# COMPARATIVE ANALYSIS OF FIXED INCOME UNIT TRUST FUNDS VERSUS EQUITY UNIT TRUST FUNDS IN MALAYSIA

# **AMINAH SHARI**

MASTER OF SCIENCE (FINANCE) UNIVERSITI UTARA MALAYSIA DECEMBER 2012

# COMPARATIVE ANALYSIS OF FIXED INCOME UNIT TRUST FUNDS VERSUS EQUITY UNIT TRUST FUNDS IN MALAYSIA

By

AMINAH BINTI SHARI

Thesis Submitted to
Othman Yeop Abdullah Graduate school of Business,
Universiti Utara Malaysia,
in Fulfillment of the Requirement for the Master of Science (Finance

ı



### PERAKUAN KERJA KERTAS PROJEK

(Certification of Project Paper)

### PERAKUAN KERJA KERTAS PROJEK

(Certification of Project Paper)

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

### **AMINAH BINTI SHARI (808812)**

(Date)

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)

# COMPARATIVE ANALYSIS OF FIXED INCOME UNIT TRUST FUNDS VERSUS EQUITY UNIT TRUST FUNDS IN 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 (Name of Superv	: isor)	PROF. DR. NUR ADIANA HIAU BT ABDULLAH
Tandatangan (Signature)	:	
Tarikh	:	3 JANUARY 2013

### 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**

Tesis ini mengkaji hubungan antara unit amanah dana pendapatan tetap dan unit amanah ekuiti bagi tempoh Januari 2006 hingga Oktober 2012. Kajian ini dijalankan untuk menyiasat samada prestasi kedua-dua unit amanah ini dapat mencapai prestasi yang lebih tinggi berbanding penanda aras pasaran. Perbandingan prestasi ini dibuat ke atas beberapa kategori sampel ekuiti iaitu ekuiti keseluruhan, ekuiti pertumbuhan dan ekuiti nilai. Indeks Komposit Kuala Lumpur (KLCI) dijadikan sebagai penanda aras pasaran bagi dana ekuiti dan dana pendapatan tetap dengan penanda aras pasaran tambahan iaitu Maybank deposit tetap 12-bulan. Sebanyak tiga puluh satu dana pendapatan tetap dan lima puluh tujuh sampel keseluruhan ekuiti dibahagikan kepada subsample iaitu tiga puluh tujuh dana ekuiti pertumbuhan dan dua puluh dana ekuiti nilai dikaji dengan menggunakan tiga prestasi pengukur iaitu indeks Treynor, Sharpe dan Jensen.

Keputusan menunjukkan bahawa keuntungan purata dana ekuiti adalah lebih tinggi berbanding dana pendapatan tetap dan penanda aras pasaran KLCI. Walau bagaimanapun, apabila perbandingan dibuat di antara dana ekuiti dan dana pendapatan tetap dengan menggunakan Wilcoxon Signed Rank test, indeks Sharpe dan Treynor memberikan keputusan yang signifikan. Ini menunjukkan bahawa prestasi dana pendapatan tetap lebih tinggi daripada dana ekuiti. Sebaliknya, keputusan ujian yang sama untuk indeks Jensen memberikan keputusan yang bertentangan. Apabila sampel tesis dikategorikan kepada jenis ekuiti yang berbeza, terdapat keputusan ujian yang bertentangan. Indeks Sharpe dan Jensen memberikan keputusan tidak signifikan untuk sampel dana ekuiti pertumbuhan. Ini bermakna tiada perubahan signifikan di antara dana pendapatan tetap dan dana ekuiti jika dibandingkan dengan keputusan indeks Treynor yang memberikan keputusan yang signifikan. Bagi sampel dana ekuiti nilai, indeks Sharpe, Treynor dan Jensen memberikan keputusan signifikan. Ini bermakna terdapat perubahan signifikan di antara dana pendapatan tetap dan dana ekuiti.

Katakunci: Unit Amanah, Dana Pendapatan Tetap, Dana Ekuiti

### **ABSTRACT**

This study examines the relationship between fixed income unit trust funds and equity unit trust funds for the period of January 2006 to October 2012. The performance of both types of funds are then compared to the market benchmark to determine whether they outperformed the market benchmark. The performance comparisons are made over several categories of equity sample namely overall equity, growth equity and value equity. The Kuala Lumpur Composite Index (KLCI) is used as the market benchmark for equity funds and fixed income funds with additional market benchmark of Maybank 12-month fixed deposit. A total of 31 fixed income funds and 57 overall equity funds which are made up of 37 growth equity and 20 value equity are evaluated by using three performance measures namely Treynor index, Sharpe index and Jensen index.

The results indicate that the mean returns of equity funds are higher than the fixed income funds and market benchmark of KLCI. Nevertheless, when equity funds are compared against fixed income funds using Wilcoxon Signed Rank Test, Sharpe and Treynor ratios produce significant results. This means that the performance of fixed income funds varies from the performance of equity funds. However the Jensen index produces insignificant result. When the sample categorised into different equity types of funds, the finding shows a conflicting result. The Sharpe and Jensen ratios indicate insignificant results for growth equity funds sample. This means that the performance of fixed income funds is not different from that of equity funds in comparison to Treynor that shows a significant result. As for the value equity, Sharpe, Treynor and Jensen produce results that are significant. This means that the performance of fixed income funds varies from that of equity funds.

Keywords: Unit Trust, Fixed Income Fund, Equity Fund

### Acknowledgement

First and foremost, Alhamdulillah, thanks to Allah s.w.t for providing me the guidance and chance to complete this dissertation to fulfill the requirement of Master of Science Finance at Universiti Utara Malaysia.

I would like to take this opportunity to extend my sincere gratitude and appreciation to my supervisor Professor Dr. Nur Adiana Hiau Abdullah, who has read the various drafts, and for her continuous guidance, advice, support and encouragement throughout the preparation of this dissertation. I would also like to thanks Dr. Kamarun Nisham Taufil Mohd for his feedbacks. Their commitment and time spent for this dissertation is most appreciated.

I would like to thank my father, Shari Musa, and my mother, Tumirah Sukiaran, for their utmost assistance in taking care of my son, Mohamad Haikal Haiyan, when I was struggling to complete this dissertation. My heartfelt thanks go to my husband, Azrol Abas, and my son for their source of inspiration and motivation. To them I dedicated this dissertation.

Finally, to all my colleagues in the Master of Science (Finance) programme especially Nabihah Aminaddin, Nor Aida Adilla and Nor Maimun Wahab, I wish to thank you all for your friendship.

# TABLE OF CONTENTS

DESCRIPT	TION	PAGE
TITLE PAC	GE .	I
CERTIFICA	ATION OF THESIS WORK	II
PERMISSIO	ON TO USE	III
ABSTRAK	(BAHASA MELAYU)	IV
ABSTRAC	Γ (ENGLISH)	V
ACKNOWI	LEDGEMENT	VI
TABLE OF	CONTENTS	VII
LIST OF TA	ABLES	X
LIST OF FI	GURE	XI
CHAPTER	1: INTRODUCTION	
1.1	Background of Study	1
1.2	The Development of Malaysian Unit Trust Fund	3
1.3	Fixed Income Unit Trust Funds	4
1.4	Equity Unit Trust Funds	6
1.5	Problem Statement	8
1.6	Research Questions	12
1.7	Research Objectives	12
1.8	Significance of the Study	12
1.9	Organization of the Study	13
CHA	APTER 2: LITERATURE REVIEW	
2.1	Introduction	14

2.2	Portfolio Theory	14
2.3	Markowitz Efficient Frontier	14
2.4	Risk and Return	15
2.5	Empirical Evidence on the Overall Performance of	15
	Unit Trust Funds in Malaysia	
2.6	Empirical Evidence on the Performance	18
	of Unit Trust Funds in Western Countries	
CHA	APTER 3: METHODOLOGY	
3.1	Introduction	20
3.2	Data Collection and Sample Selection	20
3.3	Method	26
3.4	Hypothesis	31
CHA	APTER 4: ANALYSIS OF FINDINGS	
4.1	Introduction	32
4.2	Results of the Study	32
4.3	Analysis of Wilcoxon Signed Ranks Test Results	42
	Based on Types of Funds	
4.4	Summary of Findings	46
CH/	APTER 5: CONCLUSION	
5.1	Introduction	49
5.2	Summary of the Study	49
5.3	Implications of the Study	51

5.4	Limitations	52
5.5	Recommendations for Further Research	52
REFERENCES		54
APPI	ENDIX	
A: Mean Performances of Fixed Income Unit Trust Funds – Equity		
Unit Trust Funds – Wilcoxon Signed Ranks Test for Sharpe, Treynor and		
Jense	en Performance Measures	

# LIST OF TABLES

<b>TABLES</b>		PAGE
Table 3.1	Fixed Income Unit Trust Funds Inception Dates,	23
	Total Assets and Benchmarks	
Table 3.2	Overall Equity Unit Trust Funds Inception Dates,	24
	Total Assets and Benchmarks	
Table 3.3	Growth Equity Unit Trust Funds Inception Dates,	25
	Total Assets and Benchmarks	
Table 3.4	Value Equity Unit Trust Funds Inception Dates,	26
	Total Assets and Benchmarks	
Table 4.1	Weekly Performance Measures for Fixed Income	34
	Unit Trust Funds: January 2006 – October 2012	
Table 4.2	Weekly Performance Measures for Overall Equity	37
	Unit Trust Funds: January 2006 – October 2012	
Table 4.3	Weekly Performance Measures for Growth Equity	39
	Unit Trust Funds: January 2006 – October 2012	
Table 4.4	Weekly Performance Measures for Value Equity	41
	Unit Trust Funds: January 2006 – October 2012	
Table 4.5	Z-score Results for Wilcoxon Signed Ranks Test	44
	(Fixed Income versus Overall Equity)	
Table 4.6	Z-score Results for Wilcoxon Signed Ranks Test	45
	(Fixed Income versus Growth Equity)	
Table 4.7	Z-score Results for Wilcoxon Signed Ranks Test	46
	(Fixed Income versus Valuel Equity)	

# LIST OF FIGURES

<b>FIGURES</b>		PAGE
Figure 1.1	Net Asset Value of the Malaysian Unit Trust Industry	3
	(1992-2010)	
Figure 1.2	Net Asset Value of the Fixed Income Unit Trust Funds	6
	(1998-2010)	
Figure 1.3	Net Asset Value of the Equity Unit Trust Funds	7
	(1998-2010)	
Figure 1.4	Fund Raised in Capital Market and Sukuk Outstanding	9
	(2005-2011)	
Figure 1.5	New Unit Trust Fund by Types of Funds	11
	(2002-2010)	
Figure 4.1	Distribution of Risk Adjusted Returns	43

### **CHAPTER 1**

### INTRODUCTION

## 1.1 Background of Study

Corporate bond markets in emerging Asia have continued to enjoy promising growth over the years and are predicted to grow in the future. By 2011, Asian countries hold the largest market share which consists 70% of total corporate bond issuance in the emerging market. The development of corporate bond market has been dominated by Asia Pacific countries namely Japan, China, and Korea that form the largest markets in terms of the value of corporate bond outstanding. As a percentage of Gross Domestic Product (GDP), Malaysia's bond market is now the second largest in Asia accounted for approximately 37% (Bank for International Settlements, 2011). Malaysia's bond market has seen a strong growth of 10.8% per annum over the period from 2000 until 2010 (Securities Commission and Bursa Malaysia).

Improvement in bond market outlook will continue to drive the Malaysian debt market as well as to encourage the circulation of fixed income unit trust funds. Further growth of such funds will help strengthen the capital market, where the government is pursuing retail investors to take part on investment in bond and sukuk by offering a stamp duty exemption. This will lead to the fund managers to reallocate their investment strategy towards fixed income unit trust funds to benefit from a downside protection and to take advantage of the expansion of the debt securities market.

# The contents of the thesis is for internal user only

### REFERENCES

- Abdullah, F., S. Mohamed and T. Hassan, (2002) "A Comparative Performance of Malaysian Islamic and Conventional Mutual Funds, *Pertanika*, 8(2), 30-49.
- Annuar, M.N., Shamsher, M. and Ngu, M.H. (1997), "Selectivity and timing: evidence from the performance of Malaysian unit trusts", *Pertanika Journal of Social Science and Humanities*, Vol. 5, pp. 45-57.
- Bailey, W. and Lim, J. (1992), "Evaluating the diversification benefits of the new country funds", *Journal of Portfolio Management*, Vol. 18, pp. 74-80.
- Building the foundation in CMP1, Capital market master plan 2, Securities Commission Malaysia.
- Chua, C.P. (1985), "The Investment Performance of Unit Trusts In Malaysia".

  \*Unpublished MBA Thesis\*, School of Management, University Malaya, Kuala Lumpur.
- Cornell, B. & Green, K, (1991), "The investment performance of low-grade bond funds", *Journal of Finance*, vol.46, no. 1.pp 29-48.
- Fama, E. F., & French, K. R. (2010), Luck versus skill in the cross section of mutual fund returns, *Journal of Finance*, 65(5), 1915-1947.
- Fauziah Md. Taib and Mansor Isa (2007). "Malaysian Unit Trust Aggregate Performance". *Journal of Managerial Finance* Vol. 33 No. 2.

- Ibrahim, M.,& Wong,A. (2005). "The corporate bond market in Malaysia". *BIS* paper no.26, February: 114-128.
- Ilhyock Shim (2011). "Development of Asia-Pacific corporate bond and securitization markets". *BIS Papers No. 63*.
- Jensen, M. C. (1968). "The performance of mutual funds in the period 1945–1964". *Journal of Finance*, 48(1), 389–416.
- Kahn, Ronald N and Rudd, Andrew (1995), "Does historical performance predict future performance?", *Financial Analysts Journal*; 51, 6; ABI/INFORM Global pg. 43.
- Lauren Swinkels and Pawel Rzezniczak (2009), "Performance evaluation of Polish mutual fund managers" *International Journal of Emerging markets* Vol. 4 No. 1.
- Leong, K.H. and Aw, M.W. (1997), "Measuring unit trust fund performance using different benchmarks", *Capital Market Review*, Vol. 5, pp. 27-44.
- Mahreen Mahmud and Nawazish Mirza (2011), "An Evaluation of Mutual Fund Performance in an emerging economy: The case of Pakistan" *The Lahore Journal of Economics*, September: 301-316.
- Monetary and Financial Developments, Economic Reports 2012/2013, Ministry of Finance Malaysia.
- Nur Atiqah and Nur Adiana Hiau Abdullah (2009), "The performance of Malaysian unit trusts investing in domestic versus international markets" *Asian Academy Of Management Journal of Accounting and Finance*, Vol. 5, No. 2, 77–100

- Reilly, F.K. and Brown K.C. (2009). "Analysis of investment and management of portfolios (9<sup>th</sup> ed.). Australia. South Western
- Rozali, M.B. and Abdullah, F. (2006)," The performance of malaysian equity funds", *The Business Review, Cambridge, Summer 2006*; ABI/INFORM Global, pg. 301.
- Ross Fowler, Robin Grieves and J. Clay Singleton (2010) "New Zealand unit trust disclosure: asset allocation, style analysis, and return attribution", *Pacific Accounting Review*, Vol. 22, pp. 4-21.
- Sharpe, W.F., (1966), "Mutual Fund Performance", Journal of Business, 23, 119 138.
- Soo-Wah Low (2007). "Malaysian unit trust funds performance during up and down market conditions". *Journal of Managerial Finance* Vol. 33 No. 2.
- Stephen A. Ross, Randolph W. Westerfield and Jeffrey Jaffe (2010), Corporate Finance, *McGrow Hill International Edition*, Ninth Edition.
- Tan, H.C. (1995), "The investment performance of unit trust funds in Malaysia", Capital Market Review, Vol. 3, pp. 21-50.
- Treynor, J.L., (1965), How to Rate Management of Investment Funds, *Harvard Review*, 43(1), 63-75.