

A COMPARISON OF ISLAMIC AND
CONVENTIONAL UNIT TRUST
FUNDS' PERFORMANCE IN MALAYSIA

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MASTER OF SCIENCE (BANKING)
UNIVERSITI UTARA MALAYSIA
OCTOBER 2010



A COMPARISON OF ISLAMIC AND CONVENTIONAL UNIT
TRUST FUNDS' PERFORMANCE IN MALAYSIA

by

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A Dissertation Submitted in Partial Fulfillment of the Requirements for
the Degree of
Master of Science (Banking) at the Graduate School of Management,
Universiti Utara Malaysia



KOLEJ PERNIAGAAN
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ABSTRAK

Pertumbuhan permintaan untuk produk-produk pasaran modal Islam menjurus satu pertumbuhan unit amanah, atau dana, berdasarkan prinsip Islam. Tujuan utama penyelidikan ini ialah untuk memerhatikan perbezaan dalam prestasi di antara dana konvensional dan Islam dalam konteks pasaran modal Malaysia. Kajian ini menggunakan 94 saham amanah sebagai sampel, yang terdiri daripada 44 saham amanah Islam dan 50 saham amanah konvensional. Untuk mencapai objektif utama penyelidikan ini, nisbah Sharpe, indeks Treynor dan Jensen alpha telah digunakan untuk menilai prestasi dana-dana tersebut. Untuk memeriksa sama ada perbezaan dalam prestasi dana dipengaruhi oleh pilihan penanda aras pasaran, justeru itu kajian ini menggunakan dua indeks sebagai penanda aras iaitu KLCI dan EMAS indeks. Penyelidikan ini mendapati bahawa, tiada perbezaan prestasi antara dana Islam dan dana konvensional. Berdasarkan kaedah t-tests mendapati hubungan antara dana Islam dan dana konvensional adalah tidak mempengaruhi prestasi kedua-dua dana dan kedudukan kedua-dua jenis dana menurut ujian-ujian Mann Whitney keputusan adalah sama. Penggunaan salah satu penanda aras, sama ada Indeks KLCI atau EMAS sebagai satu tanda aras pasaran tidak mempengaruhi hasil.

ABSTRACT

The growths of demand for Islamic products lead to a growth of unit trust, or funds, based on Islamic principles. The main aim of this research is to observe the differences in performance between Islamic and conventional funds in the context of Malaysian capital market. This study uses 94 funds as the sample, which is made up of 44 Islamic funds and 50 conventional funds. To achieve the major objectives of this paper, Sharpe ratio, Treynor index and Jensen alpha are used to evaluate the mutual funds performance. To examine whether the differences in performance are influenced by the choice of market benchmarks, this study uses both KLCI and EMAS indexes. This study finds that, the differences between Islamic funds and conventional funds are not significant based on t-tests and the locations of both type of funds according to Mann-Whitney tests. The use of either KLCI Index or EMAS as a market benchmark does not influence the result.

ACKNOWLEDGEMENT

All my praises and gratitude to Allah, the Merciful, for His kindness and for meeting me with many wonderful people who, with His Grace, have had helped me tremendously in the successful completion of this research.

This research would not have been possible without the constructive comments, suggestion and encouragement received from my supervisor who has read the various draft. In particular, I would like to acknowledge my debt to Dr. Kamarun Nisham bin Taufil Mohd., without, of course, holding his responsible for any deficiencies remains in this research.

I would like to thank my parents, Mohamed bin Ismail and Naimah binti Mohamad who have been a continuous source of inspiration and encouragement. Thanks for giving a great support throughout the duration of my studies and unceasing prayers for my success.

In addition, thanks to all my friends that helped, support and provided insight and useful ideas, constructive comments, criticism and suggestion throughout the duration of completing this research.

Thank you

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Unit trust is an investment product that enables small investors to pool their funds and invest in financial markets to earn same returns. The risks are lower than of individual investment as a unit trust could diversify more efficiently. The investors hold units which may fluctuate in value depending on the market performances of the underlying assets. The three components of a unit trust are firstly the investment choices, secondly the trustee or custodian, which is the organization that holds, manages and invests assets for the benefit of the investors and lastly the unit holders, mean individuals who invest money in the unit trust funds.

Through unit trusts, investors can diversify their investment. As such the risks involved are less than the investment done directly in the stock market at Bursa Malaysia. The diversification of the unit trust portfolios will be arranged by Professional Unit Trust Managers who will make sure that the investments are allocated in good companies and also give good returns to the investors.

The demand for unit trusts which comply with the shari'ah principles has been increasing over time. Islamic banking was introduced in 1983. With Islamic banking

the government developed products which are shariah-compliant Kuala Lumpur Shari'ah Index was introduced in 1999 with the objective of fulfilling the Muslims' need for performance benchmark. Under the shari'ah principle, three types of elements are avoided. They are the *riba* (interest), *maisir* (gambling) and *gharar* (uncertainty). Unlike conventional investments, unit trusts are devoid of all these elements and as such are permissible under the shari'ah law.

Though many studies regarding the performances of unit trust funds have been conducted by scholars all over the world yet, the results of most studies in Malaysia are proven inconclusive because the sample sizes used are small, Taib and Isa (2007). Low (2007) uses two different benchmarks to determine the performances of the unit trusts. She uses the KLCI index and the EMAS index as her benchmarks in contrast to Abdullah, Hassan and Mohamad (2007), which only uses the KLCI index as the benchmark of their study. The sample used by the latter was also small. Only 65 unit trust funds were used, of which only 14 samples are Islamic unit trust funds.

This study will focus on one of the financial products in the market which is the unit trust investment. It compares the performance of the Islamic unit trust fund with the conventional unit trust fund using three models of Treynor (1965), Sharpe (1966), and Jensen (1968). It will also use both the KLCI and Emas index as the benchmarks of the unit trust fund performances.

The Securities Commission is responsible for regulating the establishment and operations of unit trusts in Malaysia under the Capital Markets and Services Act 2007, Securities Commission Act 1993, the SC Guidelines and other relevant securities law. Unit trust is an investment vehicle created by asset management companies specializing in pooling savings from both retail and institutional investors. Known also as mutual fund it was introduced to the Malaysian capital market in 1959 by the Malayan Unit Trust Ltd. currently, forty one unit trust management companies are managed by the Federation of Malaysia's Unit Trust Managers.

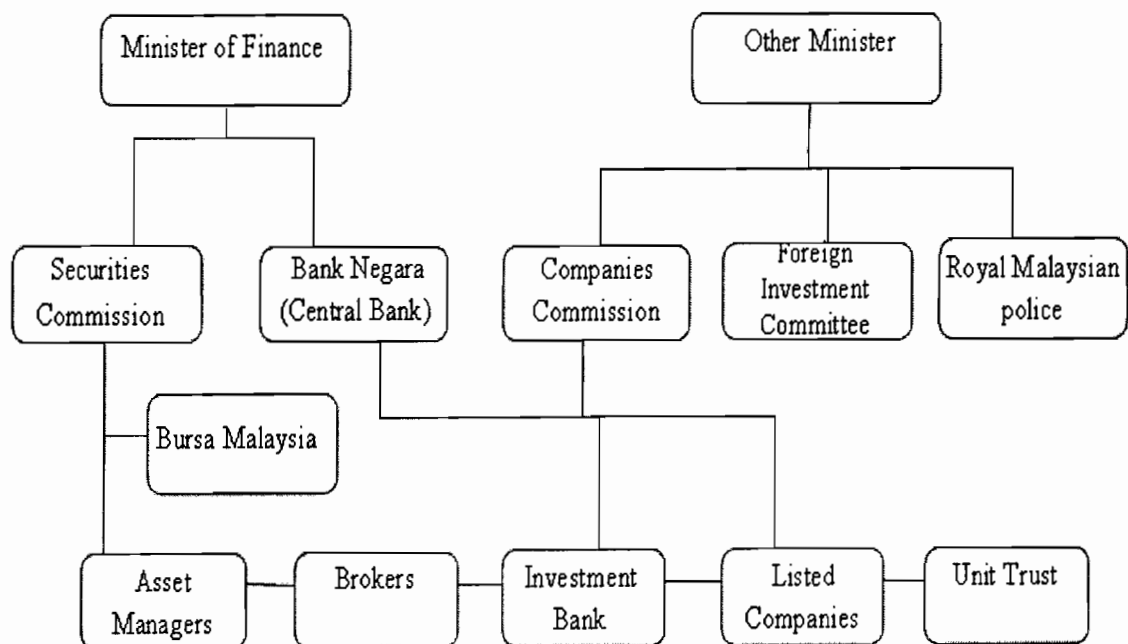
The Islamic capital market in Malaysia runs parallel with the conventional capital market and provides investors with an alternative investment philosophy that is rapidly gaining acceptance. Even though, the Islamic capital market is for the Muslims, it does not prohibit participation from non-Muslims.

This study consists of five chapters. Chapter one will discuss the background of the study, history of the Islamic capital market in Malaysia, development of the unit trust industry in the Malaysia, problem statement, the objectives of the study, the research questions for the study and the significance of the study. Meanwhile, chapter two will focus on the literature from the previous studies about the performances of unit trusts while chapter three will discuss the hypothesis, data collection and data analysis of the study. Chapter four will discuss the findings of this study and the last chapter will look at the conclusions and the recommendations of the study.

1.2 History of Islamic Capital Market.

The capital market in Malaysia has undergone a robust development since the late 1980s. Figure 2 show that the capital market in Malaysia is controlled by Minister of Finance. Under the minister are the Securities Commission and the Central Bank who manage the entire capital market products for the financial market in Malaysia. The capital market in Malaysia is divided into two. They are the conventional capital market and the Islamic capital market.

FIGURE 2: Structure of the Capital Market in Malaysia



Source: Securities Commissions

The Islamic capital market (ICM) is an alternative to the conventional capital market in the world. In the Islamic capital market all the transactions are carried out in ways that do not conflict with the ethics of Muslims and Islam. According to the Al-Quran and Hadith, all transaction in Islam must be free from activities prohibited by Islam such as usury (*riba*), gambling (*maisir*) and ambiguity (*gharar*). If any of the transactions in the Islamic capital market involves one of the three prohibitions, the transaction is considered as not being Islamic and should not be avoided by Muslims.

The Islamic capital market (ICM) is now a component of the overall capital market in Malaysia and plays an important role in generating economic growth for the country. The ICM functions as a parallel market to the conventional capital market, and plays a complementary role to the Islamic banking system in broadening and deepening the Islamic financial markets in Malaysia

Currently, the capital market in Malaysia is complex and sophisticated. As such, it needs a supportive infrastructure for it to operate and function efficiently and effectively with the current technology in the market. With regards to the Securities Commissions, they are still in the early stages of setting up a dedicated Islamic Capital Market Department (ICMD) which together with the relevant Strategy and Development Business Groups will be able to provide the much needed infrastructure support. The mandate of the Islamic Capital Market Department (ICMD) is to carry out research and development activities including formulating and facilitating a long-term plan to strengthen the ICM in Malaysia.

To support the development of the Islamic capital market, the Sha'riah Advisory Council (SAC) was established in May 1996. The purpose of establishing the Shar'iah Advisory Council (SAC) is to advise the Securities Commission on Shar'iah matters pertaining to the ICM. The SAC consists of qualified individuals who can present Shar'iah opinions, having vast experiences in the application of Shar'iah, particularly in the areas of Islamic economics and finance. In this way, all the shar'iah products will be managed by them in the right ways.

Today, in the Islamic capital market, various types of Islamic products for Muslims who only seek to invest and transact in the Islamic capital market products. Currently, there are many products in the Islamic capital market in Malaysia. They include the SC list of Shar'iah-compliant securities, *sukuk*, Islamic unit trusts, Shar'iah indices, warrants (TSR), call warrants and crude palm oil futures contracts. All the products are constantly monitored by SC and SAC to ensure that all products fulfill the needs of shar'iah.

1.3 The Development of Unit Trust Market

The history of mutual funds in Malaysia can be traced to as early as 1959, when the first unit trust, the Malayan Unit Trust Ltd. was launched. It has been more than half a century since its establishment. Malaysia introduced the unit trust concept relatively early as compared to its Asian neighbors. The unit trust industry in

Malaysia has therefore a history of more than four decades. The development of this industry, presented in chronological order, is as follows:

1.3.1 The Formative Years: 1959 -1979

The first two decades, in the history of the unit trust industry, were characterized by slow growth in the sales of units and a lack of public interest in the new investment product. In those twenty years, only five mutual fund management companies were established with only 18 funds. Lau (2007) describes the mutual fund development of that period as retarded. In 1970s, the Malaysian government managed to mobilize domestic household savings by introducing government-sponsored funds.

1.3.2 The Period from 1980 to 1990

This period marked the entry of government's participation in the unit trust industry and the formation of a committee to regulate the unit trust industry, called the Informal Committee for Unit Trust Funds, comprising representatives from the Registrar of Companies (ROC), the Public Trustee of Malaysia, Bank Negara Malaysia (BNM) and the Capital Issues Committee (CIC). In 1981, a scheme called Skim Amanah Saham Nasional (ASN) was introduced to the public and this triggered new growth in the funds' management industry (Shamser et al., 1995). Although only 11 funds were launched during this period, the total units subscribed by the public swelled to an unprecedented level because of the overwhelming response to ASN fund.

The 1980s also witnessed the emergence of more unit trust management companies in the form of subsidiaries of financial institutions. Their participation facilitated the marketing and distribution of unit trusts through bank branches. A network was thus formed to reach more investors.

1.3.3 The Period from 1991 to 1999

This period witnessed the fastest growth of the unit trust industry in terms of the number of new management companies established, and funds under the management. The centralization of industry's regulation, with the establishment of the Securities Commission on 1 March 1993, coupled with the implementation of the Securities Commission (Unit Trust Scheme) Regulations in 1996 and extensive marketing strategies adopted by the ASN and Amanah Saham Bumiputera (ASB), played key roles in making unit trusts a household product in Malaysia.

Consequently, the total asset value of funds under management grew more than threefold, from RM15.72 billion at the end of 1992 to RM59.95 billion at the end of 1996. The period also saw greater product innovation and deregulation of the industry. Although the pace of growth of local unit trust funds has moderated since the financial crisis of 1997-1998, it has nevertheless maintained its upward trend.

1.3.4 The Period from 2000 to the present day.

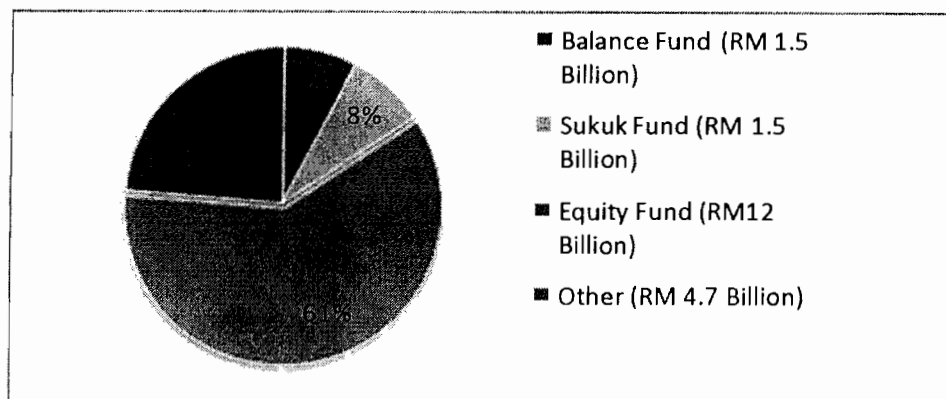
The unit trust industry has a very promising start to the 21st century. The industry recorded a double digit growth, growing from RM43 billion, in Net Asset Value (NAV) in 2000, to RM169 billion as at 31 December 2007, a period of seven years. However, this strong growth was punctuated by a financial crisis in 2008, starting from the fallout of the subprime loans in the USA, bursting of the property bubble, the global credit crunch, the banking crisis and the rapidly falling share prices worldwide.

As at 31 December 2008, the unit trust industry saw its NAV drop to RM134 billion. While the industry's NAV has dropped by 20% over the last 12 months, the industry's Net Asset Value to Bursa Malaysia's Market Capitalization has increased from 15% to more than 20%. However, in relative terms, the unit trust's industry drop is less severe than the fall in share prices in Bursa Malaysia due to the diverse nature of the former.

The Shar'iah based unit trust funds are a collection of investment funds that offer investors the opportunity to invest in a diversified portfolio of Shar'iah compliant securities and managed by professional managers in accordance with the Shar'iah principles. As at September 2009, the net asset value (NAV) of Shar'iah based unit trusts funds was RM21.18 billion, which was 11.3% to total industry. There are three main categories of Shar'iah-based Unit Trust Funds; Balance, Sukuk and Equity. Figure 1, provides the categories and Net Asset Values of Shar'iah-based Unit Trust Funds as at

September 2009. As shown in Figure 1 below, the equity fund is the largest Shar'iah-based unit trust fund being issued in the market as compared to the other funds.

FIGURE 1: Categories of Shar'iah-based Unit Trust Funds



Source: Securities Commission

1.4 Statement of the Problem

Although many researchers have studied unit trust fund performances in Malaysia, studies that compare the Islamic and the conventional unit trust are still lacking. A study by Abdullah et al (2007), in the comparison of Malaysian Islamic unit trusts with conventional unit trust funds, using KLCI as a benchmark, involved only 14 Islamic unit trusts as samples. The result found that the conventional funds performed better than Islamic funds during good economic periods and vice-versa during bad economic periods. This study was followed by that of Taib et al (2007),

which was a study of Malaysian unit trusts aggregate performances. As their sample size was small the results proved inconclusive.

Low (2007) finds that the correlation between the funds' returns using the EMAS was stronger than the one using KLCI. This was also supported by Abdullah et al (2007). This study will therefore continue from where the previous two studies left off. The problem, in this study, is therefore to determine the performances of Islamic and conventional unit trust in Malaysia using EMAS and KLCI indexes as benchmarks.

1.5 Research Objectives

This study will focus on the comparison of Islamic equity unit trusts with conventional equity unit trusts in Malaysia using 44 Islamic funds and 50 conventional funds (refer to appendix) selected randomly from 2004 until 2009. The main objective of this study is to examine the performance of Islamic unit trusts and conventional unit trusts using the KLCI and EMAS as market benchmarks. Specifically, this paper will attempt to investigate the following issues:

1.5.1 To determine the performances of Islamic and conventional unit trust funds using the EMAS and KLCI indexes from 2004 to 2009.

1.5.2 To see if the results are similar to those of Abdullah et al (2007), by using a larger sample and EMAS index as the benchmark.

1.5.3 To find a better benchmark to evaluate the unit trust performance. To evaluate if there is any differences in performance measured by different benchmarks.

1.6 Research Questions

This study hopes to answer the entire research objectives about the comparison and performance of Islamic unit trust funds and conventional unit trust funds in the Malaysian market the following research questions of interest:

- 1.6.1 There any different in performances of Islamic and conventional unit trusts when using EMAS and KLCI indexes as benchmarks from 2004 to 2009?
- 1.6.2 By using the EMAS index, as the benchmark, will the result be similar to that of Abdullah et al (2007)?
- 1.6.3 What is a better benchmark to evaluate the Islamic unit trust performance?

1.7 Significance of the Study

This study is significant to an investor interested in learning about the Islamic and conventional unit trust funds in Malaysia. From this study the investor will get an idea about the unit trust performances as given below:

- 1.7.1 To provide information to the investor about the Islamic and conventional unit trust funds performances in Malaysia.
- 1.7.2 To provide an alternative point of view in decision making.
- 1.7.3 To help the investor know about the performances of good funds.

This study will also be significant to the academicians and students in terms of knowledge and future studies as given below:

- 1.7.4 To enrich the literature on Islamic and Conventional unit trust fund performances in Malaysia.
- 1.7.5 To support the existing literature on the best benchmark to evaluate the Islamic unit trust performances.

CHAPTER TWO

LITERATURE REVIEW

2.1 Literature Review

More than 50 years has gone by since the launching of the first mutual funds in Malaysia. Yet, scholarly articles, regarding the performances of Malaysian mutual funds, are still lacking. The earliest study was conducted by Chua (1985) for his Master's dissertation, and using 12 mutual funds from 1974 until 1984, showed that mutual funds in Malaysia actually outperformed the portfolios in the market. In his research, he found that the mutual funds' portfolios are well diversified, indicating a low level of unsystematic risk. He also concluded that in term of performances, government sponsored funds are better than private funds. Ewe (1994) in his research for his Master's thesis, using 37 mutual funds as samples and using the dataset from 1988 until 1992, showed results that were contrary to Chua's (1985) findings. His findings showed that normal market portfolio actually performed better than mutual funds.

A research conducted by Shamsher and Annuar (2001) using the similar study period as that of Ong (2000), tried to determine which funds performed better, active funds or passive funds. These studies used standard performance measures that of Sharpe ratio, Treynor ratio, and also Jensen alpha. Their results showed that both active and passive funds performed equally well, but still the market portfolio outperformed

mutual funds. Although the study period was similar to that of Ong's (2000), the findings differed. The possible explanation for this was the sample preferences in these two studies. Shamsher and Annuar (2001) used as samples 41 non-governmental based mutual funds, while Ong (2000) used 16 government-sponsored and 37 private funds as his sample.

Abdullah, Hassan and Mohamad (2007) compared the Islamic and conventional funds using a 10 year period. They found that both funds performed at-par with each other. They also found that the Islamic funds were less risky than conventional funds. This means that the Islamic fund has lower risk compared to conventional funds. Their findings also showed that both the Islamic and conventional funds have diversified levels which are less than 50 per cent of the diversification level of market portfolios. As for market timing, they found that there were poor selections and market timing abilities for all classes of funds. This means that both Islamic and conventional funds had lower market timing abilities. They also concluded that Islamic funds are better than conventional funds during bearish economic trends, and conventional funds are better than Islamic funds during the bullish trends of the market.

Low (2007) found that the average betas of funds are generally similar irrespective of the market benchmarks used. However she found higher value of R-squared when the EMAS index is used. Low (2007) also found that regardless of the market benchmarks used, on the average the funds displayed negative overall performances. She also found that the movement of the EMAS index, as a benchmark, is better than

the widely used KLCI index. So Low (2007) concluded a strong correlation exists between the fund's returns and the returns of the EMAS index as compared to the KLCI index.

Leong and Aw (1997) in their research measured mutual fund performances using two different benchmarks namely Kuala Lumpur Composite Index (KLCI) and the Exchange Main Board All-Shares (EMAS) Index, using a sample of 32 mutual funds from 1984 until 1996. This is the first study in Malaysia using two benchmarks to measure performances. The mutual fund performed poorly using both indices, but they are slightly better better EMAS Index. According to their findings, there is not much of an impact on ranking when different benchmarks are being used. They also support Shamser et al (1995) findings that the funds are poorly diversified. Early studies using dataset from post mid-1980s until mid-1990s showed consistent results, despite differences in the samples used, and their style of measuring performances. Chua's (1985) finding is different from the others because the data set was from 1970s, which according to Lau (2007) is considered as "retarded period".

Taib and Isa (2007) measure the performance of the Malaysian unit trust performance using a larger sample over a longer period. They used seven methods to measure the firms' performances namely Jensen Alpha, Adjusted Jensen Alpha, Sharpe Index, Adjusted Sharpe Index, Treynor Index, Raw Returns, and Market Adjusted Returns. The study found that for equity funds and balanced funds, the overall samples indicated negative returns but bond funds showed superior performance in all sub periods of the study. Taib and Isa (2007) also found that the equity funds had the most diversification level followed by the balance funds and the

bond funds. The study concluded that unit trust performances were bad during the period of study and only the bond funds showed superiority over the equity unit trust funds during the economic crisis. This shows that the relationship between the equity funds and bond funds is negative. Their findings are consistent with most studies in literature that is the market portfolios performed better than the mutual funds, except during the financial crisis period, which is consistent with Ong's (2000) findings. They also found that bond funds are far more superior to equity and balanced funds.

Annuar, Shamser and Hua (1997) in their study on the selectivity and timing ability, using 31 unit trust funds from July 1990 to August 1995, found that on average the performance is positive but the timing performance was on average negative. Annuar et al. (1997) also shows there was a positive correlation between selectivity and timing performance. From this study, it was also found that the degree of diversification of the Malaysian unit trusts are generally below expectations and the risk-return characteristics of the trusts are inconsistent with their stated objectives.

While some research on Malaysian-based mutual fund performances are available, little work has been done to provide a comprehensive analysis across performance measurement models, investment horizons, and fund styles (Lai and Lau, 2010). Therefore, Lai and Lau (2010) used Jensen's Alpha, Treynor Index, Sharpe Index, Single-factor Model (CAPM), Fama & French 3-factor model, and also Carhart 4-factor model to study mutual fund performances and also to determine the factors that affected unit trust performances. They used 311 mutual funds as samples; with 79 of them being Islamic mutual funds. This study used a larger sample than

previous studies and covered a longer period from 1990 until 2005, a total of 16 years. They found evidence that contradicted other popular findings. Among them were that the mutual funds performance was better than benchmark indexes and fund portfolio diversification was high. They also found that private funds perform better than government-sponsored funds.

CHAPTER THREE

DATA AND METHODS

The objective of this research is to examine the performances between Islamic unit trusts funds and conventional unit trusts in Malaysia. In order to achieve this objective, this study will use three models of Treynor (1965), Sharpe (1966), and Jensen (1968).

3.1 Development of Hypotheses

In determining the performance of unit trust funds in Malaysia, the benchmark to be used is very important because a different benchmark will give a different result of the performance. Leong and Aw (1997), found that the use of various benchmarks did not in any way affect the rankings of the 32 conventional mutual funds samples from 1984 until 1996. They used both KLCI and EMAS indexes as their benchmarks to measure market returns. Their result differed from that of Low (2007) who concluded that the correlation between the funds' returns and the returns on the EMAS index is stronger than the correlation with the KLCI index.

The study conducted by the Taib et al (2007) on the Malaysian unit trust aggregate performance used a small sample size and as such the results did not prove conclusive. A study by Abdullah et al (2007) about the performance of Islamic unit

trusts used only 14 samples from the Islamic unit trust funds. This sample was too small to get any conclusive results. Based on the discussions so far, this study has come up with the following hypotheses:

H_1 = There is no difference in the performance measure of Islamic and conventional unit trusts using the KLCI or the EMAS indexes.

H_2 = The KLCI index is a better of performance measure of Islamic and conventional unit trust funds as compared to the EMAS index.

3.2 Data collection

The objective of this study is to compare the performance of Islamic and conventional unit trusts in Malaysia. The unit trust funds selected for this study will be the equity based funds only. The study will also try to find if the performance of Islamic unit trust using different market benchmark would be similar to the result obtained by Abdullah et al (2007), who only used KLCI as the benchmark.

The data for this study will consist of the monthly prices of Islamic and conventional unit trust funds. This study will use 94 equity unit trust funds: 44 Islamic funds and 50 funds (*refer to appendix*). The period of study is from 2004 until 2009. The sample data have been collects from the Bursa Malaysia Library found in the

Bloomberg database. Information about the distribution of the funds will also be taken from the Bursa Malaysia Library.

3.3 Research Design

A unit trust is a portfolio investment. To see the returns of the unit trust we have to look at net asset value (NAV) of the fund. Low (2007) calculated the monthly returns of the each fund as follows:

$$R_t = (NAV_t - NAV_{t-1} + DIST_t) / NAV_{t-1}$$

Where R_t is the total return of a portfolio, NAV_t is the net asset value at the time t , NAV_{t-1} is the net asset value one period before time t , and $DIST_t$ is the dividend or cash distribution at time t . In this study, we will use four models to determine the performance of the unit trust funds.

The first model to be used is the Treynor's model (1965). Treynor's technique would measure a fund's performance based on the ratio of the risk premium of the portfolio to beta:

$$T_i = \frac{\bar{R}_i - \overline{RFR}}{\beta_i}$$

Where:

\bar{R}_i =The average rate of return of fund i during the specified time period.

\overline{RFR} = The average rate of return on a risk free investment during the same time period

β_i = Beta of fund i over the evaluation period

In this equation the formula $\bar{R}_i - \overline{RFR}$ is the risk premium and the denominator is used to measure the systematic risk. This equation measures risk premium return per unit of risk. The β_i is a systematic risk in the portfolio market.

The second model to be used was developed by Sharpe (1966). Sharpe's measure is clearly the same as Treynor's (1965) measure, but risk of the portfolio is measured by using standard deviation of return rather than using systematic risk. The Sharpe measure of portfolio performance can be calculated as follows:

$$S_i = \frac{\bar{R}_i - \overline{RFR}}{\sigma_i}$$

Where:

\bar{R}_i = The average rate of return of fund i during the specified time period.

\overline{RFR} = The average rate of return on a risk free investment during the same time period

σ_i = The standard deviation of the rate of returns of fund i during the time period

The third model used is the Jensen model (1968). This is based on the capital asset pricing model (CAPM). The Jensen model can be calculated by using this regression equation:

$$R_{jt} - R_{ft} = \alpha_j + \beta_{jt}(R_{mt} - R_{ft}) + \epsilon_{jt}$$

Where:

R_{jt} = Rate of return of fund i in period t

R_{ft} =Rate of return on a three month Treasury bill (risk free rate) in period t

R_{mt} =Rate of return of market benchmark (KLCI or EMAS index) in period t

α_j =Jensen's performance coefficient, or better known as alpha

β_{jt} =systematic risk of fund i

ϵ_{jt} =the random error term in period t

Basically the Jensen model assumes that the systematic risk taken by the entire fund is constant over time. From this model, the performance of funds will aid to measure selectivity ability, market timing ability or the combination of the abilities of a fund manager.

By using all three measures above, this study can compare the performance of Islamic unit trust and conventional unit trust fund from 2004 until 2009.

3.4 Data analysis

For this study, 94 equity unit trust funds: 44 Islamic funds and 50 funds (*refer to appendix*). The period of study is from 2004 until 2009 are used. Two types of tests: the parametric test, which is 2-independent t-test and the non-parametric tests, which is Mann-Whitney test are used to analyze the performance.

3.4.1 Parametric test.

In the parametric test, the samples of the statistics are used to make inferences about the value of the corollary parameters of the population from which the samples are drawn. The test is to predict the null and alternate hypotheses value of a population parameter. In this study the test used is the t-test.

3.4.1.1 T-Test

The t-test finds the differences between the means of two groups to see whether there is a significant difference between their means. In this study, differences between Islamic and conventional funds are tested using t-test.

3.4.2 Non Parametric Test

The non parametric test does not make inferences about the values of a specific population parameter. Normally, nonparametric test predicts the location of a distribution. In this study the test used is the Mann-Whitney U Test.

3.4.2.1 Mann-Whitney U Test.

The Mann Whitney U Test is a non parametric test that sees how significantly different the frequency distributions of scores of two populations are. This test is the non-parametric alternative to the t-test for independent samples. Instead of comparing the means of two groups, as in the case of the t-test, the Mann-Whitney U Test actually compares medians. It converts the scores on the continuous variable to ranks, across the two groups. It then evaluates the significant difference of the ranks for the two groups to see if they differ. As the scores are converted to ranks, the actual distributions of the scores do not matter.

CHAPTER 4

ANALYSIS AND FINDINGS

4.1 Performance of Unit Trust Funds

Table 1 shows the performance of Islamic and conventional equity unit trust fund in Malaysia each year starting from year 2004 until 2009. Result in table 1 are based on 44 Islamic equity funds and 50 conventional funds (*refer to appendix*) that are randomly selected, using performance measures of sharpe (1966), Treynor (1965), and Jensen (1968), and EMAS Index and KLCI Index are used as the benchmarks.

In 2004, the performance of conventional unit trusts is better than the performance of Islamic unit trusts based on total observation of 75 unit trust funds including 26 Islamic funds and 49 conventional funds. All results for Sharpe, Treynor and Jensen measures show that they are not significant at 5%-level when t-test is used to test for different in performance but the results are significant using Mann-Whitney tests. Nonparametric test, i.e., Mann-Whitney, show that conventional unit trusts outperform Islamic unit trusts for all measure. It shows that Islamic unit trust is less diversified compare to conventional unit trust. One possible reason for the identical performance between Islamic funds and conventional funds is that both funds are being managed by the same managers or institutions. As an example, Public Mutual managed Public Growth Fund, a conventional fund, and Public Islamic Equity, an Islamic fund.

TABLE 1: A Comparison One Year Performance of Islamic and Conventional Unit Trust Funds

| Year / Total observation | | Average | | | T-test of Difference in Means | Mann- Whitney test |
|------------------------------------------------------|---------------------|---------|---------|---------|-------------------------------------|--------------------------|
| | Performance | Total | Islamic | Conv | p-value | p-value |
| 2004 (Total=75, Islamic=26, Conv=49) | Sharpe | 0.1530 | 0.1198 | 0.1706 | 0.4558 | 0.0190 |
| | Treynor KLCI | -0.0259 | -0.1095 | 0.0184 | 0.3236 | 0.0230 |
| | Treynor EMAS | 0.0078 | 0.0023 | 0.0107 | 0.0996 | 0.0080 |
| | Jensen KLCI | 0.0018 | 0.0010 | 0.0022 | 0.7716 | 0.0260 |
| | Jensen EMAS | -0.0017 | -0.0026 | -0.0013 | 0.7401 | 0.0400 |
| | R ² KLCI | 0.1693 | 0.1340 | 0.1881 | 0.0490 | 0.0360 |
| | R ² EMAS | 0.6795 | 0.6109 | 0.7160 | 0.0698 | 0.0230 |
| 2005 (Total=80, Islamic=31, Conv=49) | Sharpe | -0.2752 | -0.2619 | -0.2836 | 0.8223 | 0.2080 |
| | Treynor KLCI | 0.0009 | -0.0059 | 0.0051 | 0.4995 | 0.4440 |
| | Treynor EMAS | 0.0144 | -0.0123 | 0.0313 | 0.3088 | 0.4440 |
| | Jensen KLCI | -0.0076 | -0.0088 | -0.0068 | 0.6644 | 0.2120 |
| | Jensen EMAS | -0.0058 | -0.0078 | -0.0046 | 0.5277 | 0.1150 |
| | R ² KLCI | 0.3670 | 0.3280 | 0.3917 | 0.3032 | 0.3070 |
| | R ² EMAS | 0.3860 | 0.3417 | 0.4141 | 0.2500 | 0.2580 |
| 2006 (Total=85, Islamic=36, Conv=49) | Sharpe | 0.5925 | 0.6208 | 0.5721 | 0.5583 | 0.7330 |
| | Treynor KLCI | 0.0201 | 0.0141 | 0.0245 | 0.2899 | 0.0740 |
| | Treynor EMAS | 0.0279 | 0.0346 | 0.0231 | 0.4770 | 0.1210 |
| | Jensen KLCI | 0.0072 | 0.0092 | 0.0057 | 0.2772 | 0.7460 |
| | Jensen EMAS | 0.0056 | 0.0075 | 0.0042 | 0.3015 | 0.6360 |
| | R ² KLCI | 0.5498 | 0.5565 | 0.5449 | 0.7673 | 0.5580 |
| | R ² EMAS | 0.5846 | 0.5928 | 0.5787 | 0.7069 | 0.5060 |

| | | | | | | |
|---------------------------------------------------------------------------|---------------------|---------|---------|---------|--------|--------|
| 2007 (Total=90, Islamic=40, Conv=50) | Sharpe | 0.4374 | 0.4030 | 0.4648 | 0.2645 | 0.2330 |
| | Treynor KLCI | 0.0320 | 0.0134 | 0.0469 | 0.0826 | 0.4080 |
| | Treynor EMAS | 0.0448 | 0.0282 | 0.0580 | 0.2902 | 0.3260 |
| | Jensen KLCI | 0.0077 | 0.0092 | 0.0065 | 0.3239 | 0.3890 |
| | Jensen EMAS | 0.0064 | 0.0082 | 0.0049 | 0.2361 | 0.3140 |
| | R ² KLCI | 0.2964 | 0.2366 | 0.3443 | 0.0023 | 0.0040 |
| | R ² EMAS | 0.3086 | 0.2458 | 0.3589 | 0.0018 | 0.0020 |
| 2008 (Total=94, Islamic=44, Conv=50) | Sharpe | -0.7090 | -0.7137 | -0.7049 | 0.8774 | 0.9220 |
| | Treynor KLCI | -0.0432 | -0.0451 | -0.0415 | 0.8351 | 0.9760 |
| | Treynor EMAS | -0.0458 | -0.0501 | -0.0421 | 0.6585 | 0.9760 |
| | Jensen KLCI | -0.0016 | -0.0016 | -0.0017 | 0.9884 | 0.7050 |
| | Jensen EMAS | -0.0001 | -0.0003 | 0.0000 | 0.9128 | 0.6380 |
| | R ² KLCI | 0.6555 | 0.6384 | 0.6705 | 0.5434 | 0.8030 |
| | R ² EMAS | 0.6562 | 0.6353 | 0.6747 | 0.4536 | 0.6060 |
| 2009 (Total=94, Islamic=44, Conv=50) | Sharpe | 0.6720 | 0.6705 | 0.6733 | 0.9688 | 0.5800 |
| | Treynor KLCI | 0.0453 | 0.0549 | 0.0368 | 0.0989 | 0.3280 |
| | Treynor EMAS | 0.0472 | 0.0544 | 0.0409 | 0.1578 | 0.3400 |
| | Jensen KLCI | 0.0054 | 0.0077 | 0.0035 | 0.2075 | 0.5960 |
| | Jensen EMAS | 0.0055 | 0.0077 | 0.0037 | 0.2481 | 0.6710 |
| | R ² KLCI | 0.5401 | 0.4871 | 0.5867 | 0.0811 | 0.1440 |
| | R ² EMAS | 0.5551 | 0.5070 | 0.5974 | 0.1159 | 0.2200 |

R² could be used to measure diversification. Islamic unit trust has lower R², based on both market benchmarks, showing that Islamic funds are less diversified. However both types of funds show very low R². Thus it seems that funds in Malaysia are less diversified. This shows that the funds are managed actively.

For the rest of the years from 2005-2009 none of the differences between Islamic fund and conventional funds are significant at 5% level using t-tests. Nonparametric tests using Mann-Whitney tests confirm the results of t-tests. Thus performance of Islamic funds is similar to the performance of conventional funds. The similarity of performance between these two types of funds might be due to an institution usually offers both types of funds. R^2 fluctuates between 2005 and 2009 but neither types of funds has R^2 greater than 0.7. This shows that on average the funds are not well diversified, which implies that managers manage these funds actively.

Table 2 shows the performance of unit trust over a period of three years. The periods are divided over four intervals: 2004 to 2006, 2005 to 2007, 2006 to 2008 and 2007 to 2009. For the period of 2004 to 2006, Islamic unit trust performance better than conventional using EMAS based Treynor measure and Jensen measures. Treynor and Jensen measures shows that they are not significant at 5%-level when t-test is used to test for different in performance measures. Based on Mann-Whitney tests, performance of Islamic unit trust funds is better than conventional s at 5%-level. However, Sharpe and KLCI based Treynor measures shows that Islamic funds performance worse than conventional with Mann-Whitney test showing that the difference in locations between the two types of funds being significant at 5%. Contrast with the t-test result showing they are not significant at 5%-level when t-test is used to test for different in performance measures. Furthermore, lower R^2 of Islamic funds shows that Islamic funds are less diversified than conventional. However R^2 for both types of funds show that during this period, variance of return on market could explain less than 30% of variance of returns on unit trusts.

TABLE 2: A Comparison Three Year Performance of Islamic and Conventional Unit Trust.

| Year / Total observation | | Average | | | T-test of Difference in Means | Mann- Whitney Test |
|---------------------------------------------------------------|---------------------|----------------|---------------------|-------------|----------------------------------------------|-----------------------------------|
| | Performance | Total | Islami c | Conv | p-value | p-value |
| 2004- 2006 (Total=75, Islamic=26, Conv=49) | Sharpe | 0.1452 | 0.1407 | 0.1476 | 0.9277 | 0.0120 |
| | Treynor KLCI | 0.0104 | 0.0100 | 0.0107 | 0.9204 | 0.0210 |
| | Treynor EMAS | 0.0087 | 0.0098 | 0.0081 | 0.7411 | 0.0480 |
| | Jensen KLCI | 0.0008 | 0.0009 | 0.0007 | 0.9499 | 0.0370 |
| | Jensen EMAS | 0.0008 | 0.0009 | 0.0007 | 0.9499 | 0.0370 |
| | R ² KLCI | 0.2688 | 0.2321 | 0.2878 | 0.1058 | 0.0950 |
| | R ² EMAS | 0.2688 | 0.2321 | 0.2878 | 0.1058 | 0.0950 |
| 2005- 2007 (Total=80, Islamic=31, Conv=49) | Sharpe | 0.2679 | 0.2843 | 0.2576 | 0.6700 | 0.4990 |
| | Treynor KLCI | 0.0148 | 0.0166 | 0.0136 | 0.5062 | 0.9720 |
| | Treynor EMAS | 0.0143 | 0.0144 | 0.0143 | 0.9845 | 0.9880 |
| | Jensen KLCI | 0.0025 | 0.0036 | 0.0018 | 0.5529 | 0.8090 |
| | Jensen EMAS | 0.0027 | 0.0038 | 0.0020 | 0.5547 | 0.8160 |
| | R ² KLCI | 0.3773 | 0.3385 | 0.4019 | 0.0939 | 0.0830 |
| | R ² EMAS | 0.4043 | 0.3619 | 0.4311 | 0.0768 | 0.0750 |
| 2006-2008 (Total=85, Islamic=36, Conv=49) | Sharpe | 0.0146 | 0.0249 | 0.0072 | 0.6821 | 0.9650 |
| | Treynor KLCI | 0.0033 | 0.0014 | 0.0048 | 0.4872 | 0.9230 |
| | Treynor EMAS | 0.0041 | 0.0014 | 0.0061 | 0.4382 | 0.9370 |
| | Jensen KLCI | 0.0024 | 0.0033 | 0.0018 | 0.5494 | 0.9230 |
| | Jensen EMAS | 0.0018 | 0.0026 | 0.0011 | 0.5430 | 0.9790 |
| | R ² KLCI | 0.5853 | 0.5541 | 0.6078 | 0.1917 | 0.2620 |
| | R ² EMAS | 0.5952 | 0.5613 | 0.6197 | 0.1589 | 0.2200 |

| | | | | | | |
|--------------------------------------------------------------------------------|---------------------|---------|--------|---------|--------|--------|
| 2007-2009 (Total=90, Islamic=40, Conv=50) | Sharpe | 0.0758 | 0.0669 | 0.0743 | 0.8480 | 0.3100 |
| | Treynor KLCI | 0.0891 | 0.0043 | 0.1553 | 0.3318 | 0.5860 |
| | Treynor EMAS | -0.0128 | 0.0046 | -0.0265 | 0.2820 | 0.8260 |
| | Jensen KLCI | 0.0015 | 0.0017 | 0.0008 | 0.7044 | 0.4450 |
| | Jensen EMAS | 0.0011 | 0.0013 | 0.0004 | 0.6850 | 0.5000 |
| | R ² KLCI | 0.5671 | 0.5323 | 0.5964 | 0.1514 | 0.1630 |
| | R ² EMAS | 0.5730 | 0.5362 | 0.6038 | 0.1333 | 0.1670 |

For the rest of the intervals from 2005-2007, 2006-2008, 2007-2009 shows none of the differences between Islamic fund and conventional funds are significant at 5% level using t-tests. The results from nonparametric tests using Mann-Whitney tests confirm the results of t-tests. Therefore performance of Islamic funds is similar to the performance of conventional funds. The similarity of performance between these two types of funds might be due to an institution usually offers both types of funds. R² fluctuates between all the interval period from 2005-2007, 2006-2008 and 2007-2009 but neither types of funds has R² greater than 0.7. This shows that on average the funds are not well diversified, which implies that managers manage these funds actively.

Table 3 summarizes the result using data over a period of five years. The period is divided into two intervals: 2004 to 2008 and 2005 to 2009. The performances of Islamic funds are comparable to the performance of conventional funds using all three types of measures: Sharpe, Treynor and Jensen model. The differences between both types of funds are not significant based on t-test and the location of both type of funds are similar according to Mann-Whitney tests.

Furthermore, none of the R^2 is greater than 0.6, which shows on average the funds are not well diversified. This is not surprising as almost all funds in Malaysia are managed actively. In addition none of the differences in R^2 is significant at 5%-level. Again this results shows that both types of funds are managed actively. The results over a 6 year period reflect those of five year periods as summarised by table 4.

TABLE 3: A Comparison Five Year Performance of Islamic and Conventional Unit Trust

| 5 Years / Total observation | | Average | | | T-Test of Difference in Means p-value | Mann- Whitney Test p-value |
|------------------------------------------------------------|--------------|---------|---------|---------|------------------------------------------------|-------------------------------------|
| | Performance | Total | Islamic | Conv | p-value | p-value |
| 2004-2008 (Total=75, Islamic=26, Conv=49) | Sharpe | 0.0081 | 0.0191 | 0.0022 | 0.7781 | 0.0920 |
| | Treynor KLCI | 0.0000 | -0.0017 | 0.0009 | 0.6787 | 0.0740 |
| | Treynor EMAS | -0.0007 | -0.0015 | -0.0003 | 0.8440 | 0.0830 |
| | Jensen KLCI | 0.0001 | 0.0005 | -0.0002 | 0.8256 | 0.1150 |
| | Jensen EMAS | 0.0003 | 0.0008 | 0.0001 | 0.8282 | 0.1150 |
| | R^2 KLCI | 0.4493 | 0.4094 | 0.4705 | 0.1674 | 0.1980 |
| | R^2 EMAS | 0.5567 | 0.5096 | 0.5816 | 0.1609 | 0.1660 |
| 2005- 2009 (Total=80, Islamic=31, Conv=49) | Sharpe | 0.0877 | 0.1053 | 0.0768 | 0.5817 | 0.5660 |
| | Treynor KLCI | 0.0181 | 0.0047 | 0.0264 | 0.5442 | 0.5930 |
| | Treynor EMAS | -0.0315 | 0.0050 | -0.0542 | 0.2560 | 0.8230 |
| | Jensen KLCI | 0.0007 | 0.0015 | 0.0002 | 0.6474 | 0.5280 |
| | Jensen EMAS | 0.0009 | 0.0017 | 0.0004 | 0.6485 | 0.5470 |
| | R^2 KLCI | 0.5451 | 0.5275 | 0.5560 | 0.5403 | 0.6130 |
| | R^2 EMAS | 0.5578 | 0.5395 | 0.5692 | 0.5266 | 0.6070 |

TABLE 4: A Comparison Six Year Performance of Islamic and Conventional Unit Trusts Funds

| 6 Years / Total observation | | Average | | | T-Test of Difference in Means | Mann- Whitney Test |
|---------------------------------------------------------------|---------------------|---------|---------|--------|-------------------------------------|--------------------------|
| | Performance | Total | Islamic | Conv | p-value | p-value |
| 2004- 2009 (Total=75, Islamic=26, Conv=49) | Sharpe | 0.0944 | 0.1048 | 0.0890 | 0.7936 | 0.1440 |
| | Treynor KLCI | 0.0122 | 0.0049 | 0.0160 | 0.3155 | 0.1190 |
| | Treynor EMAS | 0.0084 | 0.0048 | 0.0103 | 0.4167 | 0.1190 |
| | Jensen KLCI | 0.0006 | 0.0011 | 0.0003 | 0.7884 | 0.1270 |
| | Jensen EMAS | 0.0005 | 0.0010 | 0.0002 | 0.7955 | 0.1140 |
| | R ² KLCI | 0.4622 | 0.4299 | 0.4790 | 0.3006 | 0.2910 |
| | R ² EMAS | 0.5471 | 0.5135 | 0.5646 | 0.3431 | 0.3380 |

An important characteristic of unit trusts funds is their market risk or beta (β), which measure the amount of non-diversifiable economy wide risk. Table 5 summarise the value of beta (β). Table 5 shows that unit trust in this study possess low market risk with beta (β) being substantially than 1.00. The results indicate that the average betas (β) for the unit trust funds are generally similar irrespective of whether KLCI or EMAS Index is used as a market benchmark. Differences in betas (β) are only significant at 5%-level only for the year 2007 and 2009 using t-test and Mann-Whitney tests.

Table 5 also shows that betas (β) using one year data is more volatile compared to using multi-period data. The volatility of one year data is expected since we are using only 12 month observations, which make the estimation to be more sensitive to

extreme observations. Most of the result shows none of the differences between risk for Islamic fund and risk for conventional funds are significant at 5% level using t-tests. Similarly with the result when Mann-Whitney test used.

TABLE 5: A Comparison Beta for Islamic and Conventional Unit Trusts Funds

| | Average | | | | | | T-test of difference in means | | Mann-Whitney Test | |
|----------------|-----------------------|-------|-------|-----------------------|-------|-------|-------------------------------|-----------------------|-----------------------|-----------------------|
| | Beta (β) KLCI | | | Beta (β) EMAS | | | Beta (β) KLCI | Beta (β) EMAS | Beta (β) KLCI | Beta (β) EMAS |
| | Total | Isl | Conv | Total | Isl | Conv | p-value | p-value | p-value | p-value |
| 1 year - 2004 | 0.366 | 0.323 | 0.389 | 0.776 | 0.750 | 0.790 | 0.344 | 0.619 | 0.018 | 0.080 |
| 1 year - 2005 | 0.390 | 0.232 | 0.490 | 0.367 | 0.208 | 0.467 | 0.185 | 0.160 | 0.070 | 0.059 |
| 1 year - 2006 | 0.656 | 0.646 | 0.662 | 0.663 | 0.660 | 0.665 | 0.835 | 0.953 | 0.416 | 0.411 |
| 1 year - 2007 | 0.601 | 0.518 | 0.668 | 0.574 | 0.490 | 0.642 | 0.033 | 0.027 | 0.046 | 0.037 |
| 1 year - 2008 | 0.769 | 0.728 | 0.805 | 0.751 | 0.709 | 0.788 | 0.209 | 0.184 | 0.462 | 0.417 |
| 1 year - 2009 | 0.629 | 0.548 | 0.700 | 0.584 | 0.513 | 0.647 | 0.017 | 0.022 | 0.033 | 0.051 |
| 3 years - 2006 | 0.504 | 0.467 | 0.522 | 0.504 | 0.467 | 0.523 | 0.393 | 0.393 | 0.194 | 0.194 |
| 3 years - 2007 | 0.678 | 0.662 | 0.689 | 0.648 | 0.632 | 0.658 | 0.646 | 0.639 | 0.832 | 0.763 |
| 3 years - 2008 | 0.778 | 0.762 | 0.790 | 0.740 | 0.724 | 0.752 | 0.551 | 0.514 | 0.431 | 0.391 |
| 3 years - 2009 | 0.741 | 0.695 | 0.777 | 0.698 | 0.653 | 0.733 | 0.087 | 0.079 | 0.028 | 0.032 |
| 5 years - 2008 | 0.693 | 0.667 | 0.707 | 0.726 | 0.704 | 0.738 | 0.353 | 0.412 | 0.098 | 0.108 |
| 5 years - 2009 | 0.752 | 0.743 | 0.757 | 0.711 | 0.703 | 0.716 | 0.743 | 0.734 | 0.460 | 0.431 |
| 6 years - 2009 | 0.699 | 0.673 | 0.712 | 0.712 | 0.691 | 0.723 | 0.363 | 0.437 | 0.106 | 0.135 |

Table 6 shows the number of observations with significant Jensen's Alpha. As an example, if yearly performance is measured using data for 2004 and KLCI as example the benchmark only. 1 year-04, then there are three funds with significant alphas out of 75 funds. From these three funds, one is Islamic fund while the other two are conventional funds. Thus from table 6, it could be observed that yearly data give more funds with significant alphas and using 1 year-05, there are 16 significant alphas out of 80 possible alphas out of 80 possible alphas or 20% of total observations are significant. However when multiyear estimation period is used, the number of significant observation decrease if we use 5 years, the maximum number of significant alphas is two for interval 2004-2008.

For the interval 2005-2009, the number of observation with significant alphas is one, which is of an Islamic fund. From table 6, it can be observed that there are not many significant alphas especially if multiyear period is used. Even though there are differences in the level of significant alphas between KLCI and EMAS, their differences are not great. Finally the differences between Islamic and conventional are not pronounced. Table 6 shows that it is very difficult to observe funds that consistently beat the market. This shows that market in Malaysia quite efficient.

TABLE 6: Total Number of Significant Observations Based on Jensen Alpha

| Year | Observation Significant | Total Observation KLCI | Total Observation EMAS | Total Sample |
|--------------------|------------------------------------|---------------------------------------|---------------------------------------|-------------------------|
| 1 year -04 | Total(Isl,Conv) | 3(1,2) | 5(4,1) | 75(26,49) |
| 1 year -05 | Total(Isl,Conv) | 16(9,7) | 12(6,6) | 80(31,49) |
| 1 year -06 | Total(Isl,Conv) | 16(9,7) | 11(6,5) | 85(36,49) |
| 1 year -07 | Total(Isl,Conv) | 3(1,2) | 3(1,2) | 90(40,50) |
| 1 year -08 | Total(Isl,Conv) | 4(3,1) | 3(2,1) | 94(44,50) |
| 1 year -09 | Total(Isl,Conv) | 12(5,7) | 12(5,7) | 94(44,50) |
| 3 years -06 | Total(Isl,Conv) | 3(2,1) | 3(2,1) | 75(26,49) |
| 3 years -07 | Total(Isl,Conv) | 4(2,2) | 5(3,2) | 80(31,49) |
| 3 years -08 | Total(Isl,Conv) | 4(1,3) | 3(2,1) | 85(36,49) |
| 3 years -09 | Total(Isl,Conv) | 2(2,0) | 2(2,0) | 90(40,50) |
| 5 years -08 | Total(Isl,Conv) | 2(1,1) | 2(1,1) | 75(26,49) |
| 5 years -09 | Total(Isl,Conv) | 1(1,0) | 1(1,0) | 80(31,49) |
| 6 Years | Total(Isl,Conv) | 2(1,1) | 2(1,1) | 75(26,49) |

In summary, this study finds that in term of:

1. Performance: There are no differences of performances for Islamic and conventional funds in Malaysia. The result shows both funds have a similar in term of performance.
2. Diversification: this study found Islamic unit trust has lower R^2 , based on both market benchmarks, showing that Islamic funds are less diversified. However both types of funds show very low R^2 . Thus it seems that funds in Malaysia are less diversified in the market.

3. Beta: The study found that the average betas (β) for the both unit trust funds in market are generally similar irrespective of whether KLCI or EMAS Index is used as the market as a market benchmark.
4. Jensen's alpha: Based on Jensen Alpha shows the differences between Islamic and conventional are not pronounced. Result shows Jensen Alpha are very difficult to observe funds that consistently beat the market. This shows that market in Malaysia quite efficient.
5. This study found that the performance between Islamic funds and conventional fund are similar for all the period from 2004 until 2009. The results differ from Abdullah et al. (2007). Abdullah et al. (2007) found Islamic funds are better than conventional funds during bearish economic trends, and conventional funds are better than Islamic funds during the bullish trends of the market.
6. Benchmark: performance of both Islamic and conventional unit trust funds are generally similar irrespective of whether KLCI or EMAS Index is used as the market as a market benchmarks. But the better benchmark for measuring the unit trust funds is EMAS index because EMAS price is more stable compared to KLCI index.

CHAPTER FIVE

CONCLUSION

5.1 Summary of Findings

This study examines the performance of Islamic equity funds as compared to the performance of conventional funds from 2004 to 2009 using monthly Net Asset Value (NAV) collected from Bloomberg database. This study uses KLCI and EMAS Index as the market benchmarks. This study divided the analysis into period of one year, three years, five years and six years. Comparison performance of Islamic equity funds unit trust fund with conventional equity unit trust funds by using parametric (2-independent t-test) and nonparametric (Mann-Whitney tests) analysis. This study uses Sharpe, Treynor and Jensen measure as method for measuring a fund's performance, beta (β) is used to measure the risk of fund and R^2 is used to measure the diversification level of the fund. This study compares the performance of Islamic funds against conventional funds using t-test of differences of means and Mann-Whitney tests are used.

The results show that Islamic funds performance is comparable to conventional funds performance. Most of the results from Sharpe, Treynor and Jensen measures show that the differences are not significant at 5%-level. The similarity of performance between Islamic funds and conventional funds might be due the fact fund manager usually offer both types of funds.

This study also found that the comparability of performance between the two types of funds are robust to the choice of benchmarks. This is not surprising as KLCI and EMAS are highly correlated. For future research, it is recommended that EMAS index is used as the benchmark as it is made of more assets.

The level of diversification of Islamic unit trusts funds and conventional unit trusts funds was also examined. R^2 fluctuates for all periods of study but most of the funds show that on average the funds are not well diversified, which implies that managers manage these funds actively. However most of the results in this study found that there is no difference in level of diversification between Islamic funds and conventional fund. Even though the conventional funds have a higher level of diversification compared to Islamic funds, the differences are limited to certain periods. This finding is similar to the finding of Abdullah et al. (2007) who found that conventional unit trusts are more diversified compared to Islamic funds.

This study found that systematic risk for the Islamic and conventional fund are not different to each other when either KLCI or EMAS Index is used as a market benchmark. T-test and Mann-Whitney test cannot reject the null hypothesis that betas of Islamic funds are similar to betas of conventional funds. As for Jensen's alphas for most of the periods under observation, the alphas are not different from zero. As a matter of fact, if five –year or six year period is used, at most only two funds that have alphas different from zero. The insignificance of alphas showed that the managers cannot outperform the market.

The limitation of this study is in terms of number of observations used. A higher number of funds might give better result. Another limitation is that the study used current period, i.e. 2004 to 2009. A longer period might give more robust result.

For future research, the comparison between Islamic and conventional funds can be done by using a sample of funds managed by full-fledge Islamic institution a sample of funds managed by the full-pledge Islamic institution and a sample of funds managed by institutions that managed both types of funds. Performance can also be measured by other techniques besides Sharpe ratio, Treynor Index and Jensen's alpha.

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APPENDICES

LIST OF ISLAMIC UNIT TRUST FUNDS'

| | |
|-----|----------------------------------------------------------------|
| 1. | AMB DANA YAKIN |
| 2. | ING ONEANSWER – EKUITI ISLAM |
| 3. | PACIFIC DANA AMAN |
| 4. | PACIFIC DANA DIVIDEN |
| 5. | ASBI DANA AL-MUBIN (FORMERLY KNOWN AS AMANAH SAHAM BANK ISLAM) |
| 6. | HWANG DBS AIIMAN GROWTH (FORMERLY KNOWN HWANGDBS DANA IZDIHAR) |
| 7. | ALLIANCE DANA ADIB |
| 8. | AMITTIKAL |
| 9. | AMISLAMIC GROWTH |
| 10. | AMOASIS GLOBAL ISLAMIC EQUITY |
| 11. | APEX DANA AL-SOFI-I |
| 12. | AUTB DANA BAKTI |
| 13. | DANA AL-AIMAN |
| 14. | DANA BESTARI |
| 15. | ASM DANA MUTIARA (PREVIOUSLY KNOWN AS ASMKMBY 4) |
| 16. | ASM SYARIAH AGGRESSIVE (PREVIOUSLY KNOWN AS ASM KMBY 6) |
| 17. | AMANAH SAHAM WANITA (ASNITA) |
| 18. | CIMB ISLAMIC EQUITY AGGRESSIVE |
| 19. | CIMB ISLAMIC DALI EQUITY GROWTH |
| 20. | CIMB ISLAMIC DALI EQUITY |
| 21. | CIMB ISLAMIC EQUITY |
| 22. | CIMB ISLAMIC ASIA PACIFIC EQUITY |
| 23. | CIMB ISLAMIC GLOBAL EQUITY |
| 24. | CMS ISLAMIC |
| 25. | HLG DANA MAKMUR |
| 26. | KENANGA SYARIAH GROWTH |
| 27. | RHB ISLAMIC GROWTH |
| 28. | PRUISLAMIC TRUST- PRUDENTIAL DANA AL-ILHAM |
| 29. | PRUDENTIAON ASIA PACIFIC SHARIAH EQUITY |
| 30. | TA ISLAMIC |
| 31. | PUBLIC ITTIKAL |
| 32. | PUBLIC ISLAMIC EQUITY |
| 33. | PUBLIC ASIA ITTIKAL |
| 34. | PB ISLAMIC ASIA EQUITY |
| 35. | PB ISLAMIC SECTOR SELECTPUBLIC CHINA ITTIKAL |
| 36. | PHEIM ASIA EX-JAPAN ISLAMIC |
| 37. | MAAKL SYARIAH INDEX |
| 38. | MAAKL AL-FAID |
| 39. | MAAKL SHARIAH ASIA-PACIFIC |
| 40. | OSK-UOB DANA ISLAM |
| 41. | PUBLIC ISLAMIC CASH PLUS |
| 42. | PUBLIC ISLAMIC SELECT ENTERPRISES |
| 43. | PUBLIC ISLAMIC DIVIDEND |
| 44. | PB ISLAMIC EQUITY |

LIST OF CONVENTIONAL UNIT TRUST FUNDS'

| | |
|-----|-----------------------------------------------------------|
| 1. | AFFIN EQUITY |
| 2. | AMB UNIT TRUST |
| 3. | AMB INDEX-LINKED |
| 4. | AMB ETHICAL |
| 5. | AMB VALUE |
| 6. | PACIFIC PREMIER |
| 7. | PACIFIC MILLENNIUM |
| 8. | PACIFIC RECOVERY |
| 9. | PACIFIC DIVIDEND |
| 10. | CIMB-PRINCIPAL KLCI-LINKED |
| 11. | HWANG- DBS SELECT OPPORTUNITY |
| 12. | AM TOTAL RETURN |
| 13. | AM CUMULATIVE GROWTH |
| 14. | APEX MALAYSIA GROWTH |
| 15. | APEX ENHANCED TRACKER (FORMERLY KNOWN AS APEX CI TRACKER) |
| 16. | AUTB TACTICAL |
| 17. | AUTB INVESTMENT |
| 18. | ASM KMBY KELIMA |
| 19. | ASM KMB-DANA PERTUMBUHAN |
| 20. | AMANAH SAHAM PEKERJA-PEKERJA TNB |
| 21. | AVENUE EQUITY EXTRA |
| 22. | CIMB- PRINCIPAL SMALL CAP 2 |
| 23. | CIMB- PRINCIPAL EQUITY |
| 24. | CIMB-PRINCIPAL EQUITY 2 |
| 25. | CIMB-PRINCIPAL EQUITY AGGRESSIVE 3 |
| 26. | CIMB- PRINCIPAL EQUITY GROWTH |
| 27. | CIMB- PRINCIPAL EQUITY INCOME |
| 28. | CMS PREMIER |
| 29. | HLG GROWTH |
| 30. | HLG BLUE CHIP |
| 31. | HLG PENNY STOCK |
| 32. | VALUE |
| 33. | RHB DYNAMIC |
| 34. | RHB CAPITAL |
| 35. | PHILLIP MASTER FIRST ETHICAL |
| 36. | TA GROWTH |
| 37. | TA COMET |
| 38. | PUBLIC SAVING |
| 39. | PUBLIC GROWTH |
| 40. | PUBLIC INDEX |
| 41. | PUBLIC INDUSTRY |
| 42. | PUBLIC AGGRESSIVE GROWTH |
| 43. | PUBLIC EQUITY |
| 44. | PB GROWTH |
| 45. | MAAKL VALUE |
| 46. | MAAKL EQUITY INDEX |

| | |
|-----|--------------------|
| 47. | MAAKL GROWTH |
| 48. | ASM FIRST PUBLIC |
| 49. | ASM KMBY KESEBELAS |
| 50. | ASM KMBY KESEPULUH |