypothesis Statements	50
3.9	Chapter Summary	51

CHAPTER 4 – ANALYSIS AND FINDINGS

4.1	Introduction	52
4.2	Descriptive Analysis	53
4.3	Multiple Linear Regression Model	56
4.4	Result Equation	65
4.5	Correlation Coefficient Analysis	69
4.6	Collinearity Statistics	71

4.7	Durbin Watson	72
4.8	Chapter Summary	73

CHAPTER 5 – DISCUSSIONS AND RECOMMENDATIONS

5.1	Introduction	74
5.2	Discussions	74
5.3	Recommendations	81

REFERENCES	83
-------------------	-----------

APPENDICES	87
-------------------	-----------

LIST OF TABLES

Table 1:	Key concepts of the variables and the Expected Sign by the Theories	41
Table 2:	Descriptive Statistics of Variables	53
Table 3:	Model summary of Multiple Linear of Regression Model	56
Table 4:	Coefficient of Multiple Linear of Regression Model	59
Table 5:	Correlation Coefficient	69
Table 6:	Collinearity Statistics for the Dependent Variables	71
Table 7:	Durbin Watson (Autocorrelation)	72

LIST OF FIGURE

Figure 1: Theoretical Framework

40

LIST OF ABBREVIATIONS

Real Estate Investment Trust	REITs
Listed Property Trust	LPTs
Security Commissions	SC
Permodalan Nasional Berhad	PNB
CapitaMalls Malaysia Trust	CMMT
Trade Off Model	TOM
Pecking Order Theory	POT
Ordinary Least Square	OLS
Statistical Package of Science Social	SPSS
Growth Opportunities	GROW
Profitability	PROF
Size of the Firm	SIZE
Tangibility	TANG
Liquidity	LIQ
Volatility	VOL
Variance Influence Factors	VIF

CHAPTER 1:

INTRODUCTION

1.1 HISTORY OF REAL ESTATE INVESTMENT TRUST (REITs)

Real estate investment trust (REITs) is one of the investment funds that designed to invest in several of real estate properties. It seems like a stock or bond mutual fund but for real estate investment trust, the money provided by the investors is invested in any of the property trusts. Real estate investment trust (REITs) in Malaysia is at an infant stage but nowadays the involvement and interest of investors towards REITS show an increase due to encouraging government incentives and revised in Securities Commission Guideline 2005.

1.1.1 Development of listed property trusts in Malaysia

Before year 2005, real estate investment trusts in Malaysia known as Listed Property Trust (LPT). The regulatory framework for listed property trust (LPT) in Malaysia was approved by the Central Bank of Malaysia in 1986, with the principal legislation governing their establishment and operation being the Companies Act 1965 and the Securities Industry Act 1983. Specific Securities Commission

The contents of
the thesis is for
internal user
only

REFERENCES

Agrawal, A. and Nagarajan, N.J. (1990), “Corporate capital structure, agency costs and ownership control: The case of all-equity firms”, *Journal of Finance*, Vol. 45, No. 4, pp. 1325-1331.

Akinlo Olayinka, (2011), “Determinants of Capital Structure: Evidence from Nigerian Panel Data”, *African Economic and Business Review*, Vol. 9, No. 1.

Amarjit Gill and Neil Mathur, (2011), “Factors that Influence Financial Leverage of Canadian Firms”, *Journal of Applied Finance & Banking*, Vol. 1, No. 2, pp. 19-37.

Attauliah Shah and Saifullah Khan, (2007), “Determinants of Capital Structure: Evidence from Pakistani Panel Data”, *International Review of Business Research Papers*, Vol. 3, No. 4, pp. 265-282.

Christina and Johan Halim, (2008), “Analysis of Relationship between Determinants of Capital Structure Across Industries at Jakarta Stock Exchange”, *Journal Applied Finance and Accounting*, Vol. 1, No. 1, pp. 99-115.

Devinaga Rasiah and Peong Kwee Kim, (2011), “A Theoretical Review on the use of Static Trade Off Theory, the Pecking Order Theory and the Agency Cost Theory of Capital Structure”, *International Research Journal of Finance and Economics*, Issue 63.

Dilek Teker et. al. (2009), “Determinants of Capital Structure for Turkish Firms: A Panel Data Analysis”, *International Research Journal of Finance and Economics*, Issue 29.

Erdine Karadentz, et. al (2011), “Firm Size and Capital Structure Decisions: Evidence From Turkish Lodging Companies”, *International Journal of Economics and Financial Issues*, Vol. 1, No. 1, pp. 1-11.

Fakher Buferns et. al. (2005), “Determinants of Capital Structure Evidence from Libya”, *Research Paper Series*, University of Liverpool.

Faris M. Abu mouamer, (2011), “ The Determinants of Capital Structure of Palestine Listed Companies”, *The Journal of Risk Finance*, Vol. 12, No. 3, pp. 226-241.

Giacomo Morri and Christian Beretta, (2008), “The Capital Structure Determinants of REITs. It is peculiat industry?”, *Journal of European Real Estate Research*, Vol. 1, No. 1, pp. 6-57.

Giacomo Morri and Fabio Cristanziani. (2009), “What determinants the capital structure of real estate companies? An analysis of the EPRA/NAREIT Europe Index”, *Journal of property Investment & Finance*, Vol. 27, No. 4, pp. 318-372.

Gurcharan S., (2010), “A Review of Optimal Capital Structure Determinants of Selected ASEAN Countries”, *International Research journal of Finance and Economics*, Issues 47.

Imed, E. Chkir and Jean, C. Cosset, (2002), “Diversification Strategy and Capital Structure of Multinational Corporations”, Working Paper, University of Laval.

Jasir Ilyas’, (2000), “The determinants of Capital Structure: Analysis of Non Financial Firms Listed in Karachi Stock Exchange”, *Journal of Managerial Finance*, Vol. 24. No. 21, pp. 121-144.

Jean J. Chen, (2003), “Determinants of Capital Structure of Chinese Listed Companies”, *Journal of Business, Research* 57, pp. 1341-1351.

Jensen, M.C and meckling, W.H (1976), “Theory of firm managerial behaviour, agency cost an ownership structure”, *Journal of Financial Economies*, pp. 323-339.

Joshua Abor, (2008), “Determinants of the Capital Structure of Ghanaian Firms”, *AERC Research Paper 176*, University of Ghana Business School.

Juan, J. Duran and Fernando, Ubeda, (1999), “The Capital Structure of the Spanish Multinational Firms: A Pecking Order Strategy”, Working Paper, University Autonoma de Madrid.

J. Edward Graham, Jr. (1998), "Domestic and Multinational Capital Structure: Theory and Evidence", Working Paper, University of Chicago.

K. Micheal Casey , Glenna, S. and James, P. (2006), "REIT Capital Structure: Is it market imposed?", *Journal of Managerial Finance*, Vol. 32. No. 12, pp. 981-987.

Keshar J. Barel, (2004), "Determinants of Capital Structure: A Case Study of Listed Companies of Nepal", *The Journal of Nepalese Business Studies*, Vol. 1, No. 1.

Lee, K.C and Kwok, C.C.Y (1988), "Multinational Corporation VS. Domestic Corporation: International Environmental Factors and Determinant of Capital Structure", *Journal of International Business Studies*, pp. 195-217.

Mary Hany A.K. Dawood et. al. (2011), "The Determinants of Capital Structure in Listed Egyptian Corporations", *Middle Eastern Finance and Economics*, Issue 9.

Modigliani, F and M. Miller (1958), "The Cost of capital, Corporation Finance and the Theory of Investment", *American Economic Review* 48, pp. 261-297.

Myres, S.C (1984), "The capital structure puzzle", *Journal of Finance*, Vol. 39, pp. 575-592. Patrik Bauer, (2004), "Determinants of Capital Structure: Empirical Evidence from the Czech Republic", *Journal of Economies and Finance*, Vol. 54, pp. 2-21.

Nadeem Ahmed Sheikh and Zongjun Wang, (2011), "Determinants of Capital Structure: An empirical study of firms in manufacturing industry of Pakistan", *Managerial Finance*, Vol. 37, No. 2, pp. 117-133.

Nurul Syuhadah Baharuddin et. al. (2011), "Determinants of Capital Structure for Listed Construction Companies in Malaysia", *Journal of Applied Finance and Banking*, Vol. 1, No. 2, pp. 115-132.

Rajan, R. and Zingales, L. (1995), "What Do We Know about Capital Structure? Some Evidence from International Data", *Journal of Finance*, Vol. 50, pp. 1421-1460.

Reint Gropp and Florian Heider, (2009), “The Determinants of Bank Capital Structure”, *Working Paper Series*, European Central Bank.

Sheridan Titman and Roberto Wessels, (1988), “The Determinants of Capital Structure Choice”, *The Journal of Finance*, Vol. 43, No. 1, pp. 1-19.

Shumi Akhtar, (2005), “The Determinant of Capital Structure for Australian Multinational and Domestic Corporations”, *The Australian Journal of Management*, Vol. 30, No. 2, pp. 321-341.

Titman, S. and Wessels, R. (1988), “The Determinants of Capital Structure Choice”, *Journal of Finance*, Vol. 43, pp. 1-18.

Wafaa Sbeiti, (2010), “The determinants of Capital Structure: Evidence from the GCC Countries”, *International Research Journal of Finance and Economics*, Issue 47.

Wanrapee banchuenvijit, (2010), “Capital Structure Determinants of Thai Listed Companies”, *Conferences Paper*, University of the Thai, chamber of Commerce.

Wenjuan Ruan, et. al. (2011), “Managerial Ownership, Capital Structure and Firm Value: Evidence from China’s Civilian run Firms”, *Finance Journal*, Vol. 5, No. 3, pp. 73-92.