

# THE PERFORMANCE OF ISLAMIC UNIT TRUST FUNDS IN MALAYSIA: DOES PERSISTENCE EXIST?

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## Abstract

This paper examines Islamic unit trust funds' performance and evaluates whether the performance persists over several time periods. On average, overall funds' performance as well as each fund performance is evaluated. Besides using raw return, this paper also uses Sharpe index, Treynor index as well as Jensen Alpha index to evaluate the funds' performance. Evaluating persistence in performance is done by comparing the performance measures on year to year basis starting 1999 to 2003 and also on several time intervals of one (1999), two (1999-2000), three (1999-2001), four (1999-2002) and five (1999-2003) years. In addition, this study also ranks each trust fund according to the performance indicators. Top 25% and bottom 25% of the funds in the ranking are then analyzed to look at persistence in being in the place through the differing time intervals. The results show that persistence in performance of the overall funds, on average, cannot be proved in the differing time periods. However, the results differ when each fund is being evaluated. Some funds persist in performance while the others do not. Similar results are also shown in the ranking performance. Thus, the evidence of the persistence in performance could give some hints to the potential investors to carefully choose which funds to commit.

**Keywords:** Unit trust performance, Capital Asset Pricing Model, Persistence in Performance, Sharpe Index, Treynor Index, Jensen-Alpha Index

## **INTRODUCTION**

Unit trust fund is a fund set up by a management company to channel investors' money into a range of securities. It offers a variety of benefits to the investors in term of investment diversification, professional fund managers, higher potential returns, liquidity and a variety of investment instruments. In Malaysia, there are 5 categories of unit trusts, which are equity unit trust, property unit trust, Islamic unit trust, balanced and diversified unit trust and specialty unit trust. Each category provides specific investment objective to cater the diverse goals of investors.

The unit trust industry in Malaysia is becoming popular. The number of approved unit trust funds including the trust funds based on Syariah principles, increased from 52 in 1994 to 219 in October 2003. Since 1990s, Islamic trust funds, in particular, have shown rapid expansion especially in term of the number of unit trust funds, units in circulation and the net asset value (NAV). The net asset value of private Islamic trust funds, for example, increased nearly 650% from 1997 (NAV = RM384.82 million) to 2002 (NAV = RM2888.23 million). From the total net asset value of private sector funds, Islamic private sector funds contributed 13.6% in 2002 compared to 7.3% in 1997. This tremendous increase has shown a successful progress of Islamic trust funds in being one of the investment platforms for potential investors.

As of February 2004, there are 44 Islamic unit trust funds that provide an additional avenue for investors especially Muslims to participate in the capital market. In Islamic unit trust, the funds collected are invested in a portfolio of stocks from companies in which activities are in accordance with the Syariah principles. Specifically, the investments will not be made in companies involved in activities, products or services related to conventional banking, insurance and financial services that make business in gambling, alcoholic beverages, and non-halal food products and also use riba or usury interest in the business transactions.

Generally potential investors make an investment in a unit trust if it shows good performance and able to persist over time. Thus, studies on persistence in performance of unit trusts are of interest to potential investors as well as to fund managers. If persistence does occur, it is important for them to make use of past performance as an indicator for future

performance besides other investment guiding principles. Unfortunately, many studies on this meaningful phenomenon show ambiguous results.

In Malaysia, many studies done on the performance and the persistence in performance of unit trusts mainly focused on the conventional or non-Islamic trust funds. Studies on performance of unit trust funds based on Syariah law or Islamic law are relatively new. Zaidi (2003) and Mohd Azlan Shah et al (2003), for instances, have found that the performance of Islamic unit trust funds on average was below the conventional ones. However a question arises on whether such performances persist over time since the studies previously done focused on only one period of time.

This paper is our attempt to evaluate the persistence in performance of Islamic unit trust funds in Malaysia. The performance is based on average raw return and risk adjusted returns using Sharpe index, Treynor index and Jensen Alpha index. The persistence in performance is evaluated according to the performance of the return in each year and in several time intervals of one, two, three, four and five years. The persistency is also looked at the individual trust fund's ranking performance within top 25% and also bottom 25%.

The organization of this paper is as follows. Section II reviews some of the past-related studies on the issue, while section III describes data and research methodology used to measure the performance and the persistence of performance of unit trust funds. Empirical result are presented and analyzed in section IV. Finally, section V consists of some concluding remarks and policy implications.

## **LITERATURE REVIEW**

Studies on performance and persistence in performance of unit trust are numerous, especially in the United States (US) as well as in the United Kingdom (UK). Early empirical studies in the US done by Sharpe (1966), and Jensen (1968) found that the mutual funds did perform poorly against the market. The funds returns on average did not outperform the market returns. Studies in 1980s, nevertheless, have shown some positive implications on the mutual funds progress. Henriksson (1984) and Chang and Lewellen (1984) revealed that fund managers during 1970s have access to information

to offset their expenses. Ippolito (1989) particularly, reported that mutual funds with higher turnover, fees, and expenses tend to earn sufficiently high return to offset the higher charges.

Empirical findings in 1990s, showed some development in the performance persistence of the mutual funds. Hendricks et al (1993), Goetzmann and Ibbotson (1994) and Brown and Goetzmann (1995) found that past performance could provide information about future performance in the mutual funds. They asserted that buying good-performing funds over short-term investment period could give investors significant risk-adjusted returns.

Studies on UK mutual funds also revealed some persistency in the performance. Blake and Timmerman (1998) found that the historically best-performing quartile of funds performs better in the following period than the historically worst-performing quartile of funds. Quigley and Sinquefeld (1998), on the other hands, found that the bad performing funds do persist, net of expenses, rather than the good performing funds.

In Singapore, empirical findings by Chua and Koh (1985), Koh and Koh (1987), and Ariff and Johnson (1990) found no evidence that the unit trust could outperform the market. Chia and Tse (2000) uncovered a little consistency in the performance ranking of the evaluated portfolios. However, they found evidence of repeat performance of some top funds. Fund managers could make excess returns above the risk-free rate in the medium to long term.

In Malaysia, early empirical study by Chua (1985) found that on average, the unit trust funds outperformed the market return and the performance was fairly consistent over time. The high performance funds are usually associated with their low asset size, low expense ratio and low portfolio turnover. Studies by Ewe (1994), Chuan (1995), Shamser and Annuar (1995) and Hin and Wah (1997) nevertheless, found contradicting results. The returns on unit trust funds, on average were lower than the market return. Ewe (1994) suggested that the unit trust funds were poorly managed and fund managers did not have ability to forecast accurately the movement of stock price and other investment. Shamser and Annuar (1995) also found inconsistency of the funds performance over time and the degree of diversification was below expectation. They also concluded that the poor performance of the funds

could result from the regulatory constraints imposed by authorities on the amount and type of investment allowed and a lack of professionalism in the industry. Hin and Wah (1997) added that difference performance measurement did not influence ranking performance of the unit trust funds. Recent study by Fauziah, Suhaimi and Lai (2002) on 78 unit trust funds in Malaysia also found similar results. They suggested that to get higher return, investor should choose unit trust funds that are larger in size and exist longer in the market.

Studies on the performance and the persistence in performance of Islamic unit trust funds in Malaysia are relatively new since the existence of most of the Islamic unit trusts only begins in 1990s. Even though using different market benchmarks, empirical studies on Islamic unit trust funds by Zaidi (2003) and Mohd Azlan Shah et al (2003) found that, on average, most of the funds returns were negative and could not outperform the market. Nevertheless the studies did not investigate the persistence in performance.

Our study attempts to reexamine the performance of Islamic unit trust funds and then evaluate whether the performance persists over time. The data and methodology used in the study are explained below.

## **DATA AND RESEARCH METHODOLOGY**

This study examines performance of 12 Islamic unit trust funds and evaluates whether the performance persists over time<sup>1</sup>. The list of all funds and their abbreviations are shown in Appendix 1. In general, the weekly closing prices from May 1999 to the first week of May 2003 are selected. This time period is chosen to minimize the effect of economic crisis which had occurred in 1997. Since available, The Kuala Lumpur Syariah Index (KLSI) is selected as a benchmark for the market return and is also used in the computation of betas based on the Capital Asset Pricing Model (CAPM). The Islamic weekly

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<sup>1</sup> There are 44 Islamic unit trusts currently available in the market. We do not study all of them since most of them only begin in 2000. We also assume that survivorship bias does not occur since all the funds are present in all the periods selected. Thus, issue of performance persistence caused by the survivorship bias is immaterial.

inter bank rates (IIBR) are selected to represent the risk-free rates. Since the rates are quoted annually, they have to be converted to weekly basis. For comparison purpose, we also present the Kuala Lumpur Composite index (KLCI) as the market benchmark. All data are collected from the Bloomberg Data Base and Bank Negara website.

To begin with, the weekly return of each of the unit trust funds is computed as below.

$$R_{it} = (P_{it} - P_{i,t-1}) / P_{i,t-1} \tag{1}$$

where  $R_{it}$  is the weekly return of the fund  $i$  at the week  $t$  and  $P_{it}$  is the unit trust price of fund  $i$  at the end of week  $t$ . The price is usually termed as net asset value per unit. In the meantime, the weekly return of the market portfolio is calculated as follows.

$$R_{mt} = (I_t - I_{t-1}) / I_{t-1} \tag{2}$$

where  $R_{mt}$  is the weekly return of the market portfolio at week  $t$  and  $I_t$  is the level of the Kuala Lumpur Syariah Index at the end of week  $t$ .

Risk of holding an asset consists of systematic risk and unsystematic risk. Systematic risk, usually symbolized with a beta, is risk that affects every firm while unsystematic risk is the one that only affect specific firms and can be lessened by diversification. To estimate Beta or systematic risk of a unit trust, we use the Capital Asset Pricing Model (CAPM). The traditional CAPM was derived independently by Sharpe, Lintner and Mossin in the mid 1960. The CAPM essentially postulates an equilibrium relationship between risk and expected return of risky asset. A greater risk should carry a greater return. More volatile or more risky funds have betas larger than one while less volatile or less risky funds have betas smaller than 1.0. Beta is used as an indicator for investors to judge systematic risks between different funds. The CAPM in term of risk premium is estimated as follows;

$$R_{pt} - R_{ft} = \beta_p [E(R_{mt} - R_{ft})] + E_{pt} \tag{3}$$

where,

$R_{pt} - R_{ft}$  = the risk premium on the portfolio  $p$

$R_{mt} - R_{ft}$  = the market risk premium during period  $t$

$\beta_p$  = the beta coefficient for portfolio  $p$

$E_{pt}$  = a random error term for portfolio  $p$  in period  $t$

We use three measures of performance in evaluating the Islamic unit trust funds. They are Sharpe (1966) Index, Treynor (1965) Index, and Jensen (1969) Alpha Index. Sharpe (1966) measure of portfolio performance is called the reward-to-variability ratio (RVAR), which is actually a ratio of excess portfolio return to the standard deviation of its return. Using the Sharpe Index, higher value means better portfolio performance. Thus

$$\begin{aligned} \text{RVAR} &= [\text{average TR}_p - \text{average RF}] / \text{SD}_p \quad (4) \\ &= \text{Excess return/Risk} \end{aligned}$$

where,

TR = total return for portfolio p during some period of time

RF = risk free rate of return during the period

SD<sub>p</sub> = the standard deviation of return for portfolio p during the period

The Treynor Index (1965) presented a similar measure called reward-to-volatility ratio (RVOL). This measurement relates the averages excess return on the portfolio during some period to its systematic risk as measured by the portfolio's beta. The reward-to-volatility ratio is;

$$\text{RVOL} = \{\text{average TR}_p - \text{average RF}\} / B_p \quad (5)$$

where  $B_p$  is the beta value of the fund estimated from the CAPM. In this case, we are calculating the excess return per unit of the systematic risk. As with RVAR, higher value of RVOL indicates better portfolio performance.

The Jensen measure usually known as Jensen Alpha Index, introduced by Jensen (1969) is used to determine the size of the excess return achieved by a fund. This measurement is based on the CAPM except it has an intercept known as alpha. The alpha is estimated from an equation presented below.

$$R_{pt} - R_{ft} = \alpha_p + \beta_p [E(R_{mt} - R_{ft})] + E_{pt} \quad (6)$$

The CAPM asserts that equilibrium condition should result in a zero intercept term. Therefore, the alpha should measure the contribution of portfolio managers since it represents the average incremental rate of return per period beyond the return attributable to the level of the risk assumed. Specifically, if alpha is significantly positive, there is evidence of superior performance and vice versa, and if the alpha insignificantly different from zero, there is evidence that the portfolio manager has matched the market on the risk-adjusted basis.

Equation 6 can be rearranged to better demonstrate what  $\alpha_p$  really is. Rearranging terms, the equation becomes:

$$\alpha_p = (\bar{R}_p - \bar{R}_f) - [\bar{\beta}_p (\bar{R}_m - \bar{R}_f)] \quad (7)$$

where the bars above the variables indicate averages for the period measured.

Equation 7 states that,  $\alpha_p$  is the different between the actual return on portfolio p during some period and the risk premium on the portfolio that should have been earned, given its level of the systematic risk and the use of the CAPM.

We look at the persistence in funds' performance by two ways. First, we examine whether the performance of the average raw returns and the risk adjusted returns of overall funds as well as the individual fund can persist over year to year basis starting 1999 to 2003 and also over several time periods of two (1999-2000), three (1999-2001), four (1999-2002) and five years (1999-2003). Second, we rank each trust fund according to the performance indicators. Top 25% and bottom 25% of the funds in the ranking are then analyzed to look at persistence in being in the ranking through the differing time intervals. The results of all findings are presented in the next section.

## EMPIRICAL FINDINGS

Table 1 and 2 indicate the average raw returns of all funds in each year and in several time intervals against the market benchmarks (the KLSI and the KLCI) and the risk free rates. On average, the funds raw returns were positive and above both the market rates as well as the risk free rates in 1999. However, the performance did not persist, since in 2000 and 2001, the returns were below the market rates. In 2002, they were above the market rates again even though in negative sign and in 2003, they were the worst with the average of -0.2585 percent weekly. The similar trend is also found in table 2 wherein the performance of the trust funds against the market was up and down given the average returns were calculated in time interval of one to five years.

Table 1: Yearly Average Returns, Risks and Diversification of Trust Funds

Year	1999	2000	2001	2002	2003
<u>Returns</u>					
Funds –Raw Return	0.4198	-0.4295	0.0629	-0.0519	-0.2585
Funds – Sharpe Index	0.1090	-0.1347	0.0039	-0.0563	-0.2099
Funds – Treynor Index	0.4912	-0.6153	0.0150	-0.1273	-0.4161
KLSI	0.2910	-0.3291	0.0793	-0.1266	-0.1678
KLCI	0.2459	-0.2845	0.0771	-0.1031	-0.1884
IIBR weekly	0.0485	0.0515	0.0538	0.0524	0.0534
<u>Portfolio Risks</u>					
Funds-St dev	3.6513	3.5329	2.3374	1.6442	1.4035
Funds-Beta	0.7601	0.7772	0.5893	0.7204	0.7423
<u>Market Risks</u>					
KLSI- St dev	3.4371	3.3191	2.6754	1.5400	1.5120
KLCI- St Dev	3.8523	3.4736	2.9431	1.7547	1.6502
<u>Diversification</u>					
R <sup>2</sup>	0.5627	0.5461	0.5169	0.4894	0.7094
No. of Observations	33	52	52	52	18

Table 2: Returns, Risks and Diversification on Different Time Intervals

Year	1999	1999-2000	1999-2001	1999-2002	1999-2003
<u>Returns</u>					
Funds – Raw Return	0.4198	-0.0998	-0.0380	-0.0418	-0.0607
Funds – Sharpe Index	0.1090	-0.0390	-0.0263	-0.0312	-0.0390
Funds – Treynor Index	0.4912	-0.1997	-0.1257	-0.1286	-0.1543
KLSI	0.2910	-0.0884	-0.0247	-0.0528	-0.0628
KLCI	0.2459	-0.0785	-0.0195	-0.0425	-0.0552
IIBR weekly	0.0485	0.0503	0.0516	0.0519	0.0520
<u>Portfolio Risks</u>					
Funds-St dev	3.6513	3.6050	3.1977	2.8565	2.7640
Funds-Beta	0.7601	0.7704	0.7201	0.7201	0.7207
<u>Market Risks</u>					
KLSI- St dev	3.4371	3.3588	3.1079	2.7627	2.6750
KLCI- St Dev	3.8523	3.6120	3.3634	3.0033	2.9083
<u>Diversification</u>					
R <sup>2</sup>	0.5627	0.5408	0.5151	0.5061	0.5062
No. of Observations	33	85	137	189	207

Compared to the risk free rates, the funds only managed to be in superior place in 1999 and 2001 when the average raw returns were above the risks free rates while most of the time the performance was no better than the performance from doing a buy and hold strategy. Thus, the persistency of the performance using the average raw returns of all funds clearly cannot be proved. Furthermore, using the risk adjusted returns of Sharpe index and Treynor Index to measure performance also gives no meaningful indicators of persistency.

The funds risks are symbolized by the standard deviation and beta. Overall, the risks termed by standard deviation show a decreasing trend, perhaps indicating that the volatility of the funds price decreased as time goes away from the economic crisis period of 1997-1998. The betas were all below one averaging around 0.7 in each year and in differing time periods. This shows that the Islamic trust funds are of low risk type of investment. Market risks, symbolized by the KLSI and KLCI standard deviations were also decreasing overtime in all differing periods.

As R-squared from the CAPM can be used to indicate the degree of diversification of the investments, the results show that, on average the degree of diversification in Islamic unit trust funds is around 0.5. This reveals that fund managers for Islamic funds, on average do not diversify well enough in a large number of securities.

Table 3 lists out ranking performance of each trust fund based on the raw returns. It indicates the performance of each fund against the market (KLSI). The figures reveal that the performance of some funds can persist over time while others do not. Investigating through different time horizons, Abrar Investment Fund (AIF), Tabung Amanah Bakti (TAB), BHLB Pacific Dana Al-Ihsan (BHLBPDI) and Kuala Lumpur Itikal Fund (KLIF) are able to perform above the market at all time while Amanah Saham Wanita (ASW) fails to do so over the same period. Thus, the persistence in performance does exist in individual fund.

In addition, table 4 and 5 list out the ranking performance based on the risk adjusted returns through the Sharpe and Treynor indexes in each year and in several time intervals. The tables indicate that the ranks derived from the Sharpe and Treynor indexes are not so much different. The coefficient of correlation between the ranks of the Sharpe and Treynor indexes in each year

and in each time interval, on average is more than 0.95. Thus, the use of Sharpe and Treynor indexes as an indicator to the ranking performance is consistent. Furthermore, table 4 and 5 present the Jensen Alpha Index of each fund. The results show that none of these alphas significant at 5% level. Hence, there is no evidence that the fund managers have the ability to outperform the market.

To better understand the ranking performance, the top 25% and the bottom 25% of the funds are arranged in simplified tables 6, 7, 8 and 9. The idea is to extract which funds persist in being the top 25% or the bottom 25%. As the table 6 indicates, none of the funds persist in being the top 25% and bottom 25% all the time. The funds that mostly appeared in top 25% is TAB (three times out of five years), while ASW appeared most in the bottom 25% (four times). Table 7 further analyzed the ranking performance through difference time horizons. It is found that TAB is able to appear in the highest place in top 25% while ASW is in the lowest place in the bottom 25% in all period of different time intervals. This shows that the persistence in being in the ranking cannot be rejected. Similar results are also shown by table 8 and 9, using Sharpe and Treynor indexes to measure the ranking performance.

(i)  
Table 3: Performance Ranking Based on Raw Returns  
on Yearly Basis and Different Time Intervals

Year	1999		2000		2001		2002		2003	
	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
Average	0.4829 *	5	-0.5144	7	0.2200 *	1	0.0916 *	1	-0.2516	9
ASK	0.2708	9	-0.5245	8	0.1673 *	2	-0.0031 *	4	-0.0221 *	1
ASDI	1.0983 *	1	-0.6556	11	0.0775	7	-0.0421 *	8	-0.1499 *	7
AIF	0.6803 *	2	-0.3612	5	-0.1999	12	-0.4085	12	-0.3971	11
TIAM	0.5254 *	3	-0.1813 *	2	0.0765	8	0.0395 *	3	-0.1470 *	6
TAB	<b>0.4149 *</b>	<b>6</b>	<b>-0.2147 *</b>	<b>3</b>	<b>0.1367 *</b>	<b>4</b>	<b>-0.0297 *</b>	<b>5</b>	<b>-0.0371 *</b>	<b>2</b>
<b>BHLBPD</b>	0.1934	11	-0.4045	6	0.0818 *	6	0.0769 *	2	-0.2043 *	8
ASBI	0.2922 *	7	-0.6031	10	0.0832 *	5	-0.1096 *	11	-0.3593	10
DPBBMB	0.0568	12	-0.7085	12	0.0245	10	-0.0405 *	7	-0.4153	12
ASW	0.2913 *	8	-0.1146 *	1	0.0432	9	-0.0590 *	9	-0.1353 *	4
KLIF	0.2415	10	-0.2919 *	4	-0.1039	11	-0.0987 *	10	-0.1387 *	5
PDA	0.4895 *	4	-0.5793	9	0.1485 *	3	-0.0390 *	6	-0.1045 *	3
RHBMF										

(ii)  
Table 3: Performance Ranking Based on Raw Returns on Yearly Basis and Different Time Intervals

Year	1999		1999-2000		1999-2001		1999-2002		1999-2003	
	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
Average										
ASK	0.4829 *	5	-0.1272	7	0.0046 *	5	0.0285 *	3	0.0120 *	3
ASDI	0.2708	9	-0.2158	10	-0.0704	8	-0.0519 *	8	-0.069	8
AIF	<b>1.0983 *</b>	<b>1</b>	<b>0.0253 *</b>	<b>5</b>	<b>0.0451 *</b>	<b>3</b>	<b>0.0211 *</b>	<b>4</b>	<b>0.0107 *</b>	<b>5</b>
TLAM	0.6803 *	2	0.0431 *	2	-0.0491	7	-0.148	11	-0.1946	11
TAB	<b>0.5254 *</b>	<b>3</b>	<b>0.0931 *</b>	<b>1</b>	<b>0.0868 *</b>	<b>1</b>	<b>0.0738 *</b>	<b>1</b>	<b>0.0565 *</b>	<b>1</b>
BHLBPD										
I	<b>0.4149 *</b>	<b>6</b>	<b>0.0297 *</b>	<b>4</b>	<b>0.0703 *</b>	<b>2</b>	<b>0.0428 *</b>	<b>2</b>	<b>0.0334 *</b>	<b>2</b>
ASBI	0.1934	11	-0.1724	9	-0.0759	9	-0.0339 *	6	-0.0401 *	6
DPBBMB	0.2922 *	7	-0.2555	11	-0.127	11	-0.1222	10	-0.1546	10
ASW	0.0568	12	-0.4114	12	-0.2459	12	-0.1894	12	-0.2002	12
KLIF	<b>0.2913 *</b>	<b>8</b>	<b>0.0430 *</b>	<b>3</b>	<b>0.0431 *</b>	<b>4</b>	<b>0.0150 *</b>	<b>5</b>	<b>0.0117 *</b>	<b>4</b>
PDA	0.2415	10	-0.0848 *	6	-0.0921	10	-0.0939	9	-0.1394	9
RHBMF	0.4895 *	4	-0.1644	8	-0.0456	6	-0.0438 *	7	-0.0543 *	7

Note:

- \* indicates that the fund performance is above the market.

- Figures in bold show that the fund persists over time.

Table 4: Performance Ranking Based on Risk-Adjusted Return on Yearly Basis

Year	1999		2000		2001		2002		2003	
	Sharp	Rank	Sharp	Rank	Sharp	Rank	Sharp	Rank	Sharp	Rank
ASK	0.1171	5	-0.1723	9	0.067	1	0.0291	1	-0.2513	8
ASDI	0.0628	8	-0.1537	7	0.0396	3	-0.0273	4	-0.1822	5
AIF	0.3024	1	-0.1698	8	0.0055	8	-0.0472	5	-0.1002	2
TIAM	0.1698	3	-0.1095	5	-0.1096	12	-0.1998	12	-0.267	9
TAB	0.18	2	-0.081	3	0.0129	6	-0.0097	3	-0.173	4
BHLBPD1	0.115	6	-0.0576	1	0.0641	2	-0.064	8	-0.1069	3
ASBI	0.0445	11	-0.1265	6	0.0135	5	0.0185	2	-0.2199	7
DPBBMB	0.0579	10	-0.1772	10	0.0111	7	-0.1006	11	-0.3495	12
ASW	0.0014	12	-0.1845	11	-0.0131	10	-0.0544	6	-0.2935	11
KLIF	0.0732	7	-0.0789	2	-0.0074	9	-0.0766	9	-0.0749	1
PDA	0.058	9	-0.1057	4	-0.074	11	-0.0804	10	-0.2894	10
RHBMF	0.1256	4	-0.1997	12	0.0377	4	-0.0636	7	-0.2113	6
Indexes	Treynor	Rank	Treynor	Rank	Treynor	Rank	Treynor	Rank	Treynor	Rank
ASK	0.5906	5	-1.0274	12	0.2605	1	0.072	1	-0.3944	7
ASDI	0.3499	7	-0.7386	9	0.1654	3	-0.0972	5	-0.3978	8
AIF	1.3188	1	-0.6837	7	0.0337	8	-0.0935	4	-0.1583	2
TIAM	0.6516	4	-0.4794	4	-0.3827	12	-0.4579	12	-0.5356	10
TAB	0.7556	3	-0.331	2	0.0387	7	-0.0168	3	-0.2672	4
BHLBPD1	0.437	6	-0.3415	3	0.1844	2	-0.1113	6	-0.1708	3
ASBI	0.1861	11	-0.5273	5	0.0572	5	0.0558	2	-0.3655	6
DPBBMB	0.2206	10	-0.7016	8	0.0411	6	-0.2127	10	-0.6106	11
ASW	0.0153	12	-0.8912	11	-0.0688	10	-0.1166	8	-0.4668	9
KLIF	0.2751	9	-0.2865	1	-0.0252	9	-0.2057	9	-0.1388	1
PDA	0.2924	8	-0.553	6	-0.2615	11	-0.2294	11	-1.1552	12
RHBMF	0.801	2	-0.8228	10	0.1377	4	-0.1139	7	-0.3326	5

Indexes	Jensen	Jensen	Jensen	Jensen	Jensen	Jensen
ASK	0.2574	-0.3611	0.15	0.1383	-0.0964	-0.1373
ASDI	0.0686	-0.283	0.0961	0.0474	0.0619	0.0619
AIF	0.8611	-0.3177	0.0058	0.0876	-0.4425	-0.4425
TIAM	0.3987	-0.0862	-0.2706	-0.2846	-0.0314	-0.0314
TAB	0.3255	0.0354	0.0078	0.1272	0.036	0.036
BHLBPI	0.1639	0.0309	0.0714	0.0506	-0.0643	-0.0643
ASBI	-0.0441	-0.1285	0.0155	0.1045	-0.358	-0.358
DPBBMB	-0.0243	-0.3035	0.0112	-0.026	-0.1973	-0.1973
ASW	-0.1232	-0.4412	-0.0401	0.0505	0.0458	0.0458
KLIF	0.0289	0.0553	-0.0213	-0.0146	-0.5544	-0.5544
PDA	0.0331	-0.1085	-0.1731	-0.0336	-0.0748	-0.0748
RHBMF	0.3091	-0.3436	0.0772	0.053		

Note:

- None of the funds' Jensen Alpha Index significant at 5 % level.

- Correlation coefficient between the ranks of both indexes is 0.96 (1999), 0.88 (2000), 0.99 (2001), 0.96(2001), 0.92 (2003)

Table 5: Performance Ranking Based On Risk Adjusted Return on Different Time Horizons

Year	1999		1999-2000		1999-2001		1999-2002		1999-2003	
	Sharp	Rank	Sharp	Rank	Sharp	Rank	Sharp	Rank	Sharp	Rank
ASK	0.1171	5	-0.0512	7	-0.0151	5	-0.0085	4	-0.0152	4
ASDI	0.0628	8	-0.0725	10	-0.0361	8	-0.0338	7	-0.0408	7
AIF	0.3024	1	-0.0063	5	-0.0016	3	-0.0085	3	-0.0118	3
TIAM	0.1698	3	-0.0019	2	-0.0307	6	-0.0657	11	-0.0817	12
TAB	0.18	2	0.0153	1	0.0144	1	0.01	1	0.0021	1
BHLBPDI	0.115	6	-0.005	4	0.0056	2	-0.0031	2	-0.0067	2
ASBI	0.0445	11	-0.0643	8	-0.0424	9	-0.0323	6	-0.0362	6
DPBBMB	0.0579	10	-0.0784	11	-0.0514	11	-0.0566	10	-0.0695	9
ASW	0.0014	12	-0.0946	12	-0.073	12	-0.0674	12	-0.0733	11
KLIF	0.0732	7	-0.0028	3	-0.0038	4	-0.018	5	-0.0203	5
PDA	0.058	9	-0.0413	6	-0.0498	10	-0.0552	9	-0.0732	10
RHBMF	0.1256	4	-0.0646	9	-0.032	7	-0.0356	8	-0.0411	8
Year	1999		1999-2000		1999-2001		1999-2002		1999-2003	
Indexes	Treynor	Rank	Treynor	Rank	Treynor	Rank	Treynor	Rank	Treynor	Rank
ASK	0.5906	5	-0.2842	8	-0.0749	5	-0.0376	4	-0.0646	4
ASDI	0.3499	7	-0.3686	11	-0.1713	8	-0.1481	8	-0.1724	8
AIF	1.3188	1	-0.0267	5	-0.0075	3	-0.0347	3	-0.0465	3
TIAM	0.6516	4	-0.008	2	-0.1204	6	-0.2346	11	-0.2848	10
TAB	0.7556	3	0.0634	1	0.0541	1	0.0332	1	0.0069	1
BHLBPDI	0.437	6	-0.0257	4	0.0265	2	-0.0128	2	-0.0263	2
ASBI	0.1861	11	-0.2682	7	-0.1734	9	-0.1207	6	-0.131	6
DPBBMB	0.2206	10	-0.3053	9	-0.1937	10	-0.1916	9	-0.2275	9
ASW	0.0153	12	-0.6347	12	-0.4624	12	-0.3674	12	-0.382	12
KLIF	0.2751	9	-0.0105	3	-0.0138	4	-0.0599	5	-0.0656	5
PDA	0.2924	8	-0.2123	6	-0.2291	11	-0.2313	10	-0.3044	11
RHBMF	0.801	2	-0.3157	10	-0.1425	7	-0.1381	7	-0.1537	7

Year	1999	1999-2000	1999-2001	1999-2002	1999-2003
Indexes	Jensen	Jensen	Jensen	Jensen	Jensen
ASK	0.2574	-0.0911	0.0009	0.0417	0.0311
ASDI	0.0686	-0.1662	-0.0676	-0.0305	-0.0405
AIF	0.8611	0.1054	0.0603	0.062	0.0607
TIAM	0.3987	0.1184	-0.0368	-0.1109	-0.1475
TAB	0.3255	0.1365	0.0849	0.0912	0.0805
BHLBPI	0.1639	0.0909	0.0725	0.0651	0.0627
ASBI	-0.0441	-0.1077	-0.0714	-0.0114	-0.0114
DPBBMB	-0.0243	-0.1672	-0.1082	-0.0791	-0.1026
ASW	-0.1232	-0.3614	-0.2486	-0.1728	-0.1767
KLIF	0.0289	0.09	0.039	0.0276	0.0303
PDA	0.0331	-0.0469	-0.0958	-0.0799	-0.1194
RHBMF	0.3091	-0.1206	-0.0451	-0.0232	-0.027

Note:

- None of the funds' Jensen Alpha Index significant at 5 % level.
- Correlation coefficient between the ranks of both indexes is 0.96 (1999), 0.97 (1999-2000), 0.99 (1999-2001), 0.99(1999-2001), 0.97 (1999-2003)

Table 6: Performance Ranking Based on Raw Return on Yearly Basis

Rank	1999	2000	2001	2002	2003
Top 25%					
1	AIF	KLIF	ASK	ASK	ASDI
2	TIAM	TAB	ASDI	ASBI	BHLBPDI
3	TAB	BHLBPDI	RHBMF	TAB	RHBMF
Bottom 25%					
10	PDA	DPBBMB	ASW	PDA	DPBBMB
11	ASBI	AIF	PDA	DPBBMB	TIAM
12	ASW	ASW	TIAM	TIAM	ASW

Table 7: Performance Ranking Based on Raw Return on Different Time Intervals

Rank	1999	1999-2000	1999-2001	1999-2002	1999-2003
Top 25%					
1	AIF	TAB	TAB	TAB	TAB
2	TIAM	TIAM	BHLBPDI	BHLBPDI	BHLBPDI
3	TAB	KLIF	AIF	ASK	ASK
Bottom 25%					
10	PDA	ASDI	PDA	DPBBMB	DPBBMB
11	ASBI	DPBBMB	DPBBMB	TIAM	TIAM
12	ASW	ASW	ASW	ASW	ASW

## CONCLUSION

The Islamic unit trust funds are now becoming increasingly popular to Malaysian investors. This is especially for the Muslim who needs alternative platform of investments which do not deal with non-halal activities. For these investors, investing in Islamic funds does not only provide them with profitable returns when proper measures are taken, but it can also help others such as firms specifically and the ummah generally. At the same time, it does not disobey the rules prescribed by the Al-Quran.

Knowing which funds to invest is indeed a crucial task. Investors need to verify all the required information and study the performance of each fund. This paper helps in evaluating the performance and examining the existence of persistence in the performance of Islamic trust funds in Malaysia. 12 unit trust funds that comply with Syariah principles are chosen in this study. Performance of each fund is evaluated using raw returns as well as the risk adjusted returns based on the Sharpe index and the Treynor index for a period of May 1999 to May 2003. Persistence in performance is then analyzed by comparing the performance indicators in each year and also in several time intervals of one (1999), two (1999-2000), three (1999-2001), four (1999-2002) and five (1999-2003) years. Both performance persistence of overall funds and each fund on average are investigated. In addition, this study also ranks each trust fund according to the performance indicators. Top 25% and bottom 25% of the funds in the ranking are then evaluated to look at persistence in being in the place through the differing time intervals.

The results show that persistence in performance measured by average raw returns as well as the risk adjusted returns of all the funds cannot be proved in the differing time periods. The funds outperform the market at one time but fail to persist at other time. However, similar conclusion cannot be made on each individual fund. It is found that some funds can persist over time than the others. Abrar Investment Fund (AIF), Tabung Amanah Bakti (TAB), BHLB Pacific Dana Al-Ihsan (BHLBPDA) and Kuala Lumpur Itikal Fund (KLIF) are examples of the good performing funds that show persistency while Amanah Saham Wanita is an example of bad performing fund that persists.

Table 8: Top 25% and Bottom 25% of Funds on Individual Years

Rank	1999		2000		2001		2002		2003	
	Sharpe	Treynor	Sharpe	Treynor	Sharpe	Treynor	Sharpe	Treynor	Sharpe	Treynor
Top 25 %										
1	AIF	AIF	BHLBPDI	KLIF	ASK	ASK	ASK	ASK	KLIF	KLIF
2	TAB	RHBMF	KLIF	TAB	BHLBPDI	BHLBPDI	ASBI	ASBI	AIF	AIF
3	TIAM	TAB	TAB	BHLBPDI	ASDI	ASDI	TAB	TAB	BHLBPDI	BHLBPDI
Bottom 25%										
10	DPBBMB	DPBBMB	DPBBMB	RHBMF	ASW	ASW	PDA	DPBBMB	PDA	TIAM
11	ASBI	ASBI	ASW	ASW	PDA	PDA	DPBBMB	PDA	ASW	DPBBMB
12	ASW	ASW	RHBMF	ASK	TIAM	TIAM	TIAM	TIAM	DPBBMB	PDA

Table 9: Top 25 % and Bottom 25% of Funds on Different Time Horizons

Rank	1999		1999-2000		1999-2001		1999-2002		1999-2003	
	Sharpe	Treynor	Sharpe	Treynor	Sharpe	Treynor	Sharpe	Treynor	Sharpe	Treynor
Top 25 %										
1	AIF	AIF	TAB	TAB	TAB	TAB	TAB	TAB	TAB	TAB
2	TAB	RHBMF	TIAM	TIAM	BHLBPDI	BHLBPDI	BHLBPDI	BHLBPDI	BHLBPDI	BHLBPDI
3	TIAM	TAB	KLIF	KLIF	AIF	AIF	AIF	AIF	AIF	AIF
Bottom 25%										
10	DPBBMB	DPBBMB	ASDI	RHBMF	PDA	DPBBMB	DPBBMB	PDA	PDA	TIAM
11	ASBI	ASBI	DPBBMB	ASDI	DPBBMB	PDA	TIAM	TIAM	ASW	PDA
12	ASW	ASW	ASW	ASW	ASW	ASW	ASW	ASW	TIAM	ASW

Similar results are also shown in the ranking performance. Given different time horizon of investment, it is found that Tabung Amanah Bakti under the management of Asia Unit Trusts Berhad (AUTB) is able to be in top 25% at all time. This could be a reason why the fund managed to get the prestigious *The Edge-Lipper Malaysia Unit Trust Fund Awards 2002* under 3 years performance category. In contrast, Amanah Saham Wanita fund is the lowest in the ranking at all time. One possible explanation to this situation is that the fund does not diversify enough to lower the unsystematic risks. The  $R^2$  of this fund, on average, is only 0.2587.

In conclusion, persistence in performance of the Islamic trust funds depends on how investors look at it. As a whole, the funds, on average do not show any persistence in performance. However, individually, some funds persist in performing above average returns than the others. The ranking performance by individual fund also gives similar results. The implication is, since on average the Islamic trust funds as a whole do not show persistency in performance, the fund managers need to do more publicity to attract more investors to invest in their funds. This is especially important if the funds individually show some persistency in performance than the others. In addition, since the degree of diversification of the funds on average is 0.5, the fund managers should also improve their investment strategies as to diversify their funds in other syariah based platforms deemed profitable.

## **End Notes:**

- <sup>1</sup> There are 44 Islamic unit trusts currently available in the market. We do not study all of them since most of them only begin in 2000. We also assume that survivorship bias does not occur since all the funds are present in all the periods selected. Thus, issue of performance persistence caused by the survivorship bias is immaterial.

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Appendix 1

No	Management Fund	Approved Size (million unit)	Launch Date	Sample covered	
				Begin	End
<b>Islamic Unit Trusts</b>					
<u>Unit Trust- Government Sponsored</u>					
1	Amanah Saham Kedah (ASK)	200	27/02/1995	7/5/1999	2/5/2003
2	Amanah Saham Darul Iman (ASDI)	500	31/10/1994	14/5/1999	2/5/2003
<u>Unit Trust- Private</u>					
1	Abrar Investment Fund (AIF)	250	12/03/1996	7/5/1999	2/5/2003
2	Tabung Irtikal Arab-Malaysian (TIAM)	500	12/01/1993	7/5/1999	2/5/2003
3	Tabung Amanah Bakti (TAB)	150	14 /05/1971	7/5/1999	2/5/2003
4	BHLB Pacific Dana Al-Ihsan (BHLBPDII)	1000	7/05/1998	7/5/1999	2/5/2003
5	Amanah Saham Bank Islam Tabung Pertama (ASBI)	302	30/06/1994	7/5/1999	2/5/2003
6	Dana Putra BBMB (DPBBMB)	300	15 /06/1995	7/5/1999	2/5/2003
7	Amanah Saham Wanita (ASW)	400	5/05/1998	7/5/1999	2/5/2003
8	Kuala Lumpur Ittikal Fund (KLIF)	300	11/04/1997	7/5/1999	2/5/2003
9	Pacific Dana Aman (PDA)	200	16/04/1998	7/5/1999	2/5/2003
10	RHB Mudharabah Fund (RHBMF)	500	9/05/1996	7/5/1999	2/5/2003

Source: *The Malaysian Unit Trust Industry, 2001. Permodalan Nasional Berhad, Kuala Lumpur.*