THE PERSISTENCE OF MALAYSIAN UNIT TRUSTS PERFORMANCE BY USING ODDS RATIO ANALYSIS

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ABSTRAK

Kajian ini adalah bertujuan untuk menganalisa persisten saham amanah di Malaysia untuk jangkamasa panjang. Tempoh kajian adalah dari Januari 1995 hingga Disember 2004. Fokus utama adalah untuk menyiasat wujudnya prestasi persisten sama ada positif (tangan panas atau tangan sejuk) atau negatif (berlawanan) di kalangan saham amanah di Malaysia. Prestasi persisten akan diukur oleh pelbagai tanda aras dengan pelbagai jangka masa kajian. Kajian ini juga bebas dari masalah jangka hayat yang pendek di mana data yang digunakan adalah tidak pupus atau bergabung dalam tempoh kajian dijalankan. Walaubagaimanapun, kajian ini cuba menggunakan analisa nisbah janggal dalam menilai prestasi persisten. Jangka masa bulanan, separuh tahunan dan tahunan dikaji dengan menggunakan pulangan lebihan, indeks Sharpe yang telah diubahsuai dan indeks Jensen Alpha yang juga telah diubahsuai. Keseluruhannya, keadaan persisten wujud dalam pasaran saham amanah di Malaysia. Merujuk kepada keputusan analisis, persisten positif dan negatif berlaku dalam jangka masa kajian yang berlainan. Antara faktor yang mempengaruhi prestasi persisten adalah faktor risiko dan tempoh kajian yang berlainan. Keputusan ini dapat membantu pengurus dana amanah dan pelabur dalam mengenal pasti dan menganalisis saham amanah yang dapat memberi pulangan memberangsangkan kepada mereka. Walaubagaimanapun, prestasi pada masa lepas bukan jaminan untuk mengukur prestasi pada masa hadapan.

ABSTRACT

This study seeks to analyze the persistency of Malaysian unit trusts for the long term periods. The period measured was from January 1995 to December 2004. The main focus is to explore whether there is persistency of performance either positive (hot hand or cold hand) or negative (reversed) persistence among Malaysian unit trusts. Indeed, the persistency performance also will be measured by different benchmarks with various intervals of time. The study is free from survivorship bias problems whereby the data used is not liquidated or merged during the research periods. However, this study tries to evaluate the performance persistence by using the odd ratio analysis. The monthly, semiannually, and annually periods were analyzed by using excess returns, Adjusted Sharpe Index, and Adjusted Jensen Alpha Index. Overall, the persistence events occurred in Malaysia unit trust industry. Based on the findings, both positive and negative persistence happened during different periods of times. There are several factors such as risks and interval periods of study could influence the persistency performance. The results could facilitate both fund managers and investors in recognizing and analyzing funds which can benefits the most. However, the past performance is not a reliable indicator for future performance.

Chapter 1

INTRODUCTION

1.1 Background

The unit trust (mutual fund) industry is still in embryonic stage in Malaysia even though it has been more than 40 years old since it kicks off. However unit trust becomes an important component of the capital market since the late 1980s. According to Deputy Prime Minister, Dato' Seri Najib Tun Razak during Unit Trust Week 2005, Malaysia unit trust industry has recorded a steady growth. He said that the growth documented with more than 118.9 billion units in circulation of the 221.6 billion units permitted. The confidence in growth will achieve from 20 to 40 percent of capital market in the near future.

Ramasamy and Yeung (2003) estimated that the world mutual funds have been growing at an average annual rate of 14.4 per cent since 1989 higher than the growth in equities and bank deposits. Emerging Asian market such as China, India, and Malaysia are expected to grow by double digits annually and estimated to reach US$ 12 trillion by the year 2030.

They also added that the size of Asian pension market was about US$ 3 trillion strong which was about a quarter of the US pension fund. US pension funds are an instrument for investment in emerging markets (Kaminsky et al., 2001). In Malaysia and Singapore, there has been a flow from pension funds to mutual funds because of the changes in government regulations. The government's supports towards mutual funds could further develop the growth of this industry.

1.2 Benefits of Unit Trust Investments

There are a number of advantages in investing in unit trust industry. Firstly, the unit trust industry required a small amount of capital indirectly affordable to investors. The transaction size of unit trust is large thus decreasing the relative costs of transaction. Conversely, people investing directly in the stock market incur high costs and charges because of the small transaction factors. Secondly, the unit trusts are managed by professionals fund manager who are expert in this industry. These professionals have much experience and able to make a structured investment decision.

Thirdly, the funds are invested in a diversified portfolio of stocks thus minimizing the investment risks. The fund manager could purchase a wide range of investment consisting of various types of assets of different risk categories. Fourthly, some of the unit trust provides life insurance coverage and disability coverage, which could attract the investors. Lastly, the unit trust scheme is liquid since it can be redeemed at any time.

The drastic growth in the unit trust industry in the emerging markets has resulted in an increase in the number of investment firms offering various funds. Even though the number of Malaysia's fund is small compared to established markets like US, the growth is high and increasing at a high rate. Some of the unit trust is consistent and some are persistence towards their performance. So, the public should aware and understand thus grab the opportunity to invest in this industry.

1.3 Role of Government

There are several factors that are expected to further enhance the growth of the unit trust industry in Malaysia. Among of it is the government promotion such annually

“Malaysia Unit Trust Week” and (Employee Provident Fund) EPF alternative scheme, which stimulate the growth of this industry. Malaysia Unit Trust Week is a national event and it was held annually. The objective is to promote unit trust approved by the government, privates and to create awareness to the public of the significant of trusts fund. The current event is just been held from 20 to 26 April 2005 at Seremban, Negeri Sembilan.

The “Malaysia Unit Trust Week” through Permodalan Nasional Berhad (PNB), helps educate the public on the advantages of investing and saving in this industry. As a result, the tendency of being influenced by the fly-by-night get-rich-quick scheme will be eradicated. PNB; Malaysia’s largest investment manager helps generate wealth and income for some of the country’s poorest people.

In 1981, PNB unveiled its first unit trust scheme called Amanah Saham Nasional (ASN). The launch came with the mission of informing investors about putting their money in the right place so that they would obtain the best returns. In other words, stuffing their savings in mattresses was not the thing to do. Besides ASN, the others are Amanah Saham Bumiputera (ASB), Amanah Saham Wawasan 2020 (ASW 2020), and Amanah Saham Gemilang (ASG) to name a few.

1.4 Industry Structure

Unit trust can be categorized into various ways. It can be grouped into equity, balance and bond fund depending on the proportion of funds invested in securities. An equity fund (growth funds) denotes that a higher proportion of fund assets will be invested in stock/shares. This fund is risky but will provide a high return in the long run. The market benchmark for equity funds is stock market index which is KLCI (Kuala Lumpur Composite Index). Balanced funds are more or less equally divided between equity and fixed income securities. These funds are less risky compared to equity with a lower return respectively. The balanced fund used the equally weighted index of risk free and equity returns as a market benchmark.

A bond funds are mainly invested in fixed income securities to secure and distribute annual income to unit holders with capital growth considered incidental to the investment process. For bond fund, the risk and return are lower and the KLIBOR (Kuala Lumpur Inter Bank Rate) is used as a market benchmark.

On the other hand, money market funds can be defined as funds invested in short term money market instruments. This type of funds has been recently significant to capitalize on the rise in short term interest rates. Meanwhile, property funds are invested in real estates which derive from the value appreciation of the real estates.

1.4.1 Closed-end versus Open-end Funds

Closed-end fund are listed on the exchange and its prices fluctuates based on the market demand and supply. Its number of unit in circulation is fixed at the time of launching with the property trust is the example of the closed-end funds. However, closed-end fund is not popular as opened-end funds. The opened-end funds are marked to the market on daily basis and its price equals the NAV (Net Asset Value) of the securities. The units can be bought or redeemed at the management firm of the fund. Basically, these funds are not listed on the exchange.

1.4.2 Government versus Private Funds

In Malaysia, the government support and involvement in unit trust is very strong. Among the activities are improving the industry regulation, liberalization of the EPF

(Employee Provident Fund) Scheme, public awareness promotions, tax incentives and development of the local capital market. Besides owning the ASN managed by PNB, various state unit trusts exist and managed by state agencies. These unit trusts are known as government sponsored funds. Isa (2003) explained that even the numbers of private funds are more than government sponsored, the NAV and units in circulation of government funds are more than the private. This is due to the size of government funds are large especially those managed by PNB.

1.4.3 Islamic Funds

The presences of Islamic funds are unique and started taking place among investors since its availability in 1994. Islamic funds invested in firms allowed under the Syariah (Islamic) law. Islamic law do not recognized companies involved in interest-based products for example banking and financial firms, trading of non-halal food products, gambling, alcoholic beverages and immoral activities. The SAC (Syariah Advisory Council) declare counters that are not against the Islamic principles. The SAC has outlined a standard criterion for companies which are permissible for Syariah criteria. The funds/securities that are banned from the Syariah approved list possess criterias such as:

a) operations involving the manufacture or sale of haram (forbidden) products like pork, liquor and unslaughtered meat not based on Islamic rules
b) activities based on riba (interest) like activities of financial institutions
c) activities involving gambling
d) activities with gharar (uncertainty) elements such as the conventional insurance instruments

1.5 Research Problem

The unit holders normally predict and choose unit trusts on the basis of its performance track record. However, most of the scholars do not believe in this approach even though the track records proved useful to the investors. The Efficient Market Hypothesis (EMH) shows that past performance is no guide to future performance after the risk adjustments.

Previous studies find that on average Malaysian unit trust performance is inferior to the market performance and even risk free performance (Taib et al. 2002). This shows that Malaysian unit trust managers are unable to predict share prices well enough to outperform a naïve buy and hold policy. Hence, there is a need to see if persistency in unit trust performance exist (negative persistency). For instance, if a fund performs poorly, would it continue to perform badly in the future?

Although there have been some studies that look into persistency issues, the studies suffer from survivorship bias and only use a particular methodology such as the HPZ (Hendrick, Patel and Zeckhaunser) model in 1993.

This study is investigating whether persistence in performance does exist and whether the best performing funds of the past are seemly to be the best performing funds in the future. The persistence phenomenon also known as "hot hand" has widely elaborated by Hendricks, Patel and Zeckhaunser (1993), and Goetzmann and Ibbotson (1994). The argument here is that the unit trust data is subject to survivorship bias which creates inaccuracy in studying the performance persistency.

Previous studies like Malkiel (1995) and Brown and Goetzmann (1995) found few evidences on the negative persistence (reversed persistence). The negative persistence explained that high fund performance in the first period will be followed by low performance in the subsequent periods and vice versa. While positive persistence can be explained as a hot hand or cold hand whereby the winner funds followed to be a winner in the next period or the loser funds followed to be loser in the next period respectively.

1.6 Research Objectives

The purpose of this study is to document the unit trust persistency in Malaysia from January 1995 to December 2004. The main focus on these studies is:

a) to explore whether there is persistency of performance either positive or negative persistence among Malaysian unit trust.

b) to examine if the persistency is influenced by the use of different measures like monthly, semi annually, or annually

1.7 Research Questions

This study seeks to address the following questions:

a) Does persistency of performance (either positive or negative) exist among Malaysian unit trust?

b) Does the persistency is influenced by the use of different measures like monthly, semi annually, or annually?

1.8 Significance of the study

The performance of persistency studies in Malaysian unit trust is scarce. The studies used the lag model from HPZ (Hendrick, Patel and Zeckhaunser) in 1993 to view the unit trust persistency. However, this study implement the odd ratio model to observe the persistency by using various benchmarks of monthly, semi annually and yearly performance.

This study also free from the survivorship bias whereby the funds selected are continuously exist from 1995 to 2004. There are no funds merged or liquidated during this period. This research also have longer time frame with a large sample size. The dataset used was 5068 and 431 for monthly and yearly respectively.

In this study, the criteria's tested were from Malkiel (1995) that used Z test for repeat winners, Brown and Goetzmann (1995), test statistic for the odds ratio and Kahn and Rudd (1995) that used the chi square test of independence. The integrated approaches of the tests used are feasible and reliable to determine the funds persistency. The odds ratio give an equal number to both winners and losers phenomenon. Perhaps, it provides enough variation to detect any statistical significance for results interpretation.

Meanwhile, the lag model used by HPZ is the most common approach in looking at persistency. By using the abnormal return, only limited or handful number of winners fund will be discovered. The unequal number of winners or losers fund may affect the results interpretation especially during the Asian financial crisis (AFC) from 1997 to 1999. When the stock returns was badly hit during that time, it reflected the lower return that gave obscured results when statistical test is been used. Therefore, the odds ratio seems to be applicable in conducting the funds persistency analysis.

1.9 Definition of Key Terms

Unit trust

A unit trust fund can be defined as a collective investment scheme that pools unitholders' monies and invests it in a basket of financial securities towards a specific goal. The professionally managed scheme aims to offer above average returns in the type of income distribution and capital growth with reasonable risks. Indeed, this scheme also will be invested in diversified portfolio of stocks and bonds or other specialized instruments. The unit trust scheme can be explained as a tripartite relationship between the manager, the trustee and the unit holders. This relationship is governed by the trust deed which registered with the Securities Commission (SC).

The manager is responsible under the Deed, SC Act 1993 and Guidelines on Unit Trust Funds to administer the funds in an efficient manner to ensure high standards of integrity and fair dealing. The trustee is appointed trustee for the unitholders and acts as the custodian for all the assets of the scheme. The trustee must ensure that the manager adheres strictly to the provision of the deed. The deed spells out in detail in which the scheme is to be administered, the valuation and pricing of units and the duties of the manager and trustee with regards of the operations of the scheme.

Unit trust persistency

The persistence phenomenon can be defined as past mutual fund returns can forecast future returns. It is also known as "hot hand" phenomenon (stock picking ability by fund managers).

Survivorship bias

The unit trust which has a short life span due to certain factors.

Odd ratios

A way comparing the probability of certain event which is equivalent for two groups comparison

The Securities Commission (SC)

A body regulates the industry and the administration of unit trust schemes via the SC Act 1993 and the Guidelines on Unit Trust Funds.

Permodalan Nasional Berhad (PNB)

PNB was conceived as a pivotal instrument of the government's New Economic Policy to promote Bumiputera share ownership in the corporate sector and develop opportunities for Bumiputera professionals to participate in the creation and management of wealth.

Syariah

The Islamic law based upon Holy Quran, the Prophet's Sunnah, and the works of Muslims scholars in the first two centuries of Islam. Syariah cannot be proved wrong and have to be accepted since it is based on the will of Allah the Al Mighty.

1.10 Organization of Remaining Chapters

This research is structured into five major chapters. Chapter one discusses the background structure of unit trust, nature of the problems, research objectives and questions, definition of key terms and the significance of this study. The second chapter highlights the glance of Malaysia's unit trust industry, the empirical studies in Malaysia, United States (U.S) and United Kingdom (U.K) evidence of the significant of the unit trust. Perhaps, the comparison between U.S and U.K unit trust will also be explored instead of viewing African and ASEAN unit trust industry. Indeed, the hypothesis development will also be explored. Chapter Three describes the methodology highlights like data sources and sample, returns approach, Jensen Alpha and Sharpe Index measurement performance, and the treatment of risk. Hence, the odd ratio model will be described to measure the monthly, semi annually and yearly performance persistence. In the fourth chapter, the results of the study are corroborated and analyzed. Finally, chapter fives concludes the study. The limitations and suggestions for future research of the study are provided in the final chapter.

Chapter 2

LITERATURE REVIEW

2.1 Introduction

The measurement of the unit trust performance has attracted interest among the researchers. The introduction of the Modern Portfolio Theory by Markowitz (1952) and the risk adjusted performance methodology by Sharpe (1966) and Jensen (1968) has encouraged other academicians for future research. Sharpe (1966) created a risk adjusted measure of performance regarding the rewards to variability ratio to observe the mutual funds performance in U.S. The period study from 1954 to 1963 shows that the mutual funds did not surpass the market return. Similar results found from the studies of Jensen (1968), Firth (1977), and Koh and Koh (1987).

On the other hand, Chang and Lewellan (1984) who studied the mutual fund performance from 1971 to 1979 found that the fund managers could access to private information to offset their expenses. Therefore, Ippolito (1989) stated, "mutual funds with higher turnover, fees and expenses are able to earn higher returns to offset their higher charges." So, it can be seen that mutual funds are efficient in their trading activities.

Hendricks, Patel and Zeckhauser (1993), Bauman and Miller (1994) and Brown and Goetzmann (1995) have isolated a "hot hand" or persistence phenomenon whereby the past mutual fund returns can predict future returns. The consequences is contradict with Sharpe (1996) and Jensen (1968) that postulates that investors could obtain significant risk adjusted returns by purchasing well performing funds over a short time periods. However, recent studies show a mixed result of funds persistency by using various benchmarks and comprehensive data.

2.2 Malaysia Unit Trust Industry

Unit trust industry in Malaysia started in 1959 but started to proliferate in the early 90's. The industry gets a full support from the government, which considers it as a tool for social restructuring.

Malaysia together with Japan and Korea showed a tremendous and consistent growth in their economies thus stimulate the unit trust growth. Even the 1997 Asian crisis gave a big impact to the economy, the sudden recovery by the government make a fast heal to the industry. According to Ramasamy and Yeung (2003), more than two thirds of these funds are affiliated with the government either owned by the state or quasi government agencies. It is a Malaysian government mission to increase Bumiputera awareness and ownership in the corporate industry. The establishment of PNB in 1978 is to choose, evaluate and obtain shares from the companies. Taib et al. in 2001 said that ASN which was introduced in 1979 will be redistributing these shares to Bumiputera (indigenous society of Malaysia especially Malays) individuals. Currently, PNB had launched various numbers of unit trust such as Amanah Saham 2 and 3, Pendidikan, and Persaraan.

Taib et al. (2002) also added that the unit trust industry in Malaysia currently accounts about 10% of total market capitalization. If compared to developed countries, unit trust plays a major role accounting approximately 40% of total market capitalization. So, this industry is expected to play a vital role in the Malaysian economy. In other words, the growth of unit trust industry will boost the investment opportunities in Malaysia.

2.3 Empirical Studies in Malaysia

The studies in Malaysia fund performance is limited even there is a substantial growth and government support in early 90's. The academic researcher in Malaysia shows a mixed result regarding the fund performance studies. Generally, Malaysia's fund performance underperformed the market benchmark. Chua (1985) postulates that on the average the unit trusts performed better than the market. His study is on 12 Malaysian unit trust funds between 1974 to 1984. The average Sharpe Index was 0.161 compared with 0.083 for the market. The study explained that the fund performance was consistent and the fund managers had diversified and performed risk control reasonably well. Indeed, the fund characteristics such as expense ratio, size and turnover were inversely correlated to unit trust performance. On the other hand, government sponsored fund have certain privileges, that make it performed better than the private fund.

However, Ewe (1994) has a different result. He explained that Malaysia fund managers were unable to accurately forecast the stock price movements and other investments. In the period taken from 1988 to 1992, he deduced that the average risk of unit trusts was below than those of market portfolios. Similar results discovered by Tan (1995), and Mohamad and Mohd. Nasir (1995). Tan (1995) stated that unit trusts generally performed worse than the market portfolio. The duration of his study is from 1984 to 1993, by examining 12 unit trusts fund. However, he found that government sponsored funds performed better than the private funds which are consistent with Chua's result.

Indeed, Mohamad and Mohd. Nasir (1995) examined the performance of unit trusts fund from the period 1988 to 1992. Their results showed that the actual returns and fund risk characteristics were not consistent with their objectives instead of degree of portfolio diversification of funds which below expectation.

Most of literature discuss about the fund performance and showed a mixed result between the performance and the portfolio benchmarks. However, scarce studies focusing on the persistency of the Malaysia fund performance. Chong and Kho (2002) explored the persistence in fund performance between 1991 to 2000. He analyzed 63 equity trusts by using various analysis method and performance measures. They stated reversed performance persistence when using the cross sectional regressions residual returns. However, they documented strong negative performance for mean adjusted residuals. Indeed, the time series regressions stated the absence of performance persistence.

2.4 U.S. Studies

In the last decade the mutual fund industry has grown tremendously. Otten (2002) explained that the number of mutual funds in US is roughly 60% larger than the number of listed securities. The significant of mutual funds in society justifies the major amount of studies published in the financial press and academia. Among the main issues that been debated are benchmark sensitivity, performance persistence, timing and selection abilities, and survivorship bias. Early studies explained that the mutual fund did not outperform the market. Indeed, the managers do not possess superior ability to consistently outperform the market. However, the studies of past stock prices do not gives helpful information in forecasting future price movement holds.

In conventional studies, Sharpe (1966), conducted a study from the period of 1954 to 1963 on 34 mutual funds. He implemented a risk adjusted measure of performance based on the reward to variability ratio which is known as the Sharpe Index. Sharpe observed that only 11 out of 34 mutual (approximately 32 %) funds had higher Sharpe Index compared to the market. It shows that lower Sharpe ratios are linked to inferior performance per unit of standard deviation. In other words, mutual fund does not outperform the market (the Dow Jones Industrial Average or DJIA). In addition, the studies also state that size of the fund per se was not an important factor in forecasting future performance. As a proved, funds with low expense ratios generally produced a better performance.

Conversely, Jensen (1968) used larger data set of 115 mutual funds with period of more or less the same with Sharpe from 1955 to 1964. Jensen introduced another performance measurement called market equation to calculate alphas for his funds. He used the excess return from a single index model whereby positive alphas indicates that the mutual fund outperform the market index. This method could evaluate a portfolio's managers predictive ability of securities prices. Jensen found that fund managers were unable to predict securities prices to outperform a simple buy and hold policy. Out of 115 funds, he obtained an average beta value of 0.84. As a result, Jensen assumed that mutual funds on average possessed a lower risk than the market.

The studies on mutual fund persistency came aggressively in the early 90's. Grinblatt and Titman (1992) utilized a three step procedure to measure the persistence in abnormal performance. The data used in their sample comprised 279 mutual funds for a time period of 1974 to 1984. In this research, they split the ten years samples of data into five years sub periods. Then, they computed the abnormal return for each fund for each sub period. At last, they estimated the slope coefficient in a cross sectional regression of abnormal returns from the last sub periods (last five year data) on abnormal returns computed from the first five year data. As a result, a positive significant t statistic in the regression rejected the null hypothesis that past performance was unrelated to future performance. In contrast, the alternative hypothesis has been supported that past performance was related to the future performance. Their studies concluded that there was a positive persistence in fund performance except on the passive portfolio which has no evidence of persistence. To sum up, the worst performing funds exhibited poor performance persistently. However the best and worst performing funds showed persistence when each fund was divided randomly in half.

Hendricks, Patel and Zeckhauser (1993) scrutinized mutual fund returns for the period of 1974 to 1988. By using 165 funds, the cross sectional regressions were estimated by ordinary least squares. The independent variables consist of lag 1 to 8 of the dependent variable. On the other, the dependent variable was a measure of the residual fund in the quarter. The results shows that the alpha for the first four lags were all positives and significant. The persistence disappears beyond a year, which was in line with a hot, or icy hand phenomenon. Indeed, the eight portfolios also been ranked from the poorest performance for the first octile to the best performance for the best octile. For the octile rank, the excess returns increased constantly with the ranks.

On the other hand, Griblatt and Titman (1993), used 155 mutual funds over the period of 1974 to 1984. They used the portfolio change measure to indicate the fund performance. The data for the fund’s performance was ranked over the first half of the period. Then, the funds were grouped into portfolios based on the rankings. The performance of the portfolios was measured over the second half of the period which is lag four quarters. The results show that there was strong relationship between performance in the first 56 months and the last 55 months. In general, not all mutual fund managers achieved superior performance which these people states their ability persistently.

Grinblatt et al. (1995) studies on the 155 mutual funds form the period 1974 to 1984. By using the cross sectional regressions of fund performance with lag dependent variable, they proved that mutual funds had a tendency to buy stock based on their past returns. Indeed, they tended to buy and sell the same stocks at the same time in excess of what one would expect from pure chance. Generally, the funds following the momentum strategies realized significant excess performance, while contrarians funds realized virtually no performance.

Brown and Goetzmann (1995) used profit analysis to forecast the persistence in fund performance. They used data ranges from 372 funds in 1976 to 829 funds in 1988. By using contingency tables with Z test of odd ratios divided by standard error, the reverse persistence also exist instead of the positive persistence. In the same year, Malkiel (1995) observed at mutual fund returns from 1971 to 1991 and rectified the persistence phenomenon with two caveats. Firstly, his findings are subject to survivorship bias. Secondly, the relationship may not very strong due to strong persistence that characterized the 1970s does not appear during the 1980s. Moreover, Elton, Gruber, and Blake (1996) found that the past mutual fund performance carries information about the future. He concluded that when the performance is evaluated within a one year period, the previous year data carries more information regarding performance instead the data from the past three years.

On the other hand, Elton et al. (1996) examined 188 funds from the year 1997 to 1993. They used risk adjusted performance based on four index model to calculate the alpha or the intercept. The results showed the relationship between past and future performances was relatively high for a short run (one year period) and decreased when alpha was measured in the long run (over three years). When ranking was used on a risk adjusted basis, the predictability increased when the performance was measured for the three year periods.

Gruber (1996) studied on 227 mutual funds from January 1985 to December 1994. He implemented three methods to measure the performance of mutual funds. The methods are returns relative to the market, the excess returns from a four index model and Jensen's measurement method which is the excess returns from a single index model. The funds were ranked and located into deciles on the basis particular selection criterion such as past monthly returns. Then the Spearman rank correlation was conducted to examine relationship between the first and second period of the performances. The results showed there was a significant correlation between both the first and second periods. So, the past performance is a reliable indicator for the future performance.

The recent studies by Carhart (1997), used three methods to measure mutual fund performance. The methods are single index based on value weighted, three index models and four factor models. The model for the four factors comprises of the three index model plus the one year momentum in stock returns. The authors grouped ten equally weighted portfolios of funds using reported returns. The results postulated that the high return funds in last year were higher than the average expected returns in the following year.

Generally, mutual fund underperformed market indices as the portfolio benchmarks. Most of the studies shows that if the funds were ranked based on the returns from the best to the worst portfolio performance, the best portfolio outperformed the benchmarks. So, there was a strong relationship between the past best or worst performances in short run but the relationship was deteriorated in the long run cases.

2.5 European Evidence

The study of unit trust in European market is scarce although several authors studied individual countries. McDonald (1973), Ward and Saunders (1976), and Shukla and Imwegen (1995) have empirically analyzed the performance of mutual funds. The main reason for the lack of studies is the institutional setting of industry in various European countries. However, the differences are reducing with the integration of European financial markets. Indeed, the demand for mutual fund industry and the studies on the mutual fund industry has enhanced.

Firth (1977) analyzed the performance of 72 unit trusts in U.K over the period 1965 to 1975. The model used was capital asset pricing model and Sharpe's reward variability index. The results show that managers have not been able to forecast share prices accurately to outperform a simple buy and hold policy. The studies also indicated that the Jensen Alpha have no significant effect on the factors like size of unit trust, age of the fund, management charges and the beta values. As a results, the beta values depends mostly on the managers investment policies. The results also showed that the fund managers do not have superior investment selection ability due to the competitive nature of the UK stock market.

Indeed, Firth (1978) expanded his research to include 360 unit trusts in UK for the period 1967-1975 similar conclusion has been obtained. However, some other papers in European shows contradict results. For example, McDonald (1973) observed eight French mutual funds over the periods 1964 to 1969 and from 1967 to 1969. By using the Jensen Alpha and Sharpe Index, he discovered that the funds outperformed the market with average alpha value of 0.25. Fletcher and Forbes (2002) examined the persistence in UK unit trust performance between January 1982 to December 1996. They concluded the significant persistence in the performance of portfolios formed on the basis of prior year excess returns. They used different performance measures based on the Capital Asset Pricing Model (CAPM) or Arbitrage Pricing Theory (APT).

CAPM is a theory concerned with deriving the expected or required rates of return on risky assets based on the assets systematic risk levels. Indeed, APT is a theory deriving the expected or required rates of return on risky assets based on the assets systematic relationship to several risk factors. This multifactor model is in contrast to the single factor CAPM. However, the persistence is eliminated when performance is evaluated relative to a model similar to Carhart (1997). As a result, this model shows a significant negative performance in the studies. However, in general researches on developed market in Europe said that the unit trust funds did not performed better than the market portfolio.

Tufano and Sevick (1997), Walter (1998), and Chordia (1996) analyzed several issues such as board and fee structures, and globalization thus concluded that organizational characteristics do influence the mutual fund performance. However, Otten (2002) tested the performance and compared the European and U.S. mutual fund industry. By using a structure-conduct-performance (SCP) paradigm, Otten found that Europe is still far back from U.S. mutual fund industry in terms of total asset size, market importance and average fund size. SCP is a framework developed in organizational literature which focuses on the product and production efficiency. The SCP paradigm measures the performance with production, progress, full employment and equity.

Conversely, finance literature uses stock market returns and asset pricing models to measure performance Moreover, the European society has more tendencies to fixed income mutual funds while the Americans prefer mutual funds investing in equity. Consequently, the mutual fund markets in the individual European countries are conquered by several large domestic fund groups, which might cause to lower levels of competition.

2.6 The Africa Unit Trust Industry

Different scholars have derived various conclusions about the performance persistence of South Africa unit trust market. Knight and Firer (1989) studied for the period 1977 to 1986 showed proved that unit trust have performed consistently well and poor respectively. Biger and Page (1994) and Oldfield and Page (1997) stated that there is little evidence of market timing ability among South African managers. The authors stated that the fund managers were not able to consistently outperform the market; neither did any manager consistently perform worse than the market. There is very little “persistence” in performance amongst fund managers. In other words, if a fund manager performed well in one period it does not imply that he will perform well in the subsequent period.

However, Theron (1996) said that there is an evidence of performance persistence of unit trust in South Africa. The conclusions suggest that it is important to invest in the top performers which in future can lead to significant difference in returns. If invest in the top quartile of best performers which can be refer to Africa Unit Trust Handbook (1997), investors can consistently received positive returns. However, only one in five of the funds in the top quartile of a five year league table are likely to remain in the top quartile over the next five years. The investors will face inconsistency in observing fund performance during their investment period.

In addition, Meyer (1997) studied the persistence of South African unit trust over the ten years period from July 1985 to June 1995. The author used the Jensen alpha measure and the Sharpe Index over different time periods (one, two and four year periods). The results of nominal returns and risk adjusted returns are comparable to those obtained in much bigger markets. The persistence in Africa unit trust does exist but there is more of a loser phenomenon than a winner phenomenon.

2.7 Unit Trusts in ASEAN Countries

Unit trusts are relatively new industry in the ASEAN region. Its growth and development is very slow and its role in capital market was not significant. However, in early 90’s its presence felt which most of the ASEAN local securities achieved a high growth of development. A lot of the evidence especially the government support shows the industry growth and moved in tandem with local capital market. Consequently, the researcher also starts to investigate the performance of unit trust in these regions. Singapore is one of the countries which empirically look at the performance of unit trust industry instead of Malaysia.

Koh and Koh (1987) conducted a study on 19 unit trusts in Singapore from 1980 to 1984. They concluded that the growth fund do not possess highest risk and returns compared to other types of funds. It shows that the risk and return characteristic are inconsistent and the funds were unable to outperform the market with some funds having negative adjusted Sharpe Index. In other words, the returns earned are less than the average risk free rate. However the income funds outperformed the balanced and growth funds but none of this type outperforms the market.

Koh and Kee (1990) further studied on the performance of four listed investments for the period 1978 to 1987. They concluded that three out of four investment trusts outperformed the market portfolio on average. Nevertheless, they suggested the same conclusion as their studies in 1987 which that the fund returns were inconsistent with the stated objectives thus the performance inconsistent too. Similarly, Ariff and Johnson (1990) observed the performance of 14 Singapore‘s unit trust over the period 1984 to 1989. They used the weekly dividend adjusted returns and concluded that the funds underperformed the market averagely. On the other hands, the funds are not diversified too. Indeed, Lee (1993) studied 21 unit trusts in Singapore from the year 1986 to 1990 and obtained the same results.

Tan (1989) analyzed four investment trusts listed on the Stock Exchange of Singapore (SES) over the period of 1978 to 1987. He found that the funds performed better than the market but not too significant. The average Sharpe Index shows 0.027 compare to 0.0135 for the market. Other results exhibit Treynor Index was 0.0355 while the benchmark value was 0.0106. The average adjusted Jensen alpha Index of 0.414 stated that the performance of the four investment trusts was similar to the markets. On a whole, the performance of most unit trusts in Singapore was not better than the market whether the performance consistent or inconsistent with their stated objectives.

2.8 Hypotheses Development

Since some studies (Hendrick, Patel and Zeckhaunser, 1993; Brown and Goetzmann, 1995) argue that past performance of unit trust is related to future performance, this study looks thoroughly at the market timing. The hypotheses are divided into three