

PERFORMANCE OF ETHICAL MUTUAL FUNDS: EMPIRICAL EVIDENCE FROM UNITED KINGDOM AND MALAYSIA

Shaikh Masrick Hasan¹

Abstract

Ethical funds have got attention to investors due to the nature of investment and selection of assets. Over the time, growth of ethical funds or Socially Responsible Investment (SRI) has been increasing. Considering the evolution of ethical funds, this study has been undertaken to compare the performance of ethical funds and 20 assets simulated portfolio of the United Kingdom (UK) and Malaysia. The study has been conducted through collecting data of nine ethical funds in the UK, listed stocks of FTSE100, nine ethical funds in Malaysia and listed stocks of FTSE Bursa KLCI. Data has been collected from Bloomberg and analyzed through Monte Carlo simulation and Sharp ratio. The result of the study shows that Malaysian ethical funds sacrifice their performance compared with the ethical funds of performance in UK. Therefore investors may select the ethical funds for social responsibility not for profit.

Keywords: Ethical Mutual Funds, Ethical Investment, Mutual Fund Performance, Socially Responsible Investment (SRI)

1. Introduction

1.1 Background of the Study

Nowadays investment decisions include various issues besides financial concerns such as environmental, social and religious considerations. These issues are integrated into investment decisions as some investors try to have non-financial utility from ethical investments. Considering these issues evaluated by investors, ethical funds have been evolved. Sandberg et al. (2008) stated that, definition of ethical fund is ambiguous and includes various intentions and purpose of investors. In this regard Kreander et al (2005) in their study concluded that, ethical fund investment may be varied, one fund may consider ethical investments which are associated with environmental issues while another fund may consider ethical investments which are not associated with issues like alcohol, tobacco or pornography etc. On the other hand, positive screening approach includes companies which meet superior standards or ethical issues (Renneboog et al. 2008). Kempf & Osthoff (2007) stated that, positive screening approach includes wide variety of investment opportunities. At present investment in mutual funds are influenced by ethical considerations.

Above mentioned discussions concluded that investment decisions are highly influenced by ethical considerations. Investments based on ethical considerations are treated as ethical fund or socially responsible investments which are different from conventional fund. This research study will review the operation nature and performance of ethical funds. This study has selected UK and Malaysia as case study

1. Assistant Professor, Department of Finance, Faculty of Business Studies, Jagannath University, Dhaka, Bangladesh.

country where UK will represent investment funds of developed country and Malaysia will represent investment funds of developing country.

Overall discussion of the study will help to understand the performance of ethical investments funds. Findings of the study will be matched with various empirical researches to identify variations.

1.2 Rationale of the Study

Corporate social responsibility (CSR) has become major concern of considerable research and debate over the last decade. At present time, one thing has become very popular during selecting investment opportunities that is applying social, ethical and environmental criteria to investment strategies. This job is done by socially responsible funds (SRI) or ethical funds.

In the survey of Sparke (1998), it was shown that one third of the investors are ready for investment in ethical funds if return from ethical firms are slightly lower than those of conventional funds. But this percentage of ethical investors rapidly falls if return for ethical funds are significantly lower than that of conventional funds. Some evidence shows that CSR behavior of an organization has positive impact on market value of the organizational and ethical funds are more sustainable than conventional funds. For this reason the portfolio that includes shares issued by firms which are involved with high quality CSR are considered to be more sustainable and profitable (Bird et al., 2007). CSR has been considered as intrinsic motivation for employees which in return associated with better performance. It is known to all that ethical funds avoid investment in certain industries regardless of return from those industries. For this reason investment from ethical funds seems more risky than traditional investments (Michelson et al., 2004). Here data collected from UK and Malaysia will help us to conclude about the research problem and collected extensive data is expected to provide effective solutions to research problem.

1.3 Research Objectives

Objective of the study is to provide comparative overview among ethical funds and simulated portfolio (local equity index) regarding their performance in both United Kingdom and Malaysia.

2. Literature Review

The origin of ethical investment or SRI is ancient in Christian, Jewish and Islamic traditions. Judaism developed numerous techniques regarding investing money ethically. In medieval Christian times, ethical investments were employed to loans and investments. Universal prohibition was employed by Catholic Church on Usury in 1139 which continued until 1900. The Pioneer Fund which was founded in 1928 is first modern fund employing religious traditions.

Ethical investments also got popularity in Islamic traditions (Elena, 2009). Beal et al. (2005) in their study concluded that, based on teachings of 'Al-Quaran' and its interpretations, Islamic investors avoid investment in companies which are involved in pork production, pornography, gambling and interest based financial activities. They also stated that ancient ethical investments were mainly concerned with

religious issues but modern ethical investments consider personal ethical convictions and social convictions of investors.

First modern SRI mutual fund was Pax World Fund which was founded in 1971 in US and initiated to avoid investments in weapon contractors. During 1980 racism was at highest level and ethical investors from Europe and USA exerted fund managers to withdraw or divert funds from South Africa to somewhere else. This action can be stated as social ethical considerations. Campaign regarding these social issues were successful and state legislature of California passed a law amendment in 1986 requiring the state's various pension funds to recover investment over 6 million Dollars from companies having activities at South Africa (Sparkes, 2002).

Ethical investment strategies have a long history. During 18th century due to influence of Catholic Church many individuals refused to do business with firms which are involved in alcohol, slave trade or gambling (Schwartz, 2003). From that, the idea of ethical investment got new era. But we noticed peak growth of ethical investment after 1980. Schwartz (2003) also stated that, corporate responsibility movements and business ethics are becoming important factors in investment and this is in increasing trend which indicates that ethical funds produce sufficient returns. This statement is also supported by Climent & Soriano (2011).

Many research papers tried to evaluate the definition of ethical funds and criteria to be considered as ethical one. Some researchers argued that ethical criteria differs from company to company and depends on ethical codes and corporate policy of the organization. Several researches help to understand and adopt ethical SRI principles. EIRIS (2008) in their research paper concluded that most of the ethical funds apply two approaches, negative and positive approaches while screening the companies to be included in their portfolio. The negative approach implies that ethical fund should avoid investing into socially not acceptable companies or non-socially responsible companies. For this reason ethical funds avoid investment in gambling, alcohol, tobacco or such other companies which violates the human rights. The positive approach of mutual funds indicates that funds tend to invest in companies with good corporate governance, promotes corporate social responsibility, protect human rights etc. There are various acts and documents which provide guidelines and policies for ethical fund investment. This research has been undertaken to discuss performance of ethical funds and conventional funds in UK. It can be stated that ethical investments in UK choose their criteria from list of the 300 criteria provided and designed by Ethical Investment Guidelines and Research Services (Mackenzie, 1998).

Ethical or SRI investments are classified on the basis of certain criteria. Some investment opportunities are excluded from ethical investments because these are associated with unethical activities (Schwartz, 2003). Various research concluded that some activities such as gambling which harms people, brings financial problems and reason for suicidal activities are considered as unethical investments (Schwartz, 2003, Sandberg et al. 2008). Some ethical funds avoid oil companies and gas companies since many of those companies imply environmental pollution and are not considered to be sustainable due to decreasing gas and oil resources. According to

Climent & Soriano (2011), ethical funds generally screen funds which are socially viable or have social objectives. But companies and funds which behave socially responsible not being concerned about social issues rather to remain competitive in the market. Destroying nature or promoting racism companies will become less attractive to customers and they will get penalties from government. Considering this Hellsten and Mallin (2006) in their study concluded that ethical behavior does not mean that the company step towards social responsibility in a positive sense.

In a study, regarding money-flows of SRI investments or ethical investments around the world Renneboog *et al* (2005) stated that, almost all countries SRI funds account less than 1% of the total domestic fund. Netherlands and UK are holding highest percentage of SRI funds in Europe. From the very beginning SRI funds or ethical funds are increasing rapidly compared to other investment funds and it has been considered that in near future main concern of investors will be SRI funds. Various issues such as carbon emissions, governance at every level, global warming, Kyoto protocol, community investment and environmental considerations are becoming main attention of the investors around the world. Former Chief Investment Officer of ABP investments considered sustainable investment as most important factors driving investment in future (Financial Times, Jan. 26, 2003). Dutch pension fund PGGM, which manages about €45 billion assets, applies two negative screens to all of its investment portfolios and these human rights and weapon related activities (Eurosif, 2003).

The growth of ethical funds indicates that the demand of ethical funds or SRI funds has been increasing over the time. This part of research study will discuss about various investors of ethical funds. Several research studies concluded that socially responsible investors or ethical investors are normally young, educated and have lower income compared to that of conventional investors (McLachlan and Gardner, 2004). Study conducted by KPMG (2000) suggests that 80% of 25-39 years old as compared to 72% of 40-59 year old would consider ethical investments. Rosen and Sandier (1991) in their study concluded that 60% of investors in ethical funds are graduates and currently they earn 15% less than that of conventional funds because they are at their early stage of careers. That means highly educated person and early stage investor prefer ethical investments. Their study also concluded that most of the investors in ethical funds are male.

This study has been undertaken to analyze the performance of conventional funds and ethical funds. Here simulated portfolio and market portfolio will be used to have comparative overview. Monte Carlo portfolio provides a way of testing long term expected portfolio growth and survival status (Cocco et al., 2005). Schwarz (2012) concluded that simulation improves portfolio planning. He also concluded that to have optimum return and risk diversification simulated portfolio can be considered as an effective tool.

On the other hand market portfolio has been stated as the portfolio of all securities included in the market (Gibbons & Ferson, 1985). According to Jing-hua et al. (2013) market portfolio has been stated as the best tool to have comparative performance overview with selected portfolio.

3. Research Methodology

The present study is associated in reaching the conclusion on the basis of numeric data from secondary sources. To answer research questions and attain research objectives application of statistical tool is essential. Considering the pattern of numeric data researcher will reach to conclusions. So, the present study employs quantitative research method as research approach.

The present research adapts interpretivism philosophy; as the researcher needs to analyze data collected from secondary sources to understand the reality about the study. Main objective of the study is to identify the performance of simulated portfolio and ethical funds which is required for researcher to have full intervention in data. Research will be completed by analyzing the data using financial models such as Sharp Ratio, & Monti Carlo Simulation, deriving and discussing statistical data so the intervention of the data is essential and the present study will adopt interpretivism approach.

Monte-Carlo simulations: Monte-Carlo simulations are used to explore statistical distribution through simulation techniques. A problem solving technique used to approximate the probability of certain outcomes by running multiple trial runs, call simulation, using random variables (Bodie et al., 2005). Liu et al. (2014) stated Monti Carlo simulation as probability simulation which is used to understand the impact of risk and uncertainty in financial models, cost models, project management and other forecasting models.

Sharp Ratio: William Sharpe devised the Sharpe ratio in 1966 to measure this risk/return relationship; indicating reward for an extra unit of risk. Investopedia (2015) stated Sharp Ratio as risk return trade off measurements which helps to estimate effectiveness of return. The higher the Sharp ratio, the higher the return from per unit of risk. This indicator is under the mean-variance approach (Bodie et al., 2005).

$$\text{Sharp Ratio} = \frac{(R_p - \text{Risk Free Rate of Return})}{\sigma}$$

Where, R_p = Return of the portfolio and σ = Square root of Variance

Data Collection

As opined by Saunders, et al., (2007) data collection methods differ considering design of the research and this study must select one appropriate method for data collection on the basis of objectives of the study. As discussed above this study conducted on performance of simulated portfolio, and ethical funds therefore secondary data was collected from the Bloomberg Terminal for the period of 2010 to 2015.

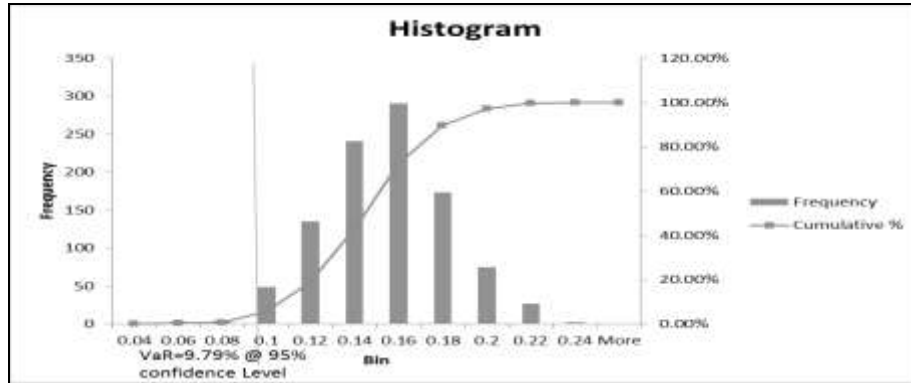
4. Data Analysis & Findings

4.1 Performance of Simulated Portfolio in the UK

To measure the performance of the stocks of the FTSE100, 1000 portfolios were formed consisting of 20 stocks selected from the 86 companies of FTSE100 for the

period of 2011 to 2015 through the **Monte-Carlo** simulation method. Then average return i.e, mean returns of those 1000 portfolios were calculated. The yearly average expected returns of those portfolios spread from 4.68% to 23.02%.

In this stage, the performance of conventional stocks, by considering 95% confidence level (the worst possible 5%), the annual return of those 1000 portfolios have been plotted to the following histogram-



Source: Graph made by the author based on simulated data using Microsoft Excel

The Value at Risk (VaR) of those 1000 portfolio's return formed with conventional stocks of FTSE100 at 95% confidence level the minimum return was 9.79% which means the conventional portfolios returns were not less than 9.79% at 95% confidence level.

Risk Adjusted Performance of Simulated Portfolio

The risk-adjusted performance of the simulated portfolio of UK is calculated by the sharp ratio. Therefore, average return was 14.48% and standard deviation was 2.81% of 1000 simulated portfolios made with 20 assets. The average risk-free rate of return was 0.3806%. The risk adjusted performance of the 20 assets simulated portfolio formed with the stocks of FTSE100 index was 5.02 times which means that for consuming extra one unit of risk the portfolio will provide 5.015 units of additional return.

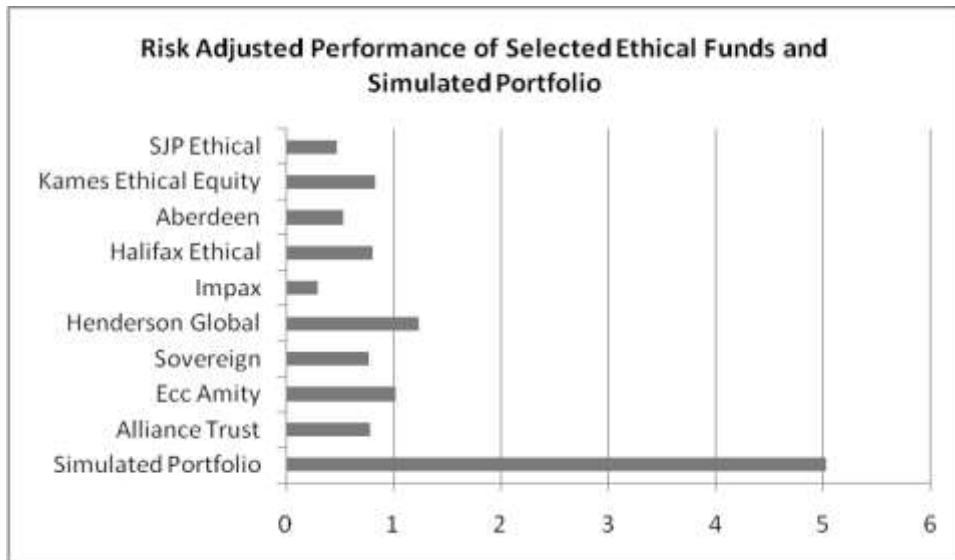
4.2 Performance of Ethical Fund in the UK

Ethical Funds returns were significantly varied from year to years and also among the individuals fund of United Kingdom which is given in the following table:

Financial Performance of Ethical Funds of UK										
Year	Alliance Trust	Ecc Amity	Sovereign	Henderson Global	Impax	Halifax Ethical	Aberdeen	Kames Ethical Equity	SJP Ethical	Average
2011	17.46%	20.46%	18.72%	15.98%	8.58%	11.08%	17.64%	25.29%	14.03%	16.58%
2012	-6.23%	-2.35%	-4.77%	0.44%	-25.65%	-9.13%	-15.20%	-7.50%	-12.21%	-9.18%
2013	14.97%	19.37%	16.32%	20.33%	8.08%	13.97%	11.41%	18.86%	11.19%	14.94%
2014	34.56%	28.13%	21.19%	33.26%	47.42%	23.41%	20.60%	37.37%	7.93%	28.21%
2015	1.95%	2.34%	-2.28%	8.44%	2.49%	10.78%	5.69%	2.36%	5.68%	4.16%
Mean	12.54%	13.59%	9.84%	15.69%	8.18%	10.02%	8.03%	15.28%	5.32%	10.94%
SD	15.65%	12.97%	12.35%	12.40%	26.06%	11.87%	14.20%	17.94%	10.30%	14.86%
Sharp Ratio	0.78	1.02	0.77	1.23	0.30	0.81	0.54	0.83	0.48	0.751

Source: The table made by the author based on the data collected from Bloomberg.

From the table, it is seen that, the average yearly return of the ethical funds spread from -9.18% to 28.21%. And the sharp ratios of individual ethical funds spread from 0.30 times to 1.23 times and the average sharp ratio of ethical funds for the period of 2011 to 2015 was 0.75 times which means that the risk adjusted performance of Ethical Funds were very poor in UK. The risk adjusted performance of simulated portfolio consists of 20 securities from the FTSE100 index was 6.68 times higher than the ethical funds which shown in the following graph-



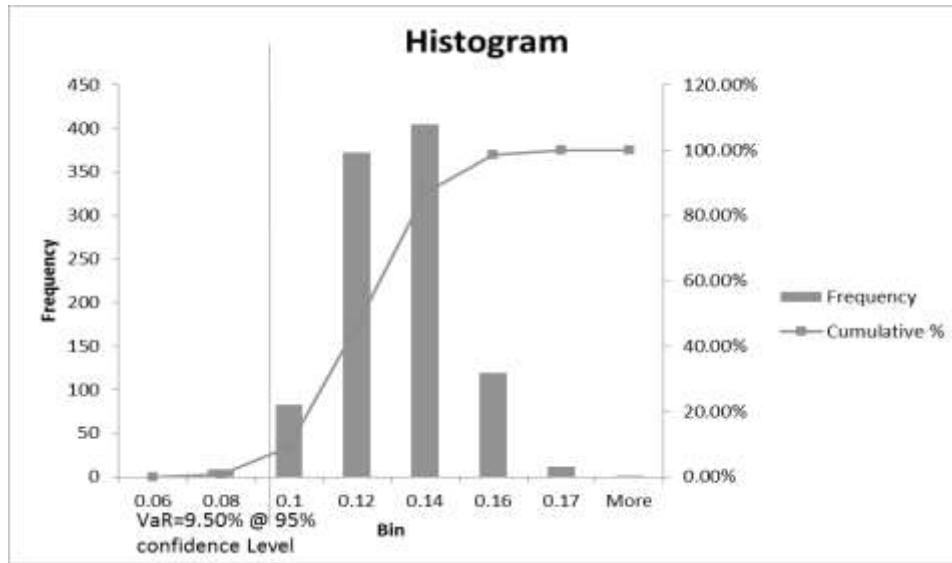
Source: Graph made by the author which shows the risk adjusted performance of ethical funds of UK and 20 assets simulated portfolio made from FTSE100 Index.

From the graph, it is seen that the average of top performing ethical funds risk adjusted return was 0.75 times whereas the 20 assets' simulated portfolio was 5.02 times. Therefore, the simulated portfolio's risk adjusted return was more than 6.5 times higher than ethical funds' return. So, the ethical funds sacrifice its return over the simulated portfolios made with conventional stocks in the UK. Therefore, if anyone wants to invest in the securities by creating their own portfolio, he can earn better return over the ethical funds.

4.3 Performance of Simulated Portfolio of Malaysia:

The performance of securities of the FBMKLCI (Kuala Lumpur Composite Index) was measured by creating 1000 simulated portfolios consisting of 20 securities selected from 25 companies of FBMKLCI through the Monte-Carlo Simulation method. Then average returns i.e, mean returns of those 1000 portfolios were also calculated for that period. The annual average expected returns of those portfolios spread from 6.68% to 17.11%.

In this stage, the performance of conventional stocks, by considering 95% confidence level (the worst possible 5%), the annual return of those 1000 simulated 20 securities portfolios' have been plotted to the following histogram-



Source: Graph made by the author based on simulated data

The Value at Risk (VaR) of those 1000 portfolios' return formed with 20 stocks of FBMKLCI Index at 95% confidence level the minimum return was 9.50% which means the simulated 20 assets portfolios returns were not less than 9.50%.

Risk Adjusted Performance of Simulated Portfolio

The risk-adjusted performance of the simulated portfolio of Malaysia is calculated by the sharp ratio. Therefore, average return was 12.18% and standard deviation was 1.67% of 1000 simulated 20 assets portfolios made with 20 securities of FBMKLCI Index. The average risk-free rate of return was 3.05%. The risk adjusted return or sharp ratio was 5.46 times for 1000 portfolios made with 20 assets which means that for consuming extra one unit of risk the portfolio will provide 5.46 units of additional return.

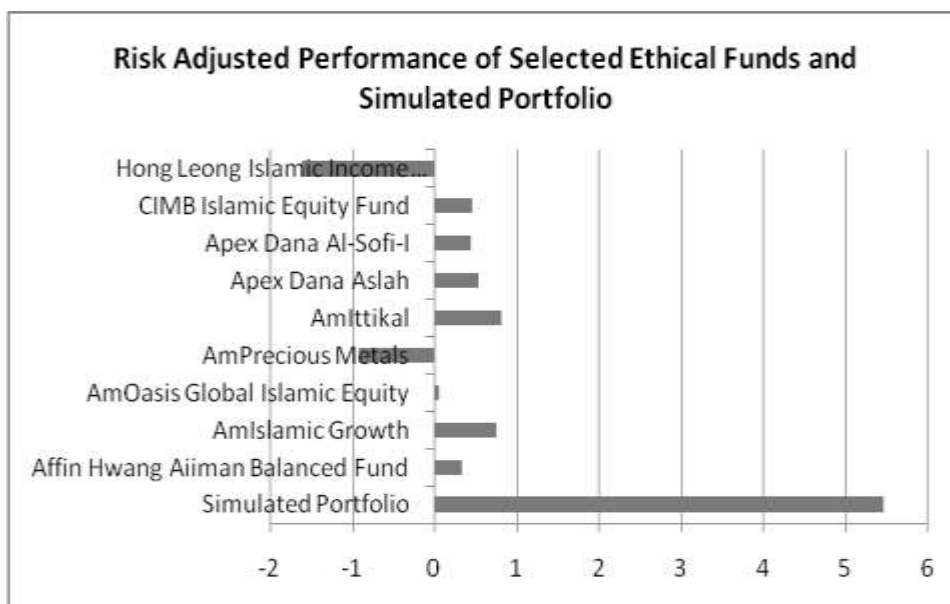
4.4 Performance of Ethical Fund of Malaysia

The performance of Ethical Funds highly varies from year to year and among the funds which were shown in the following table-

Performance of Ethical funds of Malaysia										
Year	Affin Hwang Aiiiman Balanced Fund	AmIslamic Growth	AmOasis Global Islamic Equity	AmPrecious Metals	AmIttikal	Apex Dana Aslah	Apex Dana Al-Sofi-I	CIMB Islamic Equity Fund	Hong Leong Islamic Income Management Fund	Average
2011	6.77%	19.30%	-6.17%	13.94%	15.98%	11.94%	17.75%	10.30%	2.33%	10.24%
2012	3.45%	5.95%	-6.87%	-22.12%	5.36%	1.72%	1.03%	-6.15%	2.84%	-1.64%
2013	5.27%	12.28%	-4.38%	-14.84%	11.47%	13.30%	6.55%	13.92%	2.90%	5.16%
2014	6.90%	24.54%	28.79%	-41.21%	19.37%	26.73%	25.43%	13.48%	2.73%	11.86%
2015	-1.42%	-3.98%	8.62%	-11.35%	-2.11%	-5.45%	-7.12%	3.15%	2.67%	-1.89%
Mean	4.19%	11.62%	4.00%	-15.12%	10.01%	9.65%	8.73%	6.94%	2.69%	4.75%
SD	3.43%	11.20%	15.23%	19.93%	8.57%	12.26%	13.00%	8.49%	0.22%	10.26%
Sharp Ratio	0.33	0.76	0.06	-0.91	0.81	0.54	0.44	0.46	-1.62	0.097

Source: The table made by the author based on the data collected from Bloomberg.

From the table, it is seen that, the average yearly return of the ethical funds spread from -1.89% to 11.86% and the sharp ratios of individual ethical funds spreads from -1.62 times to 0.81 times and the average sharp ratio of ethical funds for the period of 2011 to 2015 was 0.097 times which means that the risk adjusted performance of Ethical Funds were very poor in Malaysia. Besides this, some ethical funds risk adjusted returns were shown negative during those periods. The risk adjusted performance of simulated portfolio consists of 20 securities from the FBMKLCI index was 56.25 times higher than the ethical funds which shown in the following graph-

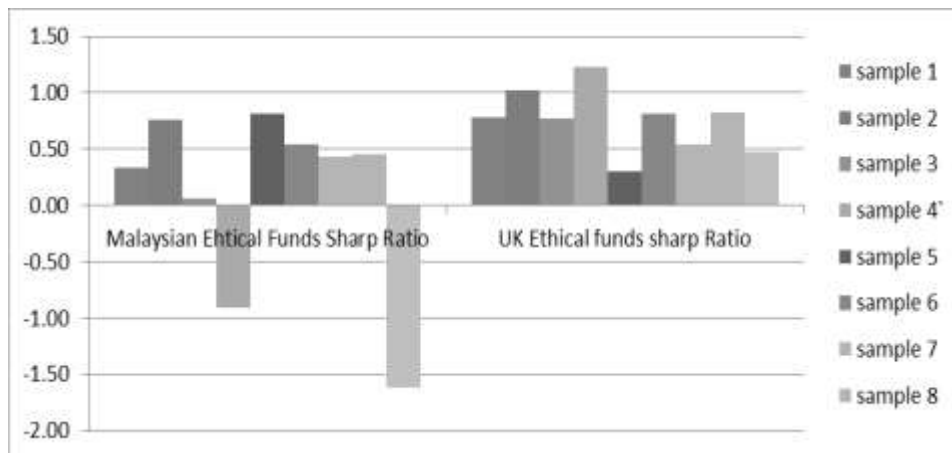


Source: Graph made by the author which shows the risk adjusted performance of the ethical funds of Malaysia and simulated portfolio consists with 20 securities FBMKLCI Index

From the graph, it is seen that the average risk adjusted return of ethical funds of Malaysia was 0.09 times and the simulated 20 assets portfolio's return was 5.46 times. The ethical funds performance in Malaysia is significantly poorer than the simulated 20 assets portfolio's created with the stocks of FBMKLC Index. The risk adjusted return of simulated portfolios' was 56.48 times higher than ethical funds' risk adjusted return. So, ethical funds highly sacrifice their performance in Malaysia in compared to 20 assets simulated portfolios.

4.5 Ethical funds performance between UK and Malaysia

On an average the risk adjusted performance of ethical funds of Malaysia and UK were 0.097 times and 0.75 times respectively. So, it can be said that the ethical funds of UK performing well above the ethical funds of Malaysia which shown in the following graph-



Source: Graph made by the author which shows the sharp ratios of ethical funds of UK and Malaysia

Finally, it can be said that, the ethical funds of the UK performing well in compare to the ethical funds of Malaysia however in both countries the ethical funds sacrificed their performance in compare to their respective countries simulated portfolios' made with conventional Securities. Moreover, the sacrifice of ethical funds performance of Malaysia was around 56.48 times in compare with simulated portfolio made with the securities of FBMKLCI. Again, the sacrifice of ethical funds performance of UK as around 6.68 times in compare with the simulated portfolio made with FTSE100 index securities. So, in the UK the ethical funds are performing 8.46 times higher than the ethical funds of Malaysia.

5. Conclusion

This research study was designed to understand the comparative performance of ethical funds and simulated portfolio in UK & Malaysia. The overall discussion of the study shows that the performance of ethical funds in the UK was higher than Malaysian ethical funds but both countries sacrifice their performance over the simulated portfolios consists with 20 stocks of their respective conventional stocks. This means that investors of Malaysia sacrifice more than the investor of UK for investing in ethical mutual funds. There is no performance sacrifice or premium by ethical funds in the UK. This finding has been strongly recommended by Renneboog et al. (2008). Kempf and Osthoff (2008) stated that investors may select ethical funds for social responsibility but not for return.

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