Islamic and Conventional Unit Trusts in Malaysia: A Performance Comparison

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Abstract

The Malaysian unit trust industry has been growing positively since the introduction of Amanah Saham Nasional and Amanah Saham Bumiputra in early 1980s and early 1990s respectively. The main objective of this paper is to evaluate the overall performance of Islamic and conventional unit trust funds in the context of Malaysia's capital market, in terms of risk, return and diversification of selected unit trust in Malaysia for the 5-year period from 2002 to 2006. The paper applies the most popular measures of performance such as Sharpe index, Treynor index, and Jensen index. The overall findings suggest that mutual funds in Malaysia are able to add value. Pertaining to the return for both conventional and Islamic funds and the market indices, it is found that conventional funds outperform the market and on the contrary, Islamic funds underperform the market. It is also found that fund managers have poor timing ability and they are unable to correctly identify good bargain stocks and to forecast price movements of the general market. Therefore, due to these reasons, fund managers should be given more room to plan the portfolio of investment that fit the objective of the fund.

Keywords: *Islamic unit trust; Islamic finance, mutual fund performance; Malaysian capital market; financial risk.*

1. Introduction

Mutual fund or better known as unit trust fund in Malaysia is an investment scheme that pools money from many investors who share the same financial objectives, investment strategy and risk tolerance. The pooled money is then invested in a diversified portfolio of authorized investments approved by Securities Commission (SC). Unit trust investors are promised to gain various benefits by investing in unit trust fund such as diversification, liquidity, professional management, and risk minimization (Choong, 2001:2).

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The history of unit trust fund in Malaysia started when the Malayan Unit Trust Limited was established in 1959 by British investors. Later in 1967, MARA Holdings Berhad introduced Amanah Saham MARA with the objective to mobilize Bumiputra's (indigenous Malays') savings. During this initial stage, Malaysians' acceptance towards unit trust investments was not very encouraging due to lack of awareness, knowledge and understanding. It was only when the Malaysian government launched the 3rd Malaysian Plan (1976-1980) with the objectives to eradicate poverty, to restructure society and to further strengthen national security, the country's unit trust industry started to grow (Taib and Isa, 2007: 103). In addition, Permodalan Nasional Berhad (PNB) also took initiatives in supporting the 3rd Malaysian Plan by introducing Amanah Saham Nasional (ASN) and Amanah Saham Bumiputra (ASB) in 1981 and 1992 respectively, with the same objective that is to promote savings among Bumiputras and to encourage their participation in the Malaysian Capital Market. Ever since, the Malaysian unit trust industry shows tremendous expansion (Wan Rasyidah et al., 2008: 16-18).

Over the last few years, the Malaysian Capital Market is experiencing a very encouraging growth. Various financial investment products were introduced to cater to the needs of Malaysian investors. However, since the majority of Malaysians are Muslim, Islamic financial products are highly demanded. In spite of that, the capital market is functioning based on interest, which does not conform to the *Islamic* principles as prescribed by the Holy *Qur'an* and *Al-Sunnah*. Due to this reason, Muslim investors are unable to take part in the capital market openly. Responding to these requirements, the government took the initiative to establish the first Islamic bank, namely Bank Islam Malaysia Berhad (BIMB) in 1983, followed by the Kuala Lumpur *Shariah* Index (KLSI) in 1999. As a result of an emerging of Islamic banking and financial sector, Malaysia has witnessed active involvement of Islamic Capital Market (ICM). The objective of ICM is to fulfill the investment needs of Muslim investors (Wan Rasyidah et al., 2008: 7).

Islamic unit trust fund is one of the Islamic financial products present in the market. These funds are operating in compliance with *Shariah* (Islamic law) principles. With the introduction of unit trust funds to the ICM, the Securities Commission (SC) was established on the 1st March 1993. The establishment of SC is to promote and to maintain fair, efficient, secure and transparent securities and future markets as well as to facilitate the orderly development of an innovative and competitive capital market. In addition, responsibility of the SC is to supervise and regulate all issues related to unit trust schemes, the trust fund companies and the investors.

From the Islamic perspective, investing in Islamic unit trusts is about the contractual relationship between a unit trust company and the respective investors. All investment companies which have Islamic unit trust component is required to have their own *Shariah* boards -consist of Islam law scholars and experts-to advise, monitor and ensure that the investment operations and portfolios are managed in compliance with *Shariah* principles.

The remarkable expansion of this industry generates the escalating statistical figure year by year. Tremendous growth of the NAV of the unit trust funds is owing to increasing demand for units, launch of new products and bullish market conditions (Securities Commission, 2009: 6). Based on the most recent statistics, in relation to collective investment scheme the total number of unit trust funds increased from 291 to 495 as at end December 2004 and end December 2007 respectively. Out of 495 funds, 128 funds belong to *Shariah* based funds. The amount of total approved fund size also increased to 473.94 billion units in 2007 compared to 339.88 billion units as of end December 2006. In addition, as of December 2006, the total number of NAV grew 39 percent year on year from RM121.76 billion in 2006 to RM169.41 billion in 2007. Of this, RM152.55 billion represented conventional unit trust funds whilst RM16.86 billion was *Shariah* based funds. The increase in the NAV could be attributed to the increase in the net sales of unit trust funds. The total NAV of unit trust funds as of end December 2007 represented 15.32 percent of the market capitalization of Bursa Malaysia as compared to 14.35 percent for 2006 (Bank Negara Malaysia, 2009:46).

This paper aims at evaluating the overall performance of Islamic and conventional unit trust funds in the context of Malaysia's capital market, in terms of risk, return and standard deviation of selected unit trust funds from January 2002 to December 2006. The remaining of this paper is organised as follows: section 2 begins with literature review that provides a brief review of prior studies relevant. Section 3 outlines the methodology and measurement employed in this study. Section 4 discusses the findings from the empirical analysis. Section 5 concludes with comments and suggestions.

2. Review of Literature

Studies on the performance of unit trust funds have attracted numerous scholars in finance. The issues being studies are in terms of risk and return performance, fund managers' selection and market timing abilities and diversification level of unit trust funds. The earlier studies on mutual funds' performance were conducted by Jensen (1968; 1969; 1972), Sharpe (1966), Carlson (1970), McDonald (1974), Fama (1972)

and Firth (1977). They found that fund managers have trouble in outperforming the market and most funds underperformed the market. Similar findings were reported by Lehmann and Modest (1987), Cumby and Glen (1990) and Droms and Walker (1994).

In Malaysia, the performance of unit trust industry has created intense examination among researchers and policymakers since 1980s. Among the earliest study on unit trusts performance was by Chua (1985). He found that unit trust funds performed fairly consistent and fund managers were able to control risk well. Later studies on Malaysian unit trust performance were done extensively by scholars, among them were Shamsher and Annuar (1995), Tan (1995), Annuar et al. (1997), Arbi (1997), Leong (1997), Mohd Nawawi (1999), Shamsher et al. (2001),Taib et al. (2002), Soo-Wah Low and Noor A. Ghazali (2005), Soo-Wah Low (2007), Hussin (2006) and Huson (2007).

Shamsher and Annuar (1995) found that average return on Malaysian unit trust funds was below the market average. In addition, they found that unit trust funds failed to achieve expected level of diversification. Similar result was recorded by Annuar et al. (1997) regarding the diversification level of unit trust funds which is below expectations. Previous studies also found that fund managers have inferior selection skills and poor market timing abilities (Annuar et al., 1997:45; Shamsher et al., 2001:139-140; Ahmad & Haron, 2006:121; and Huson, 2007:22-23).

Due to mushrooming of Islamic unit trust industry, the performance of Islamic unit trust funds is also being the focal debate among scholars. The Malaysian Islamic unit trust funds performance was examined by Hanafi (2002), Shariff (2002), Abdul Ghafar and Mohd Saharudin (2003), Zaidi et al. (2004), Kefeli and Zaidi (2006) and Abdullah et al. (2004, 2007). These studies provided some insights on the performance of Islamic trust funds in Malaysia by measuring the nature and characteristics of these Islamic trust funds (Bashir, 2009: 135-137).

For instance, Hanafi (2002) reported that during the bear period, Islamic unit trust funds performed better than the market and the risk-free investments. However, Islamic unit trust funds failed to provide diversification in investment. In addition, the fund managers showed negative timing ability during the bear period. This indicated that the fund managers failed to shift their portfolio betas to be consistent with the direction of the market portfolio (Hanafi, 2001: 51-52). On the contrary, Abdullah et al. (2006) found that Islamic unit trust funds were not only underperformed the market but showed low level of diversification. Another study was conducted by Zaidi et al. (2003). They found that on the average, most of Islamic unit trust funds recorded a negative return and were underperformed the market.

Studies pertaining to the comparative performance of Islamic and conventional unit trust funds, in Malaysia are quite new. Among the studies done were Baharuddin and Azwan (2004) and Abdullah et al. (2007). Furthermore, Baharuddin and Azwan (2004) examined the return performance between conventional and Islamic funds, to know whether assets allocation types and styles influence the fund's performance and also to identify whether the fund size and fund age influence the return performance. Sharpe index, geometric means, Mallin and Gregory models were used to evaluate the risk-adjusted performance, to calculate the annualized return, and to estimate the coefficient of fund size and fund age respectively (Sharpe, 1966: 135; Mallin et al., 1995:483-485; Gregory, 1997:705; Bashir, 2009: 123-126).

They found that the performance of the conventional funds outperforms Islamic funds in a shorter period less than one year but it is insignificant in the longer run. One possibility for the difference in the performance between conventional and Islamic funds is due to the larger fund size and well diversified for the conventional funds compared to Islamic funds. Another finding was that the assets allocation, types and styles do influence fund performance in shorter period but not in longer period. They concluded that assets allocation types and styles as well as fund size influence the fund performance of conventional and Islamic unit trusts funds but not the fund age (Bashir, 2009: 135-137).

Another study by Abdullah et al. (2007) attempted to find the differences between Islamic and conventional mutual funds in terms of performance in the perspective of Malaysia capital market at of monthly returns adjusted for dividends and bonuses for 10-year period from January 1992 to December 2001. The sample consists of 65 funds where, 14 are Islamic funds. This study was divided into three different periods, which were pre (1992-1996), during (1997-1998) and post (1999-2001) financial crisis to ascertain the impact of the economic conditions on the performance of unit trusts funds. Sharpe index and adjusted Sharpe index, Jensen alpha, timing and selectivity ability measures were used for evaluating the mutual funds performance (Abdullah et al., 2007:142-143).

Their findings indicated that Islamic funds performed better than the conventional funds during bearish economic period. However during bullish economic conditions, the conventional funds showed better performance than Islamic funds. In terms of diversification, it was reported that both conventional and Islamic funds did not achieve at least 50 per cent market diversification levels. They also revealed that the fund managers have poor abilities in terms of stock selection and market timing for both Islamic and conventional funds (Abdullah et al., 2007:148-152).

3. Methodology and Data Sources

The sample of the study focuses on the equity-based fund that consists of Islamic and conventional unit trusts from the period of January 2002 up to December 2006. These unit trust funds are based on three different objectives namely growth, income and balance. The data of month-end NAV were obtained from the Bloomberg database, based on the last quoted price for the month. Monthly return of Kuala Lumpur Composite Index (KLCI) is taken to serve as a benchmark for the market portfolio for conventional funds while monthly return of Kuala Lumpur *Shariah* Index (KLSI) is used as a proxy for market portfolio for Islamic funds. The monthly returns adjusted for dividends and bonuses distributed to unit holders will be computed as well as the yield on the three-month Treasury Bills, which were sourced from the Bank Negara Malaysia's (BNM's) website.

The data consists of a sample of 40 unit trust funds with a complete data for at least one-year period. Out of 40 funds, 29 are conventional funds and the remaining 11 are Islamic funds. These funds have sufficient period of data (five years).

3.1 Method Specification

3.1.1 Measurement of Performance

Three standard performance measures, which are recognized worldwide for the performance evaluation of mutual funds specifically, Sharpe's index, Treynor's index and Jensen's Alpha are used in this study. The measurement of returns on unit trusts funds are derived from two components namely income and capital returns. The rate of returns for each fund is calculated as follows.

$$R_p = \frac{NAV_t - NAV_{t-1} + D_t}{NAV_{t-1}} \qquad (1)$$

Where:

R_p =   Total return of a portfolio (individual fund)

NAV_t =   Net Asset Value at time t

NAV_{t-1} =   Net Asset Value one period before time t

D_t =   Dividend or cash Disbursement at time t

In addition, for the benchmark of comparison, the return on the market index is measured as follows:

$$R_m = \frac{1_t - 1_{t-1} + D_t}{1_{t-1}} \qquad (2)$$

Where:

R_m	=	Return on market index
I_t	=	Market index value in time period t
I_{t-1}	=	Market index value on period before time t
D_t	=	Dividend or cash disbursement at time t

While the Sharpe's index includes total risk which consist of the both systematic risk and non-systematic risk into consideration since Sharpe's index measures the reward or risk ratio with the fund's standard deviation as a measure of total risk and is expressed as follows:

$$S_1 = \frac{R_p - R_f}{\sigma_t} \qquad (4)$$

Where:

S_1	=	Sharpe's index
R_p	=	Ex post adjusted return on the unit trusts over the measurement period
R_f	=	Risk-free rate of return on corresponding period on a government security
σ_t	=	Standard deviation of return of the unit trusts funds

Since the standard deviation is affected by the number of observations, there is a bias if the number of observations is small. Therefore, the Sharpe's index has been modified by Jobson and Korkie (1981), to become the Adjusted Sharpe index. It is expressed as follows:

$$AS_1 = \frac{S_1 \text{ x No. of observations}}{\text{No. of observation} + 0.75} \qquad (5)$$

While, the Treynor's index assumes that portfolio is fully diversified and since non-systematic risk cannot be diversified, only relevant risk is taken in consideration. The systematic risk is measured by beta. Therefore Treynor's index measures the excess return per unit of systematic risk expressed as follows:

$$T_1 = \frac{R_p - R_f}{B_p} \qquad (3)$$

Where:

T_1	=	Treynor's index
R_p	=	Average return on the unit rust over the measurement period

R_f =   Risk-free rate of return on corresponding period on a government security

B_p =   Beta coefficient for the portfolio (It can be estimate by regression the portfolio return, R_p with the mark return, R_m)

Whilst, the Jensen's index measures the difference between the actual and expected performance of unit trusts funds. The difference is termed as alpha and expressed as follows:

$$\alpha_p = (R_p - R_f) - \beta_p (R_m - R_f) \qquad (6)$$

Where:

α_p =   Jensen's measure of portfolio performance

R_p =   Average return on portfolio

R_f =   Risk-free rate

R_m =   Returns on the market

R_f =   Beta of the portfolio (It can be estimated by regressing the portfolio return R_p with the market return, R_m)

A statistically significant and positive alpha will imply above-average performance of unit trusts funds over the expected performance and a significant negative alpha implies an under performance. However, this index cannot be used to compare the performance of different portfolio with different level of systematic risks and therefore the Adjusted Jensen's Alpha index was computed in the following way:

$$Adjusted\ Jensen's\ Alpha = \alpha_{p\,/}\beta_p \qquad (7)$$

3.1.2 Measurement of Risk

Standard deviation is used to measure the total risk of investment, which is given as follows:

$$\sigma = \sqrt{\frac{\Sigma(R - R_t)^2}{N - 1}} \qquad (8)$$

Where:

σ =   Standard deviation

R =   Actual return

R_t =   Average return

N =   Number of samples

In addition, coefficient of variation *(CoV)* ratio is employed to measure the amount of risk assumed per unit of average returns. Coefficient of variation is a relative measure of variability and is defined as:

$$CoV = \frac{\sigma_i}{E(R_i)} \qquad (9)$$

Where:

CoV	=	Coefficient of variation
σ_i	=	Standard deviation (total risk) of asset *1*
E (R$_i$)	=	Average return of asset *1*

The R-square static measures the proportion of total variance of returns of a unit trust, which is explained by the KLCI (the proxy for the market portfolio). It measures the degree of diversification of the unit trusts and the value ranges from zero (no diversification) to one (perfect diversification). It is computed by regressing the return on the unit trusts to the return on the market index.

3.1.3 Measurement of Selectivity and Timing

The Treynor and Mazuy (1966) model is implied in this study to estimate the stock selection and market timing performances for each fund and the equation is as follows:

$$R_p = \alpha_p + \beta_p (R_m) + \gamma (R_m)^2 + \mu \qquad (10)$$

Where:

R_p	=	Dividend-adjusted return on portfolio percent minus the yield on 91-day Treasury bill rate
α_p	=	Coefficient that indicates estimated selectivity skill
β_p	=	Beta risk of unit trusts
R_m	=	Observed return on the KLSE Composite Index minus R$_f$ (risk-free Rate)
γ	=	Coefficient that indicates market-timing skill
μ	=	Residual excess return on portfolio percent α_p , β_p and γ are coefficient values to be estimated by regression analysis.

A positive and significant α and γ imply that the fund managers have high selectivity skills and superior market-timing skills respectively. Thus, they are reasonably good at forecasting expected market changes and explore this situation to earn extra returns.

4. Results and Discussion

4.1 Returns and Risk Profile for Islamic and Conventional Unit Trust Funds

Table 1: Average Return and Risk Profile for Islamic and Conventional Unit Trust Funds

	Overall period 2002-2006		Overall period 2002-2006	
	Islamic funds	*KLSI*	*Conventional funds*	*KLCI*
Average return	0.0457	0.5906	0.1334	-0.1658
Standard deviation	2.1558	3.3606	0.0736	3.7872
Beta	0.4370	1.00	0.5005	1.00

Table 1 summarizes the average returns and risk of both funds for the 5-year period from 2002 until 2006. In terms of average return, the period of 2002 to 2006 reveals that the market shows high average return of 59.06 per cent compared to Islamic funds average return of 4.57 per cent. On the other hand, the average return of conventional funds is 13.34 per cent, which means conventional funds provide better return than the market index (-16.58 per cent). This suggests that Islamic funds under-perform the market whereas conventional funds outperform the market.

Standard deviation measures the total risk of the portfolio. The larger value of standard deviation the higher the risk assumed by the portfolio. Comparing the risk for both Islamic funds and market index, it is found that KLSI market index presents higher standard deviation. Similar result is recorded by conventional funds, which are found to be less risky than the market as shown by the value of standard deviation of 7.36 per cent. However, the standard deviation of returns of Islamic funds is higher than that of conventional funds. This indicates that the risk of Islamic funds is high compared to conventional funds.

In addition, beta is used to measure the systematic risk of the market. The higher the value of beta shows the sensitivity of the funds to the changes in the market. As shown in Table 1, the beta values of Islamic funds and conventional funds are 0.43 and 0.50 respectively. This implies that Islamic funds are less sensitive to changes in the market than conventional funds.

4.2 Risk Adjusted Performance

Table 2 presents the comparative performance analysis of both funds, Islamic and conventional over the 5-year period. It is shown that Islamic funds record a positive value as compared to conventional funds. This indicates that Islamic funds show better performance than conventional funds over the 5-year period.

The absolute performance Jensen's measure suggests all funds did not perform up to expectations, but the negative alpha values are not statistically significant. This suggests that at best the observed performance of these funds is about equal to their

expected performance. It shows that all measures on conventional funds are negative but not statistically different from zero, which implies normal performance.

Table 2: Unit Trust Performance by Various Performance Measures

Type of funds	Sharpe's index	Treynor's index	Adjusted Jensen's alpha index
Islamic funds	0.3113	0.2261	-0.1152
Conventional funds	-0.1234	-0.1120	-0.1410

A comparison analysis of both funds does not show any significant difference in performance, implying that both funds performed equally well on the risk-adjusted basis. Though on non-risk adjusted basis, the performance of conventional funds seems to be slightly better but the difference is not significant.

4.3 Degree of Diversification

Diversification is one of the main elements in evaluating unit trust performance. Investors being risk adverse will prefer less risk and more return. For investors who have limited capital to obtain the same degree of diversification requires a large transaction cost. The degree of diversification of the funds relative to the diversification of the market portfolio is measured by the *R-square* statistics, which range from one (1) to zero (0). The nearer the *R-square* value is to 1, the more diversified is the portfolio. Table 3 shows the value of *R-square* of the sample.

Table 3: R-square of Unit Trust Funds

Type of funds	Overall period 2002-2006
Islamic funds	0.53
Conventional funds	0.44

Based on the results Islamic funds have better diversification level than conventional funds. This result is inconsistent with Abdullah et al. (2007) who found that conventional funds have better diversification level. However, it is shown that both funds have low degree of diversification. The reason may be that both funds have almost equal investment opportunity. The low level of diversification of the funds is consistent with the study done by Shamser and Annuar (1995), Shamsher et al. (2001) and Abdullah et al. (2007).

4.4 Selectivity and Timing Performance

Table 4 shows the results of quadratic regression analysis. A positive significant ά indicates successful selected ability of the fund manager. A positive and significant β_2 indicates successful timing of the market. The results show that overall ά shows positive values, which mean that the mangers have positive selection ability. This

result is consistent with previous study studies. Managers are seen to have better selection abilities for conventional funds compared to Islamic funds.

Table 4: Average Selectivity and Timing Performance

Type of funds	Overall period 2002-2006 ά	Overall period 2002-2006 γ
Islamic funds	0.0112 (-0.033)	0.5670 (-0.587)
Conventional funds	0.0245 (-0.112)	0.6545 (-0.670)

In comparison analysis the conventional funds present the highest positive values of selection ability compared to Islamic funds, which indicates that selection abilities of fund managers are generally good. Note that the *t values* were insignificant for all values of ά. For the overall period as shown in Table 4, both funds managers have a positive timing ability. This implies that fund managers succeed in shifting their portfolio beta to be consistent with the direction of the market portfolio.

5. Concluding Remarks and Implications

This paper focuses on examining unit trust funds performance in Malaysia over the period of 2002 until 2006. Performance is analyzed from return performance perspective. The perspective is investigating returns performance of unit trust and measuring it against an appropriate benchmark. This research provides some evidence on the comparative performance between conventional and Islamic unit trust funds over the 5-year period by using monthly observations.

The paper finds that the average return of Islamic funds is lower than the market portfolio during the whole period 2002-2006 while conventional funds has higher average return than the market in the same period. This indicates that conventional funds are the best performance in sense of return compared to Islamic funds. However, in terms of risk-return characteristics of the funds, conventional funds had the lowest standard deviation as compared to Islamic funds. This implied that the risk undertook by the funds were not consistent with the stated objective of the funds.

In this paper, it is also found that fund managers have poor timing ability and they are unable to correctly identify good bargain stocks and to forecast price movements of the general market. Therefore, due to this reasons, fund managers should be given more room to plan the portfolio of investment that fit the objective of the fund. In short, the performance of unit trust funds is somewhat satisfying especially for conventional funds. There are more rooms for improvement to overcome the

weaknesses and to enhance the strengths of the funds. For future research attention should be given to increase the size of the sample in order to get better validated findings by including the unit trust funds from other developing countries, where both Islamic and conventional funds are available.

Without doubt, unit trust investment is a good alternative investment vehicle for investors to consider. However, unit trust industry in Malaysia is still small if compared to the United States and the United Kingdom. Thus, realizing the huge potential of this industry, the government and the fund companies should revise their marketing strategies in attracting more investors towards this kind of investment.

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