

**STYLE ANALYSIS OF MALAYSIAN ISLAMIC BOND UNIT TRUST
FUNDS**

By

AHMAD HARITH ASHROFIE BIN HANAFI

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

PERMISSION TO USE

In presenting this dissertation/project paper in partial fulfillment of the requirements for a Post Graduate degree from the Universiti Utara Malaysia (UUM), I agree that the Library of this university may make it freely available for inspection. I further agree that permission for copying this dissertation/project paper in any manner, in whole or in part, for scholarly purposes may be granted by my supervisor(s) or in their absence, by the Dean of Othman Yeop Abdullah Graduate School of Business where I did my dissertation/project paper. It is understood that any copying or publication or use of this dissertation/project paper parts of it for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the UUM in any scholarly use which may be made of any material in my dissertation/project paper.

Request for permission to copy or to make other use of materials in this dissertation/project paper 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 sama ada gaya peruntukan aset unit amanah akan berbeza daripada matlamat asal mereka sepanjang tempoh kajian dan sub-tempoh, iaitu semasa dan selepas krisis kewangan. Tempoh pengajian adalah enam (6) tahun bermula dari Januari 2007 hingga Disember 2012 dan telah dibahagikan ke dalam tempoh keseluruhan dari Januari 2007 hingga Disember 2012 dan dua sub-tempoh : Krisis kewangan dari Januari 2007 hingga Disember 2009 dan selepas krisis kewangan dari Januari 2010 kepada Disember 2012. Kajian ini menggunakan Indeks MSCI Malaysia Pertumbuhan, Indeks MSCI Malaysia Nilai, 1-bulan Kuala Lumpur Kadar Tawaran Antara Bank (KLIBOR), Indeks TRBPAM Bon Islam Kerajaan , Indeks TRBPAM Bon Islam Korporat, Indeks MSCI Dunia sebagai penanda aras bagi kelas aset. Jumlah 14 dana bon Islam yang digunakan sebagai sampel dan dianalisis menggunakan Return Based Style Analysis (RBSA).

Keputusan menunjukkan terdapat beberapa unit amanah yang mempunyai gaya yang berbeza yang ketara berbanding dengan matlamat asal mereka untuk tempoh keseluruhan dan dua sub- tempoh, sama ada semasa krisis kewangan atau tempoh selepas krisis kewangan. Perubahan dalam pulangan bulanan bagi kebanyakan dana untuk tempoh keseluruhan dan sub-tempoh terutamanya boleh dijelaskan oleh variasi dalam gaya mereka. Gaya purata tempoh keseluruhan dan dua sub-tempoh menunjukkan bahawa pengurus dana telah menumpukan pelaburan mereka terutamanya dalam bon, sama ada kerajaan atau bon korporat. Walau bagaimanapun, terdapat sebahagian kecil daripada pelaburan diletakkan dalam kelas aset lain seperti ekuiti dan instrumen pasaran wang. Purata pulangan dana boleh dijelaskan oleh perubahan dalam gaya dana.

Katakunci : Dana bon Islam, kelas aset, Return Based Style Analysis

ABSTRACT

This study examines whether or not asset allocation styles of unit trusts different from their original objectives over the study period and sub-periods, which are during and after the financial crisis. The period of study is six (6) years starting from January 2007 to December 2012 and has been divided into overall period from January 2007 to December 2012 and two sub-periods: financial crisis from January 2007 to December 2009 and post financial crisis from January 2010 to December 2012. This study uses MSCI Malaysia Growth Index, MSCI Malaysia Value Index, 1-month Kuala Lumpur Inter-bank Offer Rate (KLIBOR), TRBPAM Islamic Government Index, TRBPAM Islamic Corporate Index, MSCI World Index as benchmarks for asset classes. The total of 14 Islamic bond funds used as sample and analysed using Return Based Style Analysis (RBSA).

The results show there are some unit trusts that have significant different styles when compared to their original objectives for overall period and two sub-periods, either during financial crisis or post financial crisis period. The variation in monthly returns for most of the funds for overall period and sub-periods mainly could be explained by the variation in their styles. The average style of overall period and two sub-periods shows that fund managers have focused their investment mainly in bonds, either the government or corporate bonds. However, there is a small proportion of investment is placed in asset classes such as equity and money market instruments. The average fund returns could be explained mainly by the variation in the funds' styles.

Keywords : Islamic bond funds, asset classes, Return Based Style Analysis

Acknowledgement

Assalamualaikum,

Ahamdulillah, thanks to Allah S.W.T for providing me the guidance, time, and chance to complete this dissertation to fulfill the requirement of Master of Science Finance at University 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 various drafts and for her continuous guidance, advice, support and encouragement throughout the process of preparing this dissertation. I also would like to thanks Associate Professor Dr. Kamarun Nisham Taufil Mohd for his feedbacks. Their commitment and time spent for this dissertation is most appreciated.

Next, I would like to thank my parent, Hanafi bin Omar and Jamilah binti Shamsuddin, and all my siblings for their full support, encouragement, and love that always motivate me to face all the difficulties to complete this dissertation.

Finally, thanks to all my friends around the world especially colleagues in Master of Science (Finance) because keep on supporting me and help myself during the progress of completing this dissertation.

TABLE OF CONTENTS

DESCRIPTION	PAGE
TITLE PAGE	I
CERTIFICATION OF THESIS WORK	II
PERMISSION TO USE	III
ABSTRAK (BAHASA MELAYU)	IV
ABSTRACT (ENGLISH)	V
ACKNOWLEDGEMENT	VI
TABLE OF CONTENTS	VII
LIST OF TABLES	X
LIST OF FIGURES	XI
CHAPTER 1 : INTRODUCTION	
1.0 Introduction	1
1.1 Background	3
1.2 Problem Statement	5
1.3 Research Questions	7
1.4 Research Questions	7
1.5 Significance of Study	8
1.6 Organisation of the Research Paper	8

CHAPTER 2 : LITERATURE REVIEW

2.0 Introduction	9
2.1 Underlying Theory	9
2.2 Empirical Evidence	11
2.3 Summary	15

CHAPTER 3: METHODOLOGY

3.0 Introduction	16
3.1 Sample Selection and Data Collection	16
3.2 Method	19
3.3 Hypothesis	25
3.4 Summary	26

CHAPTER 4: ANALYSIS OF FINDINGS

4.0 Introduction	27
4.1 Result of Asset Classes Test	28
4.2 Individual Fund's Style	32
4.3 Asset Allocation	40
4.4 Summary	44

CHAPTER 5: CONCLUSION

5.0 Introduction	46
5.1 Summary of Study	46
5.2 Implication of Study	47
5.3 Limitation	48
5.4 Recommendations for Future Research	48

REFERENCES

APPENDICES

LIST OF TABLES

TABLES	PAGE
Table 3.1 List of Selected Islamic Bond Unit Trusts	17
Table 3.2 Asset Classes' Indices	18
Table 4.1 Correlation of Asset Classes (2007 to 2012)	29
Table 4.2 Descriptive Statistical of Asset Classes for Overall Period	29
Table 4.3 Correlation of Asset Classes Based on Sub-Period	31
Table 4.4 Descriptive Statistical of Asset Classes Based on Sub-Period	32
Table 4.5 Style Analysis for Period 2007 to 2012	37
Table 4.6 Style Analysis for Financial Crisis Period 2007 to 2009	38
Table 4.7 Style Analysis for Post Financial Crisis Period 2007 to 2009	39

LIST OF FIGURES

FIGURES		PAGE
Figure 1.1	Net Asset Value of Unit Trust Funds (2004 to 2012)	4
Figure 4.1	Average Asset Allocations	42
Figure 4.2	Average Style and Selection	43

CHAPTER 1

INTRODUCTION

1.0 Introduction

Various types of investment vehicles are available in the market to be chosen by today's investors, especially those related to the financial assets. However, each of these financial assets come with different levels of risk and return that will affect investors' decision making. Thus, investors may choose to invest in unit trusts or mutual funds as he would be able to hold a diversified portfolio with limited funds.

Based on FIMM Annual Reports, the statistic shows that the total net asset value (NAV) has increased tremendously in less than 10 years. The major contributors to the rapid growth of unit trusts are equity funds, Islamic funds and bond funds. However, only Islamic funds keep increasing its percentage of total NAV from 2004 to 2012, while equity funds and bond funds decrease over time within the same period. This because Malaysia becomes the world Islamic-finance hub with the main focus on sukuk where country holds the largest portion of the global sukuk market (The Borneopost, 24 February 2013). Hence, there are individual investors who are interested in putting their money in sukuk in order to take the

The contents of
the thesis is for
internal user
only

REFERENCES

- Abdullah, F., Hassan, T., & Mohamad, S. (2007). Investigation of Performance of Malaysian Islamic Unit Trust Funds: Comparison With Conventional Unit Trust Funds. *Managerial Finance* , Vol. 33, No. 2, pp 142-153.
- Abdullah, N. A., & Abdullah, N. A. (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, pp 77-100.
- Bodson, L., Coen, A., & Hubner, G. (2008). Dynamic Hedge Fund Style Analysis with Errors-in-Variables. *Social Science Research Network* .
- Brown, K. C., & Reilly, F. K. (2009). *Analysis of Investments and Management of Portfolios (9th ed.)*. Canada: South-Western.
- de Roon, F. A., Nijman, T. E., & ter Horst, J. R. (2004). Evaluating Style Analysis. *Journal of Empirical Finance* , Vol.11, No. 1, Pages 29–53.
- Dor, A. B., & Jagannathan, R. (2003). Understanding Mutual Fund and Hedge Fund Styles Using Return Based Style Analysis. *Journal of Investment Management* , 94-134.
- Elton, E. J., Gruber, M. J., Brown, S. J., & Goetzmann, W. N. (2011). *Modern Portfolio Theory and Investment Analysis 8th ed.* Asia: John Wiley & Sons, Inc.
- Faff, R. W., Gharghori, P., Ip, B. H., & Nguyen, A. (2012). Return-Based Style Analysis in Australian Funds. *Multinational Finance Journal* , 155-188.
- Ferreira, M. A., Keswani, A., Miguel, A. F., & Ramos, S. B. (2012). The Determinants of Mutual Fund Performance: A Cross-Country Study. *Review of Finance* , 1-43.
- Fletcher, J., & Forbes, D. (2002). An Exploration of the Persistence of UK Unit Trust Performance. *Journal of Empirical Finance* , Vol.9, pp 475-493.
- Fung, W., & Hsieh, D. A. (1998). Performance Attribution and Style Analysis: From Mutual Funds to Hedge Funds. *Duke University working paper* .
- Gibson, Roger C., (1996). *Asset Allocation: Balancing Financial Risk*, 2nd Edition.,USA: McGraw-Hill.

Hartono, A. F., Soekarno, S., & Damayanti, S. M. (2014). Islamic and Conventional Equity Fund Rating Performance with Return, Sharpe, Modified Snail Trail, and Morningstar Rating Groundwork. *Journal of Economics, Business and Management* , Vol.2, No. 1, pp 74-80.

Hassan, M. K., Faisal Khan, A. N., & Ngow, T. (2010). Is Faith-Based Investing Rewarding? The Case for Malaysian Islamic Unit Trust Funds. *Journal of Islamic Accounting and Business Research* , Vol. 1, No. 2, pp 148-171.

Karacabey, A. A., & Gökgöz, F. (2006). Investment Style Analysis for the Turkish Individual Retirement Funds. *Investment Management and Financial Innovations* , Volume 3, Issue 2.

Lau, W. Y. (2007). An Integrated Framework for Style Analysis: How is it Useful to Malaysian Equity Trust Investors. *Managerial Finance* , Vol. 33, No.4, pp 122-141.

Lau, W. Y. (2002). Does Asset Allocation Explain the Styles and Performance of Unit Trust Funds: A Style Analysis with the Evidence from Malaysia. *Journal of Malaysian Studies* , Vol. XX, No.2, pp 1-32.

Lau, W. Y. (2005). How Persistent is Equity Style Performance Among Malaysian Fund Managers? *Osaka Economic Paper* , Vol.55, No.3, pp 64-82.

Lau, W. Y. (2008). Investigating Equity Style Portfolio Risk Using VaR: An Empirical Study Based on Malaysian Mutual Funds. *Osaka Economic Papers* , Vol.57, No.4, pp 100-118.

Lau, W. Y. (2006). Investment Style of Mutual Funds: How is it Useful In Communicating Economic Trends to Investors?". *Osaka Economic Papers* , Vol. 55, No.4, pp 139-156.

Lee, S. (1999). Style Analysis and Property Fund Performance. *Journal of Property Investment & Finance* , Vol.17 No.2 pp.145-156.

Ministry of Finance Malaysia. (2013). *Monetary and Financial Developments, Economic Reports 2012/2013*. Ministry of Finance Malaysia.

Otten, R., & Bams, D. (2000). Statistical Tests for Return-Based Style Analysis. *Social Science Research Network* .

Rekenthaler, J., Gambera, M., & Charlson, J. (2004). Estimating Portfolio Style in U.S. Equity Funds: A Comparative Study of Portfolio-Based Fundamental Style Analysis and Returns-Based Style Analysis. *Morningstar Research Report* , pp 1-21.

Sawicki, J. (2009). An Application of Returns-Based Style Analysis to Investigating the Disappearance of the Size Premium. *Journal of Modelling in Management* , Vol. 4 No. 3, 2009, pp. 216-234.

Sharpe, W. F. (1992). Asset Allocation: Management Style and Performance Measurement. *Journal of Portfolio Management* , pp. 7-19.

Swinkels, L., & Van Der Sluis, P. J. (2002). Return-Based Style Analysis with Time-Varying Exposures. *Social Science Research Network* .

Taib, F. M., & Isa, M. (2007). Malaysian Unit Trust Aggregate Performance. *Managerial Finance* , Vol. 33, No. 2, pp 102-121.

ter Horst, J. R., Nijman, T. E., & de Roon, F. A. (1998). Style Analysis and Performance Evaluation of Dutch Mutual Funds. *Center Discussion Paper No. 9850* .

APPENDICES

Microsoft Excel 12.0 Answer Report
Worksheet: [Book1.xlsx]Amanahraya Syariah Trust
Report Created: 5/31/2014 11:19:52 AM

Target Cell (Min)

Cell	Name	Original Value	Final Value
\$L\$7< res^2		0.15165246	0.1516525

Adjustable Cells

Cell	Name	Original Value	Final Value
\$D\$7< Return M'sia Value		0	0
\$E\$7< return M'sia Growth		0.04796253	0.0479625
\$F\$7< Return International		0	0
\$G\$7< Return TRPAMALL Gove		0.95203747	0.9520375
\$H\$7< Return TRBPAMALL Corp		0	0
\$I\$74 return KLIBOR		0	0

Constraints

Cell	Name	Cell Value	Formula	Status	Slack
\$J\$74 rNAV		1	\$J\$74=1	Not Binding	0
\$D\$7< Return M'sia Value		0	\$D\$74<=1	Not Binding	1
\$E\$7< return M'sia Growth		0.04796253	\$E\$74<=1	Not Binding	0.9520375
\$F\$7< Return International		0	\$F\$74<=1	Not Binding	1
\$G\$7< Return TRPAMALL Gove		0.95203747	\$G\$74<=1	Not Binding	0.0479625
\$H\$7< Return TRBPAMALL Corp		0	\$H\$74<=1	Not Binding	1
\$I\$74 return KLIBOR		0	\$I\$74<=1	Not Binding	1
\$D\$7< Return M'sia Value		0	\$D\$74>=0	Binding	0
\$E\$7< return M'sia Growth		0.04796253	\$E\$74>=0	Not Binding	0.0479625
\$F\$7< Return International		0	\$F\$74>=0	Binding	0
\$G\$7< Return TRPAMALL Gove		0.95203747	\$G\$74>=0	Not Binding	0.9520375
\$H\$7< Return TRBPAMALL Corp		0	\$H\$74>=0	Binding	0
\$I\$74 return KLIBOR		0	\$I\$74>=0	Binding	0

Microsoft Excel 12.0 Answer Report
Worksheet: [Book1.xlsx]AMB Dana Arif
Report Created: 5/31/2014 11:24:08 AM

Target Cell (Min)

Cell	Name	Original Value	Final Value
\$L\$7< res^2		0.02085851	0.0208023

Adjustable Cells

Cell	Name	Original Value	Final Value
\$D\$7< Return M'sia Value		0	0
\$E\$7< return M'sia Growth		0.07515148	0.078013
\$F\$7< Return International		0	0
\$G\$7< Return TRPAMALL Gove		0.11603777	0.2487754
\$H\$7< Return TRBPAMALL Corp		0.80881075	0.6732116
\$I\$74 return KLIBOR		0	0

Constraints

Cell	Name	Cell Value	Formula	Status	Slack
\$J\$74 rNAV		1	\$J\$74=1	Not Binding	0
\$D\$7< Return M'sia Value		0	\$D\$74<=1	Not Binding	1
\$E\$7< return M'sia Growth		0.07801305	\$E\$74<=1	Not Binding	0.921987
\$F\$7< Return International		0	\$F\$74<=1	Not Binding	1
\$G\$7< Return TRPAMALL Gove		0.24877539	\$G\$74<=1	Not Binding	0.7512246
\$H\$7< Return TRBPAMALL Corp		0.67321157	\$H\$74<=1	Not Binding	0.3267884
\$I\$74 return KLIBOR		0	\$I\$74<=1	Not Binding	1
\$D\$7< Return M'sia Value		0	\$D\$74>=0	Binding	0
\$E\$7< return M'sia Growth		0.07801305	\$E\$74>=0	Not Binding	0.078013
\$F\$7< Return International		0	\$F\$74>=0	Binding	0
\$G\$7< Return TRPAMALL Gove		0.24877539	\$G\$74>=0	Not Binding	0.2487754
\$H\$7< Return TRBPAMALL Corp		0.67321157	\$H\$74>=0	Not Binding	0.6732116
\$I\$74 return KLIBOR		0	\$I\$74>=0	Binding	0

Microsoft Excel 12.0 Answer Report
Worksheet: [Book1.xlsx]AMBon Islam
Report Created: 5/31/2014 11:26:21 AM

Target Cell (Min)

Cell	Name	Original Value	Final Value
\$L\$7< res^2		0.00421138	0.0042036

Adjustable Cells

Cell	Name	Original Value	Final Value
\$D\$7< Return M'sia Value		0.01095344	0.0169093
\$E\$7< return M'sia Growth		0.04015114	0.0374061
\$F\$7< Return International		0	0
\$G\$7< Return TRPAMALL Gove		0.21879532	0.2679965
\$H\$7< Return TRBPAMALL Corp		0.7301001	0.6776881
\$I\$74 return KLIBOR		0	0

Constraints

Cell	Name	Cell Value	Formula	Status	Slack
\$J\$74 rNAV		1	\$J\$74=1	Not Binding	0
\$D\$7< Return M'sia Value		0.0169093	\$D\$74<=1	Not Binding	0.9830907
\$E\$7< return M'sia Growth		0.0374061	\$E\$74<=1	Not Binding	0.9625939
\$F\$7< Return International		0	\$F\$74<=1	Not Binding	1
\$G\$7< Return TRPAMALL Gove		0.26799649	\$G\$74<=1	Not Binding	0.7320035
\$H\$7< Return TRBPAMALL Corp		0.67768811	\$H\$74<=1	Not Binding	0.3223119
\$I\$74 return KLIBOR		0	\$I\$74<=1	Not Binding	1
\$D\$7< Return M'sia Value		0.0169093	\$D\$74>=0	Not Binding	0.0169093
\$E\$7< return M'sia Growth		0.0374061	\$E\$74>=0	Not Binding	0.0374061
\$F\$7< Return International		0	\$F\$74>=0	Binding	0
\$G\$7< Return TRPAMALL Gove		0.26799649	\$G\$74>=0	Not Binding	0.2679965
\$H\$7< Return TRBPAMALL Corp		0.67768811	\$H\$74>=0	Not Binding	0.6776881
\$I\$74 return KLIBOR		0	\$I\$74>=0	Binding	0

Microsoft Excel 12.0 Answer Report
Worksheet: [Book1.xlsx]CIMB-I Enhanced Sukuk
Report Created: 5/31/2014 11:28:12 AM

Target Cell (Min)

Cell	Name	Original Value	Final Value
\$L\$7< res^2		0.01766797	0.0176387

Adjustable Cells

Cell	Name	Original Value	Final Value
\$D\$7< Return M'sia Value		0	0
\$E\$7< return M'sia Growth		0.09322217	0.0971141
\$F\$7< Return International		0.02632936	0.0239634
\$G\$7< Return TRPAMALL Gove		0.1432965	0.2405018
\$H\$7< Return TRBPAMALL Corp		0.73715197	0.6384207
\$I\$74 return KLIBOR		0	0

Constraints

Cell	Name	Cell Value	Formula	Status	Slack
\$J\$74 rNAV		1	\$J\$74=1	Not Binding	0
\$D\$7< Return M'sia Value		0	\$D\$74<=1	Not Binding	1
\$E\$7< return M'sia Growth		0.0971141	\$E\$74<=1	Not Binding	0.9028859
\$F\$7< Return International		0.0239634	\$F\$74<=1	Not Binding	0.9760366
\$G\$7< Return TRPAMALL Gove		0.24050179	\$G\$74<=1	Not Binding	0.7594982
\$H\$7< Return TRBPAMALL Corp		0.63842071	\$H\$74<=1	Not Binding	0.3615793
\$I\$74 return KLIBOR		0	\$I\$74<=1	Not Binding	1
\$D\$7< Return M'sia Value		0	\$D\$74>=0	Binding	0
\$E\$7< return M'sia Growth		0.0971141	\$E\$74>=0	Not Binding	0.0971141
\$F\$7< Return International		0.0239634	\$F\$74>=0	Not Binding	0.0239634
\$G\$7< Return TRPAMALL Gove		0.24050179	\$G\$74>=0	Not Binding	0.2405018
\$H\$7< Return TRBPAMALL Corp		0.63842071	\$H\$74>=0	Not Binding	0.6384207
\$I\$74 return KLIBOR		0	\$I\$74>=0	Binding	0

Microsoft Excel 12.0 Answer Report
Worksheet: [Book1.xlsx]CIMB-I Sukuk Fund
Report Created: 5/31/2014 11:29:33 AM

Target Cell (Min)

Cell	Name	Original Value	Final Value
\$L\$7<	res^2	0.00178415	0.0017579

Adjustable Cells

Cell	Name	Original Value	Final Value
\$D\$7<	Return M'sia Value	0	0
\$E\$7<	return M'sia Growth	0.01118517	0.0130905
\$F\$7<	Return International	0	0
\$G\$7<	Return TRPAMALL Gove	0.20072546	0.2913974
\$H\$7<	Return TRBPAMALL Corp	0.78808937	0.6955121
\$I\$74	return KLIBOR	0	0

Constraints

Cell	Name	Cell Value	Formula	Status	Slack
\$J\$74	rNAV	1	\$J\$74=1	Not Binding	0
\$D\$7<	Return M'sia Value	0	\$D\$74<=1	Not Binding	1
\$E\$7<	return M'sia Growth	0.01309046	\$E\$74<=1	Not Binding	0.9869095
\$F\$7<	Return International	0	\$F\$74<=1	Not Binding	1
\$G\$7<	Return TRPAMALL Gove	0.29139741	\$G\$74<=1	Not Binding	0.7086026
\$H\$7<	Return TRBPAMALL Corp	0.69551213	\$H\$74<=1	Not Binding	0.3044879
\$I\$74	return KLIBOR	0	\$I\$74<=1	Not Binding	1
\$D\$7<	Return M'sia Value	0	\$D\$74>=0	Binding	0
\$E\$7<	return M'sia Growth	0.01309046	\$E\$74>=0	Not Binding	0.0130905
\$F\$7<	Return International	0	\$F\$74>=0	Binding	0
\$G\$7<	Return TRPAMALL Gove	0.29139741	\$G\$74>=0	Not Binding	0.2913974
\$H\$7<	Return TRBPAMALL Corp	0.69551213	\$H\$74>=0	Not Binding	0.6955121
\$I\$74	return KLIBOR	0	\$I\$74>=0	Binding	0

Microsoft Excel 12.0 Answer Report
Worksheet: [Book1.xlsx]MIDF Amanah Shariah MM
Report Created: 5/31/2014 11:30:40 AM

Target Cell (Min)

Cell	Name	Original Value	Final Value
\$L\$74	res^2	0.03746257	0.0368132

Adjustable Cells

Cell	Name	Original Value	Final Value
\$D\$74	Return M'sia Value	0	0
\$E\$74	return M'sia Growth	0.02154297	0.0400777
\$F\$74	Return International	0.02737892	0.0172291
\$G\$74	Return TRPAMALL Gove	0	0.4572138
\$H\$74	Return TRBPAMALL Corp	0.95107812	0.4854793
\$I\$74	return KLIBOR	0	0

Constraints

Cell	Name	Cell Value	Formula	Status	Slack
\$J\$74	rNAV	1	\$J\$74=1	Not Binding	0
\$D\$74	Return M'sia Value	0	\$D\$74<=1	Not Binding	1
\$E\$74	return M'sia Growth	0.04007774	\$E\$74<=1	Not Binding	0.9599223
\$F\$74	Return International	0.0172291	\$F\$74<=1	Not Binding	0.9827709
\$G\$74	Return TRPAMALL Gove	0.45721382	\$G\$74<=1	Not Binding	0.5427862
\$H\$74	Return TRBPAMALL Corp	0.48547934	\$H\$74<=1	Not Binding	0.5145207
\$I\$74	return KLIBOR	0	\$I\$74<=1	Not Binding	1
\$D\$74	Return M'sia Value	0	\$D\$74>=0	Binding	0
\$E\$74	return M'sia Growth	0.04007774	\$E\$74>=0	Not Binding	0.0400777
\$F\$74	Return International	0.0172291	\$F\$74>=0	Not Binding	0.0172291
\$G\$74	Return TRPAMALL Gove	0.45721382	\$G\$74>=0	Not Binding	0.4572138
\$H\$74	Return TRBPAMALL Corp	0.48547934	\$H\$74>=0	Not Binding	0.4854793
\$I\$74	return KLIBOR	0	\$I\$74>=0	Binding	0

Microsoft Excel 12.0 Answer Report
Worksheet: [Book1.xlsx]Pacific Dana Murni
Report Created: 5/31/2014 11:32:42 AM

Target Cell (Min)

Cell	Name	Original Value	Final Value
\$L\$7< res^2		0.01244938	0.0124018

Adjustable Cells

Cell	Name	Original Value	Final Value
\$D\$7< Return M'sia Value		0	0.0066914
\$E\$7< return M'sia Growth		0	0
\$F\$7< Return International		0.02028477	0.0169618
\$G\$7< Return TRPAMALL Gove		0.57537753	0.7006657
\$H\$7< Return TRBPAMALL Corp		0.4043377	0.275681
\$I\$74 return KLIBOR		0	0

Constraints

Cell	Name	Cell Value	Formula	Status	Slack
\$J\$74 rNAV		1	\$J\$74=1	Not Binding	0
\$D\$7< Return M'sia Value		0.00669143	\$D\$74<=1	Not Binding	0.9933086
\$E\$7< return M'sia Growth		0	\$E\$74<=1	Not Binding	1
\$F\$7< Return International		0.01696183	\$F\$74<=1	Not Binding	0.9830382
\$G\$7< Return TRPAMALL Gove		0.70066575	\$G\$74<=1	Not Binding	0.2993343
\$H\$7< Return TRBPAMALL Corp		0.275681	\$H\$74<=1	Not Binding	0.724319
\$I\$74 return KLIBOR		0	\$I\$74<=1	Not Binding	1
\$D\$7< Return M'sia Value		0.00669143	\$D\$74>=0	Not Binding	0.0066914
\$E\$7< return M'sia Growth		0	\$E\$74>=0	Binding	0
\$F\$7< Return International		0.01696183	\$F\$74>=0	Not Binding	0.0169618
\$G\$7< Return TRPAMALL Gove		0.70066575	\$G\$74>=0	Not Binding	0.7006657
\$H\$7< Return TRBPAMALL Corp		0.275681	\$H\$74>=0	Not Binding	0.275681
\$I\$74 return KLIBOR		0	\$I\$74>=0	Binding	0

Microsoft Excel 12.0 Answer Report
Worksheet: [Book1.xlsx]RHB Islamic Bond
Report Created: 5/31/2014 11:34:30 AM

Target Cell (Min)

Cell	Name	Original Value	Final Value
\$L\$7< res^2		0.02098481	0.0209771

Adjustable Cells

Cell	Name	Original Value	Final Value
\$D\$7< Return M'sia Value		0	0
\$E\$7< return M'sia Growth		0	0
\$F\$7< Return International		0	0
\$G\$7< Return TRPAMALL Gove		0.36134653	0.4100944
\$H\$7< Return TRBPAMALL Corp		0.63865347	0.5899056
\$I\$74 return KLIBOR		0	0

Constraints

Cell	Name	Cell Value	Formula	Status	Slack
\$J\$74 rNAV		1	\$J\$74=1	Not Binding	0
\$D\$7< Return M'sia Value		0	\$D\$74<=1	Not Binding	1
\$E\$7< return M'sia Growth		0	\$E\$74<=1	Not Binding	1
\$F\$7< Return International		0	\$F\$74<=1	Not Binding	1
\$G\$7< Return TRPAMALL Gove		0.41009442	\$G\$74<=1	Not Binding	0.5899056
\$H\$7< Return TRBPAMALL Corp		0.58990558	\$H\$74<=1	Not Binding	0.4100944
\$I\$74 return KLIBOR		0	\$I\$74<=1	Not Binding	1
\$D\$7< Return M'sia Value		0	\$D\$74>=0	Binding	0
\$E\$7< return M'sia Growth		0	\$E\$74>=0	Binding	0
\$F\$7< Return International		0	\$F\$74>=0	Binding	0
\$G\$7< Return TRPAMALL Gove		0.41009442	\$G\$74>=0	Not Binding	0.4100944
\$H\$7< Return TRBPAMALL Corp		0.58990558	\$H\$74>=0	Not Binding	0.5899056
\$I\$74 return KLIBOR		0	\$I\$74>=0	Binding	0

Microsoft Excel 12.0 Answer Report
Worksheet: [Book1.xlsx]Dana AL Fakhim
Report Created: 5/31/2014 11:36:06 AM

Target Cell (Min)

Cell	Name	Original Value	Final Value
\$L\$7< res^2		0.01682208	0.01681

Adjustable Cells

Cell	Name	Original Value	Final Value
\$D\$7< Return M'sia Value		0.01652589	0.0237899
\$E\$7< return M'sia Growth		0.02842646	0.0243376
\$F\$7< Return International		0	0
\$G\$7< Return TRPAMALL Gove		0.5432641	0.487451
\$H\$7< Return TRBPAMALL Corp		0.41178355	0.4644216
\$I\$74 return KLIBOR		0	0

Constraints

Cell	Name	Cell Value	Formula	Status	Slack
\$J\$74 rNAV		1	\$J\$74=1	Not Binding	0
\$D\$7< Return M'sia Value		0.02378985	\$D\$74<=1	Not Binding	0.9762101
\$E\$7< return M'sia Growth		0.02433758	\$E\$74<=1	Not Binding	0.9756624
\$F\$7< Return International		0	\$F\$74<=1	Not Binding	1
\$G\$7< Return TRPAMALL Gove		0.48745099	\$G\$74<=1	Not Binding	0.512549
\$H\$7< Return TRBPAMALL Corp		0.46442158	\$H\$74<=1	Not Binding	0.5355784
\$I\$74 return KLIBOR		0	\$I\$74<=1	Not Binding	1
\$D\$7< Return M'sia Value		0.02378985	\$D\$74>=0	Not Binding	0.0237899
\$E\$7< return M'sia Growth		0.02433758	\$E\$74>=0	Not Binding	0.0243376
\$F\$7< Return International		0	\$F\$74>=0	Binding	0
\$G\$7< Return TRPAMALL Gove		0.48745099	\$G\$74>=0	Not Binding	0.487451
\$H\$7< Return TRBPAMALL Corp		0.46442158	\$H\$74>=0	Not Binding	0.4644216
\$I\$74 return KLIBOR		0	\$I\$74>=0	Binding	0

Microsoft Excel 12.0 Answer Report
Worksheet: [Book1.xlsx]Eastspring Invnt Dana Wafi
Report Created: 5/31/2014 11:37:37 AM

Target Cell (Min)

Cell	Name	Original Value	Final Value
\$L\$7< res^2		0.0192819	0.0191817

Adjustable Cells

Cell	Name	Original Value	Final Value
\$D\$7< Return M'sia Value		0	0
\$E\$7< return M'sia Growth		0	0
\$F\$7< Return International		0	0
\$G\$7< Return TRPAMALL Gove		0	0.1760629
\$H\$7< Return TRBPAMALL Corp		1	0.8239371
\$I\$74 return KLIBOR		0	0

Constraints

Cell	Name	Cell Value	Formula	Status	Slack
\$J\$74 rNAV		1	\$J\$74=1	Not Binding	0
\$D\$7< Return M'sia Value		0	\$D\$74<=1	Not Binding	1
\$E\$7< return M'sia Growth		0	\$E\$74<=1	Not Binding	1
\$F\$7< Return International		0	\$F\$74<=1	Not Binding	1
\$G\$7< Return TRPAMALL Gove		0.17606295	\$G\$74<=1	Not Binding	0.8239371
\$H\$7< Return TRBPAMALL Corp		0.82393705	\$H\$74<=1	Not Binding	0.1760629
\$I\$74 return KLIBOR		0	\$I\$74<=1	Not Binding	1
\$D\$7< Return M'sia Value		0	\$D\$74>=0	Binding	0
\$E\$7< return M'sia Growth		0	\$E\$74>=0	Binding	0
\$F\$7< Return International		0	\$F\$74>=0	Binding	0
\$G\$7< Return TRPAMALL Gove		0.17606295	\$G\$74>=0	Not Binding	0.1760629
\$H\$7< Return TRBPAMALL Corp		0.82393705	\$H\$74>=0	Not Binding	0.8239371
\$I\$74 return KLIBOR		0	\$I\$74>=0	Binding	0

Microsoft Excel 12.0 Answer Report
Worksheet: [Book1.xlsx]Hwang ALLMAN Income Plus
Report Created: 5/31/2014 11:38:15 AM

Target Cell (Min)

Cell	Name	Original Value	Final Value
\$L\$7< res^2		0.03961454	0.0394991

Adjustable Cells

Cell	Name	Original Value	Final Value
\$D\$7< Return M'sia Value		0.34218545	0.3553137
\$E\$7< return M'sia Growth		0.05243042	0.0465462
\$F\$7< Return International		0	0
\$G\$7< Return TRPAMALL Gove		0.45359786	0.5981401
\$H\$7< Return TRBPAMALL Corp		0.15178627	0
\$I\$74 return KLIBOR		0	0

Constraints

Cell	Name	Cell Value	Formula	Status	Slack
\$J\$74 rNAV		1	\$J\$74=1	Not Binding	0
\$D\$7< Return M'sia Value		0.3553137	\$D\$74<=1	Not Binding	0.6446863
\$E\$7< return M'sia Growth		0.04654619	\$E\$74<=1	Not Binding	0.9534538
\$F\$7< Return International		0	\$F\$74<=1	Not Binding	1
\$G\$7< Return TRPAMALL Gove		0.59814011	\$G\$74<=1	Not Binding	0.4018599
\$H\$7< Return TRBPAMALL Corp		0	\$H\$74<=1	Not Binding	1
\$I\$74 return KLIBOR		0	\$I\$74<=1	Not Binding	1
\$D\$7< Return M'sia Value		0.3553137	\$D\$74>=0	Not Binding	0.3553137
\$E\$7< return M'sia Growth		0.04654619	\$E\$74>=0	Not Binding	0.0465462
\$F\$7< Return International		0	\$F\$74>=0	Binding	0
\$G\$7< Return TRPAMALL Gove		0.59814011	\$G\$74>=0	Not Binding	0.5981401
\$H\$7< Return TRBPAMALL Corp		0	\$H\$74>=0	Binding	0
\$I\$74 return KLIBOR		0	\$I\$74>=0	Binding	0

Microsoft Excel 12.0 Answer Report
Worksheet: [Book1.xls]Kenanga Bon Islam
Report Created: 5/31/2014 11:39:44 AM

Target Cell (Min)

Cell	Name	Original Value	Final Value
\$L\$7< res^2		0.00167699	0.001657

Adjustable Cells

Cell	Name	Original Value	Final Value
\$D\$7< Return M'sia Value		0.01534015	0.0243691
\$E\$7< return M'sia Growth		0	0
\$F\$7< Return International		0.01313083	0.009014
\$G\$7< Return TRPAMALL Gove		0.32438646	0.4031886
\$H\$7< Return TRBPAMALL Corp		0.64714257	0.5634283
\$I\$74 return KLIBOR		0	0

Constraints

Cell	Name	Cell Value	Formula	Status	Slack
\$J\$74 rNAv		1	\$J\$74=1	Not Binding	0
\$D\$7< Return M'sia Value		0.02436913	\$D\$74<=1	Not Binding	0.9756309
\$E\$7< return M'sia Growth		0	\$E\$74<=1	Not Binding	1
\$F\$7< Return International		0.00901402	\$F\$74<=1	Not Binding	0.990986
\$G\$7< Return TRPAMALL Gove		0.40318857	\$G\$74<=1	Not Binding	0.5968114
\$H\$7< Return TRBPAMALL Corp		0.56342827	\$H\$74<=1	Not Binding	0.4365717
\$I\$74 return KLIBOR		0	\$I\$74<=1	Not Binding	1
\$D\$7< Return M'sia Value		0.02436913	\$D\$74>=0	Not Binding	0.0243691
\$E\$7< return M'sia Growth		0	\$E\$74>=0	Binding	0
\$F\$7< Return International		0.00901402	\$F\$74>=0	Not Binding	0.009014
\$G\$7< Return TRPAMALL Gove		0.40318857	\$G\$74>=0	Not Binding	0.4031886
\$H\$7< Return TRBPAMALL Corp		0.56342827	\$H\$74>=0	Not Binding	0.5634283
\$I\$74 return KLIBOR		0	\$I\$74>=0	Binding	0

Microsoft Excel 12.0 Answer Report
Worksheet: [Book1.xlsx]Libra ASnitaBOND
Report Created: 5/31/2014 11:41:09 AM

Target Cell (Min)

Cell	Name	Original Value	Final Value
\$L\$74	res^2	0.01182562	0.0117835

Adjustable Cells

Cell	Name	Original Value	Final Value
\$D\$74	Return M'sia Value	0	0
\$E\$74	return M'sia Growth	0	0
\$F\$74	Return International	0.00483822	0.0040172
\$G\$74	Return TRPAMALL Gove	0.3274127	0.4416529
\$H\$74	Return TRBPAMALL Corp	0.66774909	0.55433
\$I\$74	return KLIBOR	0	0

Constraints

Cell	Name	Cell Value	Formula	Status	Slack
\$J\$74	rNAV	1	\$J\$74=1	Not Binding	0
\$D\$74	Return M'sia Value	0	\$D\$74<=1	Not Binding	1
\$E\$74	return M'sia Growth	0	\$E\$74<=1	Not Binding	1
\$F\$74	Return International	0.00401716	\$F\$74<=1	Not Binding	0.9959828
\$G\$74	Return TRPAMALL Gove	0.44165289	\$G\$74<=1	Not Binding	0.5583471
\$H\$74	Return TRBPAMALL Corp	0.55432995	\$H\$74<=1	Not Binding	0.44567
\$I\$74	return KLIBOR	0	\$I\$74<=1	Not Binding	1
\$D\$74	Return M'sia Value	0	\$D\$74>=0	Binding	0
\$E\$74	return M'sia Growth	0	\$E\$74>=0	Binding	0
\$F\$74	Return International	0.00401716	\$F\$74>=0	Not Binding	0.0040172
\$G\$74	Return TRPAMALL Gove	0.44165289	\$G\$74>=0	Not Binding	0.4416529
\$H\$74	Return TRBPAMALL Corp	0.55432995	\$H\$74>=0	Not Binding	0.55433
\$I\$74	return KLIBOR	0	\$I\$74>=0	Binding	0

Microsoft Excel 12.0 Answer Report
Worksheet: [Book1.xlsx]MAAKL As_Saad
Report Created: 5/31/2014 11:42:06 AM

Target Cell (Min)

Cell	Name	Original Value	Final Value
\$L\$7< res^2		10.8539508	10.853951

Adjustable Cells

Cell	Name	Original Value	Final Value
\$D\$7< Return M'sia Value		1	1
\$E\$7< return M'sia Growth		0	0
\$F\$7< Return International		0	0
\$G\$7< Return TRPAMALL Gove		0	0
\$H\$7< Return TRBPAMALL Corp		0	0
\$I\$74 return KLIBOR		0	0

Constraints

Cell	Name	Cell Value	Formula	Status	Slack
\$J\$74 rNAv		1	\$J\$74=1	Not Binding	0
\$D\$7< Return M'sia Value		1	\$D\$74<=1	Binding	0
\$E\$7< return M'sia Growth		0	\$E\$74<=1	Not Binding	1
\$F\$7< Return International		0	\$F\$74<=1	Not Binding	1
\$G\$7< Return TRPAMALL Gove		0	\$G\$74<=1	Not Binding	1
\$H\$7< Return TRBPAMALL Corp		0	\$H\$74<=1	Not Binding	1
\$I\$74 return KLIBOR		0	\$I\$74<=1	Not Binding	1
\$D\$7< Return M'sia Value		1	\$D\$74>=0	Not Binding	1
\$E\$7< return M'sia Growth		0	\$E\$74>=0	Binding	0
\$F\$7< Return International		0	\$F\$74>=0	Binding	0
\$G\$7< Return TRPAMALL Gove		0	\$G\$74>=0	Binding	0
\$H\$7< Return TRBPAMALL Corp		0	\$H\$74>=0	Binding	0
\$I\$74 return KLIBOR		0	\$I\$74>=0	Binding	0