CHAPTER 4
RESEARCH FINDINGS AND ANALYSIS

This chapter discusses about the findings and data analysis of performance of the Islamic and conventional unit trust funds as contained in the samples. The performance is indicated by the unit trust return and Sharpe Index. In addition, the fund risk and its diversification are also analyzed. As far as the risk is concerned, two types of indicators are chosen namely standard deviation and beta coefficient. The former indicates the stand-alone risk and the latter indicates the market risk. Since the diversification is a significant element in a unit trust, the R-square (R^2) value, which represents the diversification, is also obtained. Besides that in order to identify the significant different between Islamic and conventional funds in the sample T test analysis is employed. Based on the output from the analysis, we will decide whether to reject the null hypothesis or otherwise.

4.1 DATA ANALYSIS

Table 4.1 Islamic Sample

Funds	Ave.return	Std.Dev	Sharpe	Adj.Sharpe	Beta	R^2
Putra BBMB	0.001553	0.047701	-0.359236	-0.351909	0.812947	0.91499
ABRAR	-0.004056	0.053883	-0.422113	-0.413499	0.733803	0.583978
ASBI	0.001093	0.038658	-0.455164	-0.445875	0.527424	0.586105
ASM Aiman	0.001915	0.027748	-0.604511	-0.592174	0.307985	0.387922
KL Ittikal	0.001662	0.031914	-0.533529	-0.522641	0.375057	0.434887
Ittikal Arab	0.008534	0.090483	-0.112230	-0.109939	0.891411	0.305604
RHB Mudha.	0.003012	0.037910	-0.413533	-0.405093	0.647383	0.91824
ASDI	0.003011	0.044148	-0.355103	-0.347856	0.651745	0.686235

Table 4.2 Conventional Sample

Funds	Ave.Return	Std.Dev	Sharpe	Adj.Sharpe	Beta	R^2
BBMB U.T	0.0014025	0.0517208	-0.33422774	-0.3274068	0.689249	0.559191
Arab 1st	0.0081542	0.0635165	-0.16585946	-0.1624746	0.827543	0.53450
ASM 1st	0.0009809	0.0527637	-0.33561217	-0.3287629	0.888527	0.892914
Pac.Premier	0.0044215	0.0417778	-0.34150997	-0.3345404	0.665363	0.798666
Maybank	0.0003185	0.0499197	-0.368001	-0.3604906	0.444259	0.249383
RHB Dynamic.	0.002869	0.0333507	-0.47435363	-0.4646729	0.552414	0.863891
KL. Saving	0.0007274	0.0308951	-0.58137165	-0.5695069	0.396227	0.517902
ASAS	0.0045974	0.060898	-0.23139702	-0.2266746	0.824041	0.576503

Table 4.3 Mean of Return, Risk and R^2 for Market Portfolio, Islamic Funds and Conventional Funds.

Fund	Mean Return	Mean Std.Dev	Mean Sharp	Mean.Adj.Shar	Beta	R^2
T. Bills	0.018689	0	-	-	0	-
Market	0.0016025	0.0561092	-0.30451719	-0.2983026	1.000000	1.00000
Islamic	0.0020907	0.0465557	-0.40692738	-0.3986232	0.618469	0.60224
Convent.	0.0029339	0.0481053	-0.35404156	-0.3468162	0.660953	0.6241

4.1.1 Fund Performance

Performance of the unit trust is based on various points of view. Return is one of the most important elements for indication of a particular unit trust. From the sample analyzed, five out of eight Islamic funds exceed the market's average return. Arab Malaysian Ittikal Fund gains the highest return that is 0.008534 compared to the market average return that is only 0.001602. This is followed by RHB Mudharabah Fund and Amanah Saham Darul Iman with 0.003012 and 0.003011 respectively. Another two funds that outperform the market return are KL Ittikal and ASM Aiman. The three funds that underperfom the market return

are Dana Putra BBMB, Amanah Saham Bank Islam, and Abrar Investment Fund. However, only Abrar has negative returns.

Using the Sharpe Index as an indicator after incorporating risk (standard deviation), it is shown that all the Islamic funds have negative index as well as index for market portfolio. The negative index may be due to the overall market slowdown, which has yet to fully recover after the economic downturn. Based on Adjusted Sharpe Index, only Arab Malaysian Ittikal Fund outperforms market index with –0.10994. The performance of the other funds such as Amanah Saham Darul Iman, Putra BBMB, and RHB Mudharabah Fund are below market index, that is –0.347856, -0.351909, and –0.405093 respectively. Different from the return yielded, the least performing among the funds is ASM Aiman with –0.592174.

The conventional fund sample shows that only fifty percent of the funds exceed the market portfolio average return. However, there are no funds that have negative yield. Consistent with previous study, which shows that the best performing funds come from the similar management company[1], from the analyzed sample the highest yield fund is found to be the Arab Malaysian First Fund with 0.0081542. The next performer is Amanah Saham Selangor with 0.0045974, and then followed by Pacific Premier Fund and RHB Dynamic Fund with 0.0044215 and 0.002869 respectively. Another four funds that have return below market are BBMB Unit Trust, ASM First Public, KL Savings Fund, and Maybank Unit Trust Fund.

As far as performance is concerned, after incorporating risk, Adjusted Sharpe Index shows that the best performer is Arab Malaysian First Fund and followed by Amanah Saham Selangor with –0.1624746 and –0.2266746 respectively. These are the only two funds that outperform market index and do slightly better than the Islamic sample in which only one fund is able to perform better than the

overall market. The funds that under perform are BBMB Unit Trust, ASM first Fund, Pacific Premier, Maybank Unit Trust, RHB Dynamic, and KL Savings.

According to the table 4.3 that summarizes the mean return and the mean Sharpe and Adjusted Sharpe index, there is no fund including the overall market which has the higher return than the three month Malaysian Treasury Bills. Besides, both the Islamic and conventional funds exceed market return (0.0016025) with 0.0020907 and 0.0029339 respectively. However, after risk is incorporated, it is proven that the market performs better than both samples in which the market adjusted Sharpe index is –0.2983026 compared to the mean of the adjusted Sharpe Index for the Islamic and Conventional samples that are -0.3986232 and –0.3468162 respectively. It also shows that in comparison, the conventional unit trusts have higher average return and it perform slightly better than Islamic unit trusts.

4.1.2 Risk

As mentioned earlier, the risk of a unit trust is measured by the standard deviation and the beta coefficient. The standard deviation represents the stand-alone risk whereas the beta indicates the market risk. The stand-alone risk can be reduced by the fund diversification. Hence, the highly diversified fund tends to have a lower value of standard deviation. On the other hand the higher the beta value the higher the risk that a particular fund has and the higher the tendency of an individual fund to move with the market.

According to table 4.1, Arab Malaysian Ittikal Fund has the highest standard deviation followed by Abrar Investment Fund with value of standard deviation of 0.090483 and 0.053883 respectively. The fund that has the lowest standard deviation value is ASM Aiman with 0.027748. In between the two extremes are among others, Dana Putra BBMB, Amanah Saham Darul Iman, Amanah Saham Bank Islam, RHB Mudharabah Fund and KL Ittikal Fund.

As comparison from the conventional fund sample, we will notice that KL Savings Fund has the lowest value of standard deviation with 0.0308951. In contrast, Arab Malaysian First Fund has the highest value with 0.0635165.

In terms of beta coefficient, for Islamic funds sample Arab Malaysian Ittikal Fund has the highest beta value of 0.891411, followed by Putra BBMB with 0.812947. Since the Arab Malaysian Ittikal Fund has the highest return and risk, it is consistent with the general financial assumption which stated that the higher the risk the higher the return.

For the conventional sample, the highest beta is ASM First Fund with 0.888527. The fund that has the lowest beta is KL Savings Fund with only 0.396227. In between these two extreme are Arab Malaysian First Fund, Amanah Saham Selangor, BBMB Unit Trust, Pacific Premier, RHB Dynamic and Maybank Unit Trust. The values of the beta and the standard deviation for conventional sample are shown in table 4.2.

As far as this study is concerned, the average risk for both systems (Islamic and conventional) samples must be compared. Thus, from the table 4.3, we find that the mean beta as a proxy of risk for the Islamic unit trusts (0.618469) is lower compared to mean beta for the conventional unit trusts that has a value of 0.660953. Besides, the mean standard deviation for Islamic fund sample also has a lower value compared to conventional fund sample with 0.0465557 for the former and 0.0481053 for the latter.

4.1.3 Degree of Diversification

One of the benefits of investing in unit trusts is the reduction of portfolio risk through diversification in a large number of securities. Investors, being generally

risk averse, would prefer less risk and more returns. The degree of diversification of a unit trust is measured by the R^2 statistic that ranges from 0 to1.

Regarding to Islamic sample, two funds are very well diversified. These are RHB Mudharabah and Dana Putra BBMB with R^2 value 0.91824 and 0.91499 respectively. Additionally, 3 other funds are fairly diversified with R^2 values above 0.5. These are Amanah Saham Darul Iman, Amanah Saham Bank Islam and Abrar. Another three funds are found to be poorly diversified with R^2 values less than 0.5 cutoff points. These are KL Ittikal, ASM Aiman and Ittikal Arab Malaysian Fund.

For conventional sample, seven out of eight funds have R^2 values above 0.5 and only one fund that is poorly diversified with R^2 value below 0.5. The most diversified fund is ASM first public and the least is Maybank Unit Trust with R^2 values are 0.892914 and 0.249383 respectively. The details of R^2 values for each fund in both samples are shown in table 4.1 and 4.2.

From the overall unit trust funds taken from both samples, after averaging them, we can see that mean R^2 for the conventional (0.624119) exceeds R^2 value for Islamic funds (0.602245). It means that conventional funds generally have better diversification than the Islamic fund. The reason why an Islamic fund is less diversified than conventional fund might be due to the restriction of investing in non-permissible stocks. However, the performance of the Islamic unit trusts will no longer be severely affected by such restriction since the Syariah Advisory Council of Securities Commission has approved seventy eight percent from the overall stocks traded in KLSE. Because of that, the gap between these two types of funds is also not so obvious.

4.1.4 Comparing Islamic and Conventional Unit Trust As Two Portfolios

Table 4.4 Mean Returns, Standard Deviation, Sharpe Index, Beta and R^2 for Islamic and Conventional Pool Portfolio.

Portfolio	Mean return	Std.dev	Sharpe	Adj.Sharpe	Beta	R^2
Market	0.001602	0.056109	-0.304517	-0.2983	1.000000	1.000000
Islamic	0.002091	0.037327	-0.444673	-0.435598	0.618368	0.864453
Conventional	0.002934	0.038669	-0.40744	-0.39912	0.660950	0.919931

For the sake of this research, comparing two systems performance could be done by various approaches. In addition to analyzing based on mean performance of unit trusts from two different samples as we have done above, comparing two pool portfolios can also be another approach.

Two portfolios, which consist of all funds in the respective sample, can be structured. Returns of the portfolios are derived by averaging the monthly return of every fund in the sample. For example the Islamic portfolio return for a particular month is obtained from the average of return of Islamic funds in the Islamic sample for the same month (refer to appendix 4). In order to get portfolio beta and R^2, the portfolio returns are regressed against the market returns as we have done before to every single unit trust in both samples.

As regard to the finding in the table 4.4, we found that both portfolios obtain higher return than the market. However, the Islamic portfolio has a lower average monthly return compared to the conventional, comprising of 0.002091 and 0.002934 respectively. Besides that, the Adjusted Sharpe Index also shows that conventional unit trust portfolio performed better than Islamic portfolio. Nevertheless, in terms of risk the conventional portfolio has higher risk with beta value of 0.660950 compared to the Islamic portfolio with beta of 0.618368. In concurrence with the finding shown in the table 4.1 and 4.2, R^2 for conventional portfolio was found higher than value of R^2 for Islamic Portfolio with 0.919931 and 0.864453 respectively. However, we cannot simply conclude that the

conventional funds perform better than the Islamic funds unless there is significant different in terms of performance between these two funds.

4.1.5 T-test

Table 4.5 Paired Samples Statistics and Test

		Mean	N	Std. Dev	t	df	Sig.(2-tailed)
Pair 1	MthRetIslamPort	0.002100	36	0.0373204	-.343	35	0.734
	MthRetConvPort	0.002934	36	0.0386688			
Pair 2	RetIslamU.Trust	0.002091	8	0.0034329	-.456	7	0.662
	RetConvU.Trust	0.002934	8	0.0026754			
Pair 3	SharIslamU.Trust	-0.398623	8	0.14314638	-.690	7	0.513
	SharConvU.Trust	-0.346816	8	0.12701942			

In order to identify the significant difference between Islamic and conventional unit trusts performance, a statistical analysis has been employed. We used T test for difference of means to analyze the selected data. Pair 1 in the table 4.5 shows the finding when monthly returns for Islamic and conventional portfolio are compared In addition to that, the other two variables that are compared in pair 2 and 3 are Average Return and Adjusted Sharpe Index.

From table 4.5 above, we can see that the mean for monthly return of portfolio, return of unit trusts in the sample and Sharpe Index for conventional are higher than the one of the Islamic. However, the standard deviation for pair 1 showed that Islamic has lower value compared to conventional. It means that even though Islamic Unit Trust has lower return and lower Sharpe Index, it still has an advantage over the conventional one because the conventional has a relatively higher risk.

On the other hand, if we look into the Significant Value there is no salient difference of all the three pairs between the Islamic and Conventional unit trust. In view of the above we are unable to reject H_0.

4.2 CONCLUSION

From the discussion in part one of this chapter we can see that conventional funds perform slightly well than the Islamic funds. Even though the Islamic funds have relatively lower return and less diversified than conventional, it still has a lower beta value, which is tantamount to a lower risk.

However, since there is no significant difference when t-test is employed, we cannot simply conclude that performance of the conventional unit trusts is higher than the Islamic unit trust. Thus, we failed to reject H_0 and found that Islamic funds perform as good as conventional funds.

Endnote

[1] Aw Mee Wah (1997), ***Measuring Unit Trust Fund Performance Using Different Benchmarks***, MBA project paper, University of Malaya, pp 74-76.