MK7227 Postgraduate Dissertation

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Applying Sustainability and Responsible Investment on Islamic Equity Investment: An Analysis of FTSE Shariah and FTSE4GOOD Indices

A dissertation submitted in partial fulfilment of the requirements of the Royal Docks Business School, University of East London for the degree of MSc Islamic Banking and Finance

May 2015

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UNIVERSITY OF EAST LONDON

Business and Law School

Applying Sustainability and Responsible Investment on Islamic Equity Investment: An Analysis of FTSE Shariah and FTSE4GOOD Indices

By
U1330144

A dissertation submitted to the University of East London for the degree of MSc Islamic Banking and Finance

May 2015

Applying Sustainability and Responsible Investment on Islamic Equity Investment: An Analysis of FTSE Shariah and FTSE4GOOD Indices

Abstract

Shariah-compliant Investment and Sustainability Responsible Investment (SRI) are the alternative asset classes and they are growing rapidly leaving their counterparts behind. Nontheless, there are some criticisms against the screening criteria which are applied by Islamic equity investment because they exclude the environment, social and human rights issues that are also important beside the prohibition of riba, gharar, alcohol, and so on which are already applied by them. The purpose of this dissertation is to investigate the performance of the Islamic equity or Shariah-compliant Investments after incorporating positive screened stocks from ethical or Sustainability Responsible Investment (SRI) and eliminate the constituents that do not meet those criteria. Using the Security Market Line of Capital Asset Pricing Model (CAPM) and use the traditional adjusted return model like Treynor Index (1995), Jensen Alpha, and Sharpe Index (1964), I hope the result will make a contribution to the Shariah debate on screening and assist investors who are interested in Islamic Equity Investment.

Keywords:Islamic finance, Islamic equity investment, Sustainability Responsible investment (SRI)

Contents

Chapter 1: Introduction

1.1   Research Overview and Background

Nowdays, many ways people used to earn more money. One of them is through investment which has become a major way to increase money as well as money circulation. The word 'invest' as the basis of investment word meaning plant on something. In simple manner, investments can be defined as an activity to plant treasure aims to develop it. In more practical, investment is a commitment of a number of funds or other resources at present time then hope to obtaining a number of advantages which will come in the future (Tandelilin, 2001). Based on such understanding, one can consider that investment is an economic activity that could not be separated by human life.

Property development activities or planting requires commitment to sacrifice a certain current amount of funds and hoping to obtain a number of advantages in the future (Jones, 1996: 6). The profit could not be expected while investors could even be suffered losses or loss of funds. In other words, Investors will always be associated with the risk of business uncertainty which will come in future. Various kinds of investment activity as described above, in general, they have the same purpose, profitability or earnings (return). An investor should take the right decision to select objects and consider the time and conditions in order to achieve their goals. In general, the relationship between risk (risk) and the rate of return expected (expected rate of return) is linear. Whereas, the higher the level of risk, the higher the expected rate of return. After setting goals, the next step is to analyze an effect or multiple effects. One purpose of this assessment is to identify the price of an effect. The increasing of demand of people who invest their money so called investor, make many types of investment occur out there in order to fulfil their appetite and needs on how they invest their money. Some of them maybe only looking for profit but not few of them look after ethical investment which more friendly to social, environment, and society. However, with a booming of Islamic Banking and Finance nowadays, the Islamic equity investment has become one alternative that deliver huge profit for their investors. They are not only contributed to

represent the demand from Muslim people for Shariah-compliant business but also create more stable industries which of course attract more people to invest in. On the other hand, with the world greatest issues nowadays about environment and social responsible, it has effect on the situation in business and finance industry to be more care about those issues. Furthermore, they come up with the alternative investment called ethical investment or Socially Responsible Investment (SRI) which tackle the above issues.

Islamic equity investment and Socially Responsible Investment (SRI) introduced in 1980s and in a short time their assets reached US$1 trillion, thus they are categorized as the most rapidly growing sector in finance industries. Both investment have similarities on integrating morals and beliefs in usage of their fund. In contrast, finance driven only by the effort to maximize risk adjusted returns, however, Islamic and SRI investors added additional objectives for financial market activity related to investor ethics and social-welfare activities. In addition, investors also concern about social aspect other than significant return, which are benefit and return to the society (Bennet& Iqbal, 2013).

Figure 1
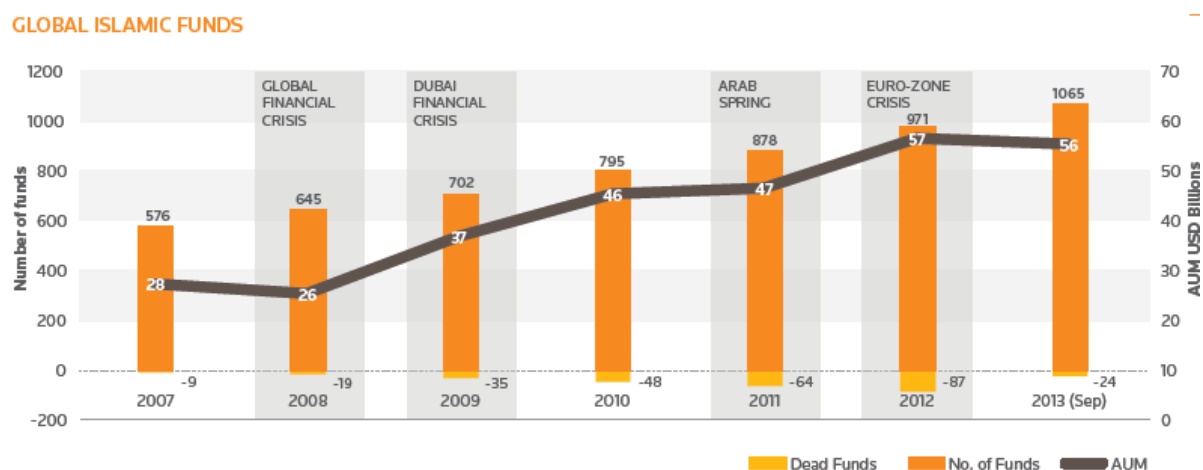
Source: Eurosif (2013)

Figure 1 present the trends of Global Islamic Funds from 2007 until september 2013. As could be seen the number of funds keep increasing year to year although there are several crisis in that period. It proves that investor

believe in Shariah funds to invest their money because their resistance of those crisis and Islamic funds could be the leader in the future.

Despite the similarities, Islamic equity investment and SRI have different screening criteria that draws criticisms. Islamic equity investment focus on Shariah-compliant products, such as the prohibition of riba, alcohol, tobacco, etc., meanwhile excluded the positive screening related to the environment and social criteria. For example, Vendeta Resource (a Shariah-compliant based company and member of the FTSE Global Islamic Index) practices that are abusive to the human rights and contribute to the environmental damage. This is far against principle of Islam that goodness does not only done to all mankind but also society and environment.

Islamic Finance focus only to the profitability and prohibitions mentioned in the Quran and ignoring other aspects such as mentioned above. Abdul Hasan (2009) strongly suggested that values of fairness, justice, and equity embedded in Shariah-compliant can overcome the current crisis and create a sustainable growth in the economic cycles. This also can give benefit for society to improve their quality of life. In addition, it can also contribute to the climate change which make us able to deal with the coming energy shortages caused by high demand of oil.

Purchasing and Selling Stocks in Islam

Most of the scholars agreed that it is not allowed 'haram' to trade the stocks in the market from companies which trading not allowed 'haram' sectors such as liquor, pork, conventional financial institution, gambling, porn, prostitution, and so on.

On the other hand, it is allowed to trading stocks of companies from 'halal' sectors (transportation, telecommunication, textile production, and etc.). As mentioned by Syahatah and Fayyadh, "Purchasing stocks from those companies are allowed in Shariah rules" (Syahatah dan Fayyadh, Ibid. page 17). However, there are some scholars that still forbid stocks trading although from halal sector companies like Taqiyuddin an-Nabhani (2004), Yusuf as-Sabatin (Ibid. page 109) and Ali as-Salus (Mawsû'ah al-Qadhaya al-

Fiqhiyah al-Mu'âshirah, page 465). Three of them together concern about the non-Islam corporation. Thus, before see the company sector, one should first look the form of the corporation, is it fulfiled the requirements as an Islami company (syirkah islâmiyah) or not.

This aspect seems truly ignored by most jurists and experts of Islamic economics at this time. Evidently, they did not mention at all of this crucial aspect. Their attention was more focused on the identification of business (halal / haram), and various existing transactions mechanisms, such as spot transactions (cash on the spot), option transactions, transactions trading on margin, and so on (Junaedi, 1990; Zuhdi, 1993; Hasan, 1996; az-Zuhaili, 1996; al-Mushlih and ash-Shawi, 2004; Syahatah & Fayyadh, 2004).

Taqiyuddin an-Nabhani in An-Nizam al-Iqtishâdi (2004) asserts that a limited liability company (shirkah musâhamah) is a form of vanity syirkah (invalid), as opposed to the laws shirkah in Islam. Iniquities partly because the corporation is not contained in the consent and granted (ijab-qabul) as akad syirkah. There is only unilateral transactions from investors that include capital by buying shares of the company or from other parties in the capital market, without any negotiation or negotiation whatsoever either with the company or other investors. The absence of consent-granted (ijab-qabul) in this corporation is crucial, same with a male and women couple who only register marriages at the Civil Registry Office, without the consent and granted in syar'I or Shariah rules. Therefore, a second opinion which forbids this stock business (though it is halal field of business) is stronger (rajih), due to more cautious and observant in understanding the facts, especially regarding the form of legal entity company. Moreover, the background of first opinion to allow business as long as it shares are lawful (halal) business areas are al-Mashâlih al-mursalah, as well as analysis of Yusuf al-Sabatin (Ibid., Page. 53). Yet according to Taqiyuddin an-Nabhani, al-Mashâlih al-mursalah, the source of the law is weak, because all of the opinion are not based on the proposition that qath'i (ash-Syakhshiyah al-Islamiya, III / 437).

1.2   Research Aims and Objectives

After read the available literature out there, researcher finds that quite a few of them tried to have a look the benefit of Islamic equity or Shariah–compliant investment and ethical or Socially Responsible Investment (SRI) inclusion criteria. As most of them studied the comparison of the performance from both investments, researcher tried to see the performance of Islamic equity or Shariah–compliant investment and ethical or Socially Responsible Investment (SRI) by mixing both criteria, the goal of this dissertation is to investigate the performance of FTSE Global Shariah Index after including the positive screening from FTSE4GOOD Index and comparing with those indexes without mixing positive and negative criteria.

Finally, I hope the result from this dissertation will add new literature on the performance of Islamic and ethical investment and thus absolutely will encourage the stakeholders particularly sovereign wealth fund, pension fund, employees' provident fund and other institutional investors to fully comply with the Islamic and ethical investing characteristics in their investment policy and furthermore to promote the equity as a better asset class than fixed income.

1.3   Research Questions

In order to conclude the statements from above, the question comes up to be solved as follows: "Do Islamic or Shariah–compliant Investment perform better after including the positive screening from ethical or Sustainability Responsible Investment?" In doing so, complete explanation will be provided on the further sections.

1.4   Research Structure

The orginization of this dissertation research will be consist on (5) five chapters as follows; The first chapter is introduction. In this section, Shariah and Ethical investment overview will be carried out followed with the problem that should be managed; Chapter 2 is about literature review where discussion and opinion from previous researchs brought to this research to build the perspective of the research; While in chapter 3, research

methodology being used to solve the problem is explaind including the choosen model and method; On the Chapter 4, data analysis obtained after scrutinise the data to get the result and answer the research question. Last chapter is conclusion and recommendation as a disscusion and explanaition of the result and what should be done in the future research.

Chapter 2: Literature Review

The fundamental elements of my research are previous studies on Islamic Investment/Shariah–compliant and ethical investment. Islamic Investment/Shariah–compliant aim to promote industries or sectors that

added value to the real economy. It is also expected by Muslim investors for its' stable returns and opportunities of capital growth (DeLorenzo, 2001).

Furthermore, Islamic Investment, as a modern form of investment, have characteristics of social-ethical investment, non-financial, and low-debt, most similar with "green investment", "ethical investment", "socially responsible investment", and "faith investment". Alternatively, management and selection of investment uses ethical investment which consist of social and ethical criteria in the company shares. Ethical investors determined the characteristics of the investment company as well as the risk and the financial returns on their portfolios. It also explain the services or goods of the company, manner in conducting its affairs, and location of the business.

Positive and negative screening are the strategies for ethical investment, the former being supportive of companies which are particularly approved of in terms of their business methods, products or activities. The latter objectives to evade investing in companies which are involved in non-allowed countries or products, or whose business methods are regarded as unethical. Negative screening criteria are more usual than positive screening criteria, with investors starting with a complete listing of quoted companies, and after that excluding the unethical minority.

2.1   Ethical Investment

Ethical investment can be described as an investment that uses ethical and social criteria to manage investment portfolio (Cowton, 1994). The history of ethical investment started from some of religious institution that trying to avoid non-ethics business sectors such as gamble, alcohol, and tobacco (Murninghan, 1992). Conventional investment behaviour philosophy in the beginning was led by market exposure. In contrast, ethical investment more focus on ethics. The forms of investment valuation should not depends on two main consideration; risk and return, but also characteristics of the company being invested. Moreover, this include the production of goods and services from the company, business location, and how business activity operated (Wilson: 1325). In general, ethical investment criteria could be

categorized in two: positive and negative. Positive criteria addressed to investment activities that environment friendly while negative ethical investment criteria forbid the companies to operate their business in illegal moral sectors like alcohol, tobacco, gamble, or pornography.

Ethical investment in western concept has different epistemology with Islamic investment. However, they have similar domain. Thus, Islam already developed 'muamalat' concept that not only looking for material profit, but also the immaterial one. Besides, 'fiqh' on environment or ecology and social–economy 'fiqh' also has become a discussion from the beginning. Nevertheless, it is true that Islamic world still one step behind in practical level.

2.2   Sustainability Responsible Investment

Islamic investment often aligned with Socially Responsible Investment (SRI). Main objectives of SRI that claimed as ethical business are mixture of return and morality. Commonly SRI related to company stocks. Traditionally, fund manager will select pure stocks based on company financial performance. However, recently they including environment and social consideration in their investment decisions. According to I Made B.Tirthayutra (2005) is SRI generally defined as an investment philosophy that includes considering ethics and morals in addition to financial considerations. The considerations of the ethical and moral cover environmental issues, human rights and corporate governance. SRI is an investment in which the investor principle is not only pay attention to the company's ability to generate profits but also the ability of company resources, including the ways companies run their business. Therefore, through SRI investors are expected to participate in efforts to establish a better world without sacrificing its economic interests.

One other possibility which may affect investment is to encourage foreign ethical investment or investment social responsibility. Responsible investment social is often called Social Responsible Investment (SRI). Although this investment pattern yet become a major issue in a State, but

the SRI market has increases significantly. In a country like England, SRI has reached 7.1 pounds billion. In the United States, the ethical investment scheme has reached US $ 153 billion by the year 2000.

While the SRI principles that have been applied in the stock market for example Dow Jones Sustainability Index (DJSI) in New York Stock Exchange, Socially Responsible Investment (SRI) Index and Financial Times Stock Exchange (FTSE) by the London Stock Exchange and is followed by stock markets in Asia such as Hanseng Stock Exchange, Singapore Stock Exchange and Sri-prudential Index of the Indonesia Stock Exchange (IDX) where this index is an indicator and measurement tool to see open the company's commitment to environmental and social including the commitment of the company or issuer to Corporate Social Responsibility.

Socially Responsible Investment (SRI) or ethical investment as is one of the driving factors of the implementation of Corporate Social Responsibility by a company. It is closely related to consciousness of investors to invest with attention to social responsibility. Social Responsible Investment or also called Green or Ethical Investment is allocating investment or investment money which can make a positive contribution to the world and leave the company that destroy the world, either people or the environment. Usually Ethical Investment managed by a securities company. Where invest in the securities firm to avoid industries that have activity detrimental to the survival social life and the surrounding environment, such as smoking, gambling, drinks alcoholic, deforestation or selling weapons. Investors more choosing investments involved in environmental improvement activities as well as prioritizing business community social relations.

Public interest on SRI develop in line with growing awareness of economy activity effects on social and environment. Sustainable business that used to become the main consideration for some of business so called *good business practice*, now has a friction.

According to eurosif, there are several potential of SRI as follows:
The potential role of SRI:
- SRI will help broaden the reach of Islamic Funds beyond localized markets

- SRI principles provide a natural crossover to Shariah compliant products
- Incorporating SRI principles in Islamic products offers a synergetic product to cater beyond regional markets
- According to The Assosiation of the Luxembourg Fund industry, Shariah compliant funds fail under responsible investment
- This year has seen two new Shariah compliant funds incorporating SRI parameters
- The SRI industry is estimated to be a US$ 33 trillion industry
- SRI facilitates the scale required to improve the efficiency of Islamic funds
- SRI is a growing industry, having grown over 500% since 1995

Despite of the fact that SRI growing rapidly, not all of people give the positive response. In fact, Milton Friedman, a nobel winner in 1962 indicate that the only social responsible is to use all the available source to maximize the return (Shaw and Berry, 1995; 207). In investment aspect, example of rejection came from Investment–U Group. Their vision, followed by Friedman, was that investment aims in the companies or institution is to obtain the profit, not to rescuing the world. They stated quantitative researches, like Wharton School (2003) did, conclude that SRI investors claimed 3.5 percent deficit per year. Furthermore, compare to non–SRI investors, they were 18 percent behind.

2.3   SRI Screening Method

In the development, SRI not only strict themselves not to investing on tobacco, alcohol, and gamble companies, but also taken further action with including 4 aspects:

First, Social Research. This aspect needs to find companies with excellent management and low risk. Kerr and Zubevich said there are 3 things needed to do screening on the companies:

1. Negative Screens. Selection criteria used obligate fund manager to eliminate particular activities and instruments. For example screening will cross entities that dealing with uranium, deforestation, and so on.

2. Positive screens. With this approach, fund manager will give reference on specific investment or activities that socially responsible like companies that obtain renewable energy.

3. Best of Sector screens. All companies given rank with social and environment criteria. Then investment only been done on the companies that have high rank for every industry sectors.

Beside those screening methods, there is uses of constructive engagement. With this approach, particular social and environment issues will be found by fund manager. If investment already done on one company, but the performance become bad after measured with several issues, then fund manager will encourage that company to increase their performance.

Secondly, Shareholder Advocacy. In this part, individual subjectivity values need to be consider because what one thought to be ethical not necessarily will stand for the others.

Third, Social Venture Capital. Put funds on the beginning in the companies (i.e alternative energy companies) is the benefit way on fulfil people needs before those funds sold to the public.

2.3.1 FTSE4GOOD Screening Method

FTSE4Good is a series of indices that are used to identify companies that globally meets the standards of social responsibility. The criteria used to select stocks that entry is, the companies are not companies that produce cigarettes, produced partially or entirely either nuclear weapons systems or conventional weapons, and not the owner or operator of nuclear power stations and not mining or producing uranium. Instead, the companies

selected are companies that protecting the environment, building positive relationships with the owners of the company, and upholds human rights. FTSE4Good is applicable in some countries, such as in the UK there are FTSE4Good UK Index, in Europe there are FTSE4Good Europe Index, in the United States there are FTSE4Good US Index and for the global market there FTSE4Good Global Index.

There are 3 major aspects on FTSE4GOOD index inclusion criteria including Environment, Social and Governance (ESG). On the Environment side, Climate Change, Water Use, Biodiversity and Pollution & Resources have become their concern. On the Social, there are Human Rights & Community, Supply Chain Labour Standards, Customer Responsibility, and Health & Safety while Anti-Corruption, Tax Transparency, Risk Management, and Corporate Governance take part for Governance criteria. All of those aspects considered and scrutinised on the company that willing to join to the index and then obtain their ESG Rating (www.ftse.com).

The criteria are based only on publicly available data, and in assessing ESG practice FTSE does not accept data or information privately provided by companies. This improves the credibility of data and enhances transparency across the market. The FTSE ESG Ratings also fall under the oversight of an independent committee comprising experts from the investment community, companies, NGOs, unions and academia. They meet regularly to oversee ESG Rating reviews and methodology development. Moreover, companies which have had a zero score in any one applicable High Exposure Theme have not been added to the index.

Based on FTSE4GOOD US Select Index Ground Rules (2012), there are also Exclusion Methodology for the following activities:

- Weapons
  Constituents will be screened out if strategic military sales make up over 10% of total sales, or if their products constitute strategic parts for and/or whole of a nuclear weapons system.
- Tobacco
  Constituents will be screened out if any of their turnover comes from tobacco sales or production.

- Nuclear

  Constituents will be screened out if they own or operate nuclear power stations or if their products and services are used strategically in a nuclear plant.

- Gambling

  Constituents will be screened out if any of their turnover comes from gambling.

- Adult Entertainment

  Constituents will be screened out if sales from Adult Entertainment make up over 3% of total sales.

- Alcohol

  Constituents will be screened out if any of their turnover comes from alcohol production.

2.4 Islamic Investment

The development of Islamic investment performance began with analysis of investment performance that suitable with ethics that happening since 1970s (Wilson: 1325). Ethical investment concept started from western countries that developing specific investments for specific investors, where they really concern with the form of investment that social responsible. Cowton defines it with "...*the use of ethical and social criteria in the selection and management of investment portfolio, generally consisting of company shares*" (Prindl, 1994: 213). In other words, this investment has through specific rules of selection, including morals and economics.

Islamic capital market has developed quite rapidly in some Muslim countries in the world, primarily the Middle East countries, and also in Europe. However, the United States is the first non–Muslim country which launched the Amana Fund as the first Islamic equity fund by the North American Islamic Trust in 1986. In February 1999, New York Stock Exchange (NYSE) also publishes DJIMI (Dow Jones Islamic Market Index). In Europe (including UK and France), the government took legal steps to accommodate sukuk, even in the UK there is Shariah index like FTSE Global Islamic Index,

as well as in the Middle East countries, with the GCC (Gulf Cooperation Council) Islamic Index.

Islamic economic system is based on a real asset transactions. Whereby the productive sector, Islamic capital markets should also be based on equity-based securities market, not based on debt. Islamic capital market model that meets the principles of Islamic law yet formally formulated. However, several important issues need to be identified so that it can be distinguished Islamic capital market with conventional capital markets. According to Iqbal and Mirakhor, at least three important things must be concerned. First, regarding the contractual agreement can be represents in the right way in the joint-stock company with the limited liability (debt). This is important especially related to legality of corporate entities and their treatment as a judicial person, especially in case of default of companies on liabilities or obligations. Secondly, the type of contract that is appropriate for common stock as a partner in the company's stock, based musyarakah mulk or Musharaka aqed. The classification of shares in the company using Musharaka mulk contract cause the majority of transactions in the stock market capital can not be accepted by Shariah. Negotiability, transferability and tradability in the primary and secondary markets become the third important issue that needs to be observed. As mentioned above, Islam encourages economic transactions on assets / real goods (tangible), which means the prohibition against debt transactions (dayn), currencies, bonds restricted in goods generics, as well as contingent rights (such as options, futures, forward), where these instruments are traded in the capital market. The fundamental difference between Islamic capital markets and capital market conventional wisdom is that the implementation of the Islamic capital market in general not only determined by business conditions, socioeconomic environment, and politics. There are important principles about what is right and what is not correct based on the Qur'an and the Hadith of the Prophet Muhammad. The principle question is the prohibition of usury, speculation and a series of activities namely uncertainty prohibited (gharar), gambling (maysir), ignorance (jahl). These principles must be followed in all economic transactions, including capital markets.

Islamic investment is part of investment activities that considering ethics and religious values. Similar with ethical investment, this investment addressed to fulfil some investors need that wishing to achieve the investment return from clean way and source that could be accountable in Shariah way. Therefore, Shariah values fulfilment becomes the main goal.

2.5   Shariah Screening Method

The main difference of Islamic Investment with their conventional counterpart is in their operational, and the very basic is in the screening process on the portfolio construction. There are two aspects in it: qualitative and quantitative aspects. Qualitative screening aspects including assessment on content assets; 1) whether the companies run on prohibited sectors or not; 2) whether using 'riba' or not in practice; 3) whether contains 'maysir' and 'gharar' or not in practice. These process will exclude few stocks that have 'haram' or 'not allowed' activities like 'riba', 'gharar', liquor, gambling, pork, tobacco, and so on so forth. Meanwhile, quantitative screening aspects considering things like debt and equity ratio and valuation or business return appraisal that related (Lestari, 2008).

2.5.1 FTSE Shariah Screening Method

To be more complete, the following is FTSE Shariah screening criteria guidelines for companies to be avoided:
1. Interest bearing investments including loans and deposits based on interest;
2. Forward currency transactions;
3. Securities issued by companies whose income is derived from any of the following activities:
   - Manufacture or distribution of alcohol or tobacco products
   - Gaming or gambling;

- Manufacture or distribution of weapons and defence related products
- Production, processing, packaging or any other business activity relating to pork products;
- Conventional banking, insurance or any other interest-based financial services activity;
- The production or distribution of pornographic materials; or
- Any other activity that is not permitted by the Shariah as determined by Yasaar's Shariah Board;

4. Derivatives, including futures, options and contracts for differences; and

5. Any other transaction that is not permitted by Yasaar's Shariah Board.

Once business compliance is established, the stock universe is screened for a set of financial ratios. These comprise of:

1. Debt to total assets ratio to be less than 33%
2. Cash and interest bearing accounts (liquid instruments like CDs) should not exceed 33% of total assets.
3. Receivables and cash should be less than 50% of total assets
4. Total interest and non-compliant activities income should not exceed 5% of revenues

For a stock/security to be deemed Shariah compliant it must pass both the business compliance and financial ratios tests. Following the screening, the stock universe will be monitored on an ongoing basis for compliance and reviewed quarterly. Companies that change financial compliance between two successive quarters will be monitored to check if their debt, and/or cash/interest bearing ratios fall within 33.333% +/- 5% (i.e. below 31.667% and 35% or above). If during the monitoring period any company remains above or below 33.333% +/- 5% for two consecutive quarters, the compliance of that company will change accordingly. Appropriate purification of dividends at 5%. This ratio calculates the recommended purification amount to be paid by the investor.

2.6   Debate on Performance

Most of researcher tried to compare the performance of Islamic equity investment and ethical or Socially Responsible Investment (SRI). The research from Hajara Atta (2000) concluded that ethical screening will reduce the performance of a portfolio. From his study about the effect of ethical screening (Islamic Investment) on investment performance in Dow Jones Islamic Market (DJIM) and FTSE Global Islamic (FTSE GI), he argue that with ethical investment screening, the performance of DJIM and FTSE GI will be abnormal.

The conclusion from Wharton and Atta research (2000) above and many other similar research like Schroeder (1995) should be understood due to business orientation from ethical investment does not look after profit only, but also morality, social and environment. Thus, the company have to provide more money to social sectors. On the contrary, many research has been done to proof that there is no significant effect of ethical screening on investment performance. Abul Hassan, Antonios Antoniu, and D. Khrishna Paudyal (2005) together claimed that Shariah screening does not have any effect whatsoever on DJIM performance.

On the other side, plenty of studies and researches on the bright future and eminency of both ethical and Islamic investment from many angle has been disclosed. These including research that analyse and compare market performance of Islamic investment with their conventional counterparts (non-ethical) which most of them are Muslim.

There are several screening criteria that needed to be done to accommodate the Shariah-Compliance Needs for Financial Products. Various researches has been done to find the best recommendation for the Islamic Investment. Khaled (2004) tested the performance of FTSE Global Islamic Index, FTSE All-World Index, and FTSE4GOOD Index focusing on the ethical criteria. His research was done on the entire period (July 1996 – July 2003), the bull period (January 1996 – March 2000), and the bear period (April 2000 – July 2003) and founded that the ethical screens does not have an adverse impact on the FTSE Global Islamic Index Performance. However, it

underperformed the FTSE All-World Index in the bear market. On the other hand, in the bull market period, Islamic Index yield has significant positive abnormal returns as well as over the entire period. Different research has been done by Erragraguy Elias (2012) to evaluate and construct a panel of self-composed Shariah compliant portfolios that differ in ESG performance. Using the KLD social ratings on MSCI US Islamic Index, He founded out that together with good governance practices, it can significantly outperformed portfolio and could be a possible determinant on financial performance. Therefore, He strongly suggested that the Islamic Finance Industry should define social responsibility using SRI screening strategies that accommodate Shariah compliant or Islamic principle.

Furthermore, Lovisa (2012) conducted a further research to see Shariah compliant Indexes and/or Socially Responsible Indexes can improve financial performance of an investment portfolio. His research revealed that there is a strong correlations between Shariah compliant, Socially Responsible, and conventional indexes. They could slightly over perform the other indexes, while socially responsible indexes is the most volatile during the whole period of study.

2.7   Case on Dow Jones Islamic Sustainability Market Index

Even though researches have been done to accommodate most of the Shariah compliance needs, there are several criticisms on Shariah screening processes that still arises. Vendeta Resource Company, constituent of FTSE Shariah UK Index, caused serious human right violations and harmfully effected the environment in a long-term period which is an opposite action of the principle and fundamental of Islam (Irfan, 2009). Thesis from Saeed (2012), strongly suggested that positive screening criteria, such as social and environment, should be taken into consideration of Islamic Investment Screening Criteria. He also added that traditional screening criteria should be integrated with conventional sustainability criteria since it will not affect the Islamic Investment Performance. To conclude it all, global economy not only need to have the ability to survive the current crisis, but also implement the principle values of Islamic or Shariah compliant Investment, which are

fairness, justice, and equity, in order to develop and sustain their presence in the worldwide economy.

The Dow Jones Sustainability World Index is among the first global equity indices launched in 1999 in the move towards integrating sustainability into the capital market. There are presently 12 broad market, 10 blue-chip, 3 specialty/screened, 8 diversified sustainability indices that track financial performance of leading sustainability-driven companies worldwide. The Dow Jones Islamic Market Sustainability Index is the first global Islamic sustainability index launched in 2006. The sustainability indices are constructed based on a best-in-class approach in the selection of sustainability leaders (companies in top 10% of their industries based on sustainable business practice model established by RobecoSAM). This approach promotes vibrant competition among companies for inclusion in the index. The selection framework comprises companies' Total Sustainability Score and Corporate Sustainability Assessment (CSA) by RobecoSAM. Constituents are weighted based on companies' market capitalization and a maximum weight of 10%. The Invited Universe includes 2,500 largest companies in S&P Global Broad Market Index, and any index constituents with free-float market capitalization above US$ 500 million (for the world sustainability index). The evaluation and monitoring of corporate sustainability performance consist of media and stakeholder analysis, review by DJ sustainability index committee, periodic update of CSA, external verification and annual external audit of assessment process.

This case study examines the performance of 4 Dow Jones indices: Dow Jones Global Index ("DJ Global") (as the market benchmark), Dow Jones Islamic Market World Index ("DJ Islamic"), Dow Jones Sustainability World Index ("DJ Sustainability"), and Dow Jones Islamic Market Sustainability Index ("DJIS"). Both DJ Sustainability and DJIS are concentrated in leading markets in socially responsible investment such as the US, UK and Switzerland. DJIS has higher average market capitalisation (US$ 41.5 billion) despite having smaller universe of constituent equities (106 components) relative to other indices. Technology and health care are the dominant sectors in DJIS, representing 28.97% and 20.56% of the sector allocation respectively as at

January 2015. This study found that basic materials, recreational and personal products, and technology sectors are significant drivers of the performance of DJIS. Its performance is also driven mainly by market, value and size premiums.

The performance of the 4 indices is evaluated at the level of individual equity asset class and at the portfolio level of mixed global asset classes. There is high degree of co-movements of the 4 indices across multiple timescale (4, 8 to 512 and 1,024 days) over 1996–2014.3 All 4 indices exhibit similar volatility patterns over the whole period of study.4 DJIS performed relatively well during economic expansion (average monthly return of 1.02%) and the subprime crisis (average monthly return of −1.60%), but was adversely affected by the Dotcom crisis compared to other global asset classes. DJIS also performed better than other non-equity asset classes during equity bullish period (with an average monthly return of 1.11%) and had positive returns during low default and high term premium regimes.

Given the sustainability trends and empirical evidence provided in this study, Islamic finance industry should proactively drive mainstream sustainability investing. There are significant market opportunities for Islamic finance industry. The socially responsible investment (SRI) market offers access to over US\$ 33 trillion assets (which has grown 486% since 1995) and facilitates the scale required to improve the efficiency of Islamic funds. Pension funds that integrate ESG and a total of US\$ 36 billion from GCC pension assets can be potentially channelled to Islamic asset management industry. There are also opportunities for the integration of the global *halal* real sector with sustainability investing. The extension of Dow Jones Sustainability Indices and the development of customised domestic Islamic sustainability indices in major Islamic finance jurisdictions are expected to broaden market opportunities. Islamic financial institutions should consider adopting global recognised principles such as the United Nations Principles for Responsible Investment (UN PRI), corporate sustainability reporting, and participate in UNEP Financial Initiatives. As sustainability investment performance would also depend on unique strategies to outperform market benchmark, Islamic financial institutions

should strengthen their investment strategies and capacity in sustainability investing. Industry bodies can also encourage the inclusion of clauses on responsible investment in Islamic fund management contracts.

Policy and regulatory initiatives to facilitate this drive include (a) promotion of greater transparency and disclosure from institutional investors, fund managers and companies on integration of ESG; (b) fiscal incentives to improve profitability of sustainable businesses; (c) investment performance review over longer time horizon; and (d) extension of UN PRI to include distinctive Islamic principles. In terms of research and scholarship, it is important to build expertise in the valuation of firms' sustainability fundamentals, and facilitate access to and standardisation of ESG data. Researchers are encouraged to participate in PRI Academic Network. Academic and training institutions in Islamic finance should develop curriculum in sustainable finance and promote integrated financial literacy.

Risks and Returns on Investment

Investment objective is to obtain a certain rate of return (on generally as high as possible). In conventional economics, there are at least three things to consider as an investor in making an investment, namely: 1) the level of expected return (expected return), 2) level risk (rate of risk), and 3) the availability of the amount of funds to be invested (Halim, 2005: 4). If sufficient funds are available, usually investors want maximum returns with certain risks. On taking a decision of investment, particularly in securities stocks, returns derived from two sources, namely dividends and capital gains, while the equity investment risk reflected in income variability (stock return) obtained.

Business is the courage to take the risk, because the risk is always there in economic activity. This dilemma has even spawned a sort of rule general business; no risk no return. Thus, the fundamental issues that will be faced in efforts to achieve Islamic ethical investments (in financial asset) is a matter of speculation to risk. When the risk is simply equated with uncertainty, and this uncertainty is considered gharar, so it is forbidden, then this problem will become increasingly

difficult to be described. Prior to solve these problems, a discussion of the risks needed to be confirmed first. Talks about the risks in this case must distinguished by uncertainty. Both are terms that "Similar but different." Similarity of them lies in the understanding of the existence of an event that is uncertain in the future. In terms of uncertainty, it is refers to events that are not expected the unexpected (unexpected risk), whereas the risk in terms of this is meant as something that can be predicted (expected risk).

Furthermore, the important differences of both located on the upper these uncertainties estimation. Unexpected risk in uncertainty possibilities that emergence of more than one, but the probability of occurrence could not be known as quantitative (Djohanputro, 2006: 14). While for the risk, the level of uncertainty that can be measured quantitatively (Djohanputro, 2006: 15). Quantitative measurement of investment risk in this case can only be done in conditions of availability of information. Thus, the differences between uncertainty and risk converging on a single keyword, such as availability information. In muamalah jurisprudence, a term used to refer to uncertainty is gharar and tadlis. As well as uncertainty and risk, and also the use of these two words are often interchangeable, but the actual are fundamental differences. Both are associated with the lack of knowledge or information. In gharar lack of knowledge is experienced by both parties, while in tadlis only experienced by one party. Every form of the transaction that contains elements categorized gharar in the contract that are not allowed in Islamic law. Although the legal aspects about gharar has been clear, but the issue of the definition and elaboration in right still poses a dilemma. As stated Vogel and Hayes, jurists actually still not agreed on the scope of the gharar itself, just as they still argue about the meaning of the indeed of usury (Vogel and Hayes, 1998: 275). The lack of clarity associated with the object of the contract is the cause of prohibiting contract according to the scholars include; 1) type, 2) specification, 3) attributes, 4) the quantity, 5) the essence, and 6) the time of delivery (al-Ameen: 21-30). In other words, in line with Ibn Abidin, gharar can be defined as a physical manifestation obscurity of the object of the contract (mabi'). This definition more applicable for investment discussion.

This was stated by Imam Sarkhsi stating that gharar is something which as a result is unpredictable (Huda and Mustafa, 2007: 31). It should be recognized that the element of uncertainty is almost impossible predictable. However, as noted earlier, in the language of literature financial management, risk that could not be predicted in advance (Unexpected risk) is referred to as the uncertainty. This is the type of risk intended as gharar. While the risk in the investment market is kind risks that can be predicted.

Chapter 3: Research Methodology

The main aim of this research is to obtain a better view about the performance of Islamic investment after carrying the SRI criteria on their screening process so it could give another literature for the debate that already there about inclusion needs for Islamic investment with the ethical or green investment. In doing so, the suitable research methodology should be

used in order to get a good result. This chapter providing the research methodology that will be conducted because in line with Kumar (2008) which said that research objectives and aims could be accomplished through a good research methodology and research procedures to tackle the research problems.

3.1   Research Philosophy

In relation to the purposes of this thesis, it is clear that the tradition within which this work will be performed is naturalism. In other words, in order to examine the financial performance of ethical investment portfolios compared to conventional investment portfolios, methods of natural science for measurements and statistical analysis will be applied. Moreover, naturalism is the only sociological tradition which implies utilization of a quantitative research methodology. Thus, the naturalistic tradition will guide us further in the research methodology.

3.2   Research Approach

There are two main research approaches to the relationship between theory and research. These are: deduction and induction (Saunders et al., 2009, p. 124–126). In the deductive approach, researchers develop hypotheses from existing theory which is being tested by collecting empirical data. The outcome decides whether existing theory can remain as it is, or if it has to be modified due to new findings generated in the hypotheses testing. In the inductive approach, the researcher is aiming to develop a new theory. This is being done by collecting data that later is being observed and analyzed. From that, conclusions can be made and new theory can be generated (Bryman & Bell, 2011, p. 11). Like this, Fox in his work "Socially responsible investing: criteria, research and quantification" (2004), despite that the field had been already researched quite extensively, tried to find new insights. In order to do so, he conducted interviews with experts from the field and analyzed them. Inferences were drawn and new features of concepts were explored.

The research approach in this thesis is holding a deductive standpoint since it is based on existing theory. We started out the research by exploring the previous scientific knowledge related to the topic of ethical investments, and the performance compared to conventional investments. This led to discussions on if a research gap existed. After some more reading we concluded that we indeed had found a research gap. This meant that we could continue on with our study and start creating our hypotheses.

3.3   Research Methodology

There are two approach out there usually used in a research. Qualitative and quantitative approach represent the philosophy of the research which have their own strength and benefit to accommodate the researcher to processing the data. The differences that separate both approach are for qualitative approach, the data collected and processed substantially by words or sentence to describe and analyse the characteristics of the group from the perspective of anthropology. On the other hand, quantitative approach used for a research normally used numeric data to solve the research questions or hypothesis. (Saunders, 2009). However, some of studies also bring those approach in one research due to seeking a clear result and avoiding misjudgement of the result when only used one approach. Since the level of success of them in a research are the same, it will be a benefit to apply mixed research method from both approach in one paper although it demands more effort and time to do so. Saunders (2009) once again stated that mixed approach method is a very good asset in giving a different objectives of a study, generating various outcomes, minimizing the method effect, and finally making conclusion more valid and reliable.

On this research, quantitative research method is used to obtain a quantitative data which related to economic and financial like stock price, dividend, return of the stock, market return, etc. These numerical data then will be calculated and the conclusion or explanation of the result will appear.

3.4   Data Collection Method

Primary and secondary data are two type of data that commonly used in a research. The data that never been exist and could not be find elsewhere is a primary data. Surveys, in–depth interviews, focus groups, or experiment are the ways to collect the primary data that be used to solve the problem in question and is conducted by the decision maker, a university or extension researcher, a marketing firm, etc. (Curtis, 2008). Meanwhile, according to Cnossen (2007), secondary data refer to a 'second hand' analysis because the information or data was already gathered by someone else. It is originally from primary data and used for some other purpose. However, secondary data could has a more advantageous rather than primary data collection regarding the time and is some cases money cost. Interestingly, secondary data could help primary research design to be easier to do. Consequently, it is better to start a research whatever it is by reviewing the secondary data (Novak, 1996). Secondary data can be found in the published journal, electronic paper, internet, etc.

The research methods conducted in this thesis uses the secondary data because I will collect the data which is provided on the internet and from the collection of time series data comprising daily historical closing values of the indices extracted from the Bloomberg. The benefit of using this method is because it is very easy to get the data since the limitation of time to do this research. The quantitative data amassed from this type of research enables one to address the goals and arguments formed in a successful thesis through statistical insight and a variety of enlightened perspectives.

3.5   Data Characteristics

The data collection start with secondary time series data on FTSE4GOOD, FTSE Shariah and all the constituents that included in both indices in 5 (five) years from January 2010 until the end of December 2014. It should takes longer time to make it better but unfortunately the data from Bloomberg for FTSE4GOOD only available from 5th January 2010 while FTSE

Shariah available slightly earlier from 21ˢᵗ August 2009. Thus, I decided to uniform it start from January 2010.

In order to calculate the market return, I picked FTSE 100 as a benchmark since it is the most popular one in FTSE indices family as it seen in table below:

Table 1.

No	Indices	Bloomberg Ticker	Fund Base
1	FTSE4GOOD	4GGL	Developed Market
2	FTSE Shariah	SWORLDS	Developed Market
3	MSCI All World (Benchmark)	MXWO	Global
4	FTSE All World (Benchmark)	FTSW01	Global

The proxy for risk-free rates is from the monthly rate of US Government the Treasury Bills released the US Department of the Treasury from their official website. This is also a valid risk-free rate proxy for Islamic investment portfolios, since Islamic finance modes such as *murabaha*, *ijara*, and so on, use a conventional interest rate as a benchmark for determining the profit rate.

Equally Weighted Portfolios

Equally weighted portfolios is commonly used to evaluate the efficiency of the ethical/'Islamic' investment industry, rather than the value weighted portfolios. The mutual funds are grouped into an Islamic and a conventional investment, based on their geographical focus (Bauer et al., 2005, 2006, and 2007). Equally weighted portfolios assessed both the performance of socially responsible and Islamic mutual funds to investigate whether the difference between Islamic and conventional mutual funds are caused by Sharia criteria or not. It also focuses on religious or ethical characteristic of an asset that lower the chance of bias due to idiosyncratic return characteristics of a specific asset (Renneboog *et al.*, 2008 and Hong &Kacperczyk, 2009 in Hoepner*et al.*, 2009). Meanwhile, value weighted

portfolios resulted a bias since it is effected by the behavior of large mutual funds (funds' size) rather than Shariah criteria.

3.6   Empirical Models

For this section, the explanation of calculation used in order to obtain the performance of Islamic Investment that including Socially Responsible Investment (SRI) screening criteria and compare it with Islamic Investment without SRI screening criteria and SRI with no Shariah compliance criteria. Based on previous research that already mentioned in previous chapter, performance measurement commonly applied risk-adjusted performance like Sharpe ratio, Treynor ratio, Security Market Line of Capital Asset Pricing Model (CAPM) Index Model and Jensen Alpha.

From their equations, both ratios put risk variable to calculate the performance. However, their risk measurement are different. For Sharpe ratio, standard deviation of the return is used to identify the risk, while Treynor ratio using beta to measure the risk. Standard deviation measures the total risk, whereas beta measures systematic risk which is the risk that could not be dismiss through diversification. The correct implementation of the measurement will be decided by the type of risk that the investor dealing with. If they have non-diversification asset or portfolio (only have one asset for example), so the relevant risk for that investor is the total risk (standard deviation). For that reason, Sharpe ratio indicator is the perfect risk measurement for them. On the other hand, when the investor has large diversification of portfolios, then the risk measurement that suitable for him is systematic risk using beta. Therefore, Treynor ratio is the risk measurement that will accommodate his needs. Other performance measures used in this study is Jensen's alpha. Jensen's alpha departing from the model CAPM (Capital Asset Pricing Model). An asset will have a good performance, if the return of the resulting line is above the CAPM. In other words, the return of these assets is above the return predicted by CAPM, with a certain level of systematic risk. α (alpha) is an intercept in the equation. Positive alpha indicates that the performance of the asset will be

above the line SML (Security Market Line) or CAPM line. In contrast, a negative alpha-value indicates that the performance of these assets under SML line. Jensen alpha gives the advantage, because Jensen's alpha could provide statistical significance typically required in empirical research. However, before calculate those ratios, the returns from the indices should be gathered using the equation below:

$$R_{it} = (P_{it} - P_{it-1} + D_{it}) / P_{it-1}$$

Where;
R_{it} is return of stock i at time t
P_{it} is price of stock i at time t
D_{it} is dividend of stock i at time t

Sharpe Ratio

Sharpe (1966) develops a reward-to-variability ratio as a risk-adjusted performance measure in order to measure the excess return, per unit of total risk. Similar to the Treynor ratio, the numerator of the ratio is the risk premium presented by subtracting the risk-free rate from the return on risky assets. However, unlike the Treynor ratio, this one considers total risk (as measured by standard deviation) instead of systematic risk (*beta*) as a proxy for risk. It implies that investors should be rewarded for both types of risk – systematic and unsystematic. It is calculated as follows:

$$\text{Sharpe} = (R_i - R_f) / \sigma_i$$

Where R_i is the average return of the portfolio i, R_f is the average return on the risk free asset and σ_i is the standard deviation (total risk) of the return of the portfolio i. Similar to Treynor's ratio, the higher the Sharpe ratio, the better the performance from a risk return perspective, and also, a negative ratio indicates that investors are not rewarded for the excess risk taken and they would be better served by investing in the risk-free asset over a risky portfolio; the opposite is true for a positive ratio.

Treynor Ratio

Treynor (1965) introduces a risk–adjusted performance measure called the reward–tovolatility ratio to measure the excess return over the risk–free rate, per unit of systematic risk (*beta*). It is calculated as follows:

Treynor = $(R_i - R_f) / \beta_i$

Where R_i is the average return of the portfolio i, R_f is the average rate of return on the risk free asset and β_i is *beta* (systematic risk) for the portfolio i. This ratio implies that investors should be rewarded only for systematic/market risk. This is because, unlike unsystematic risk, which can be avoided by holding a diversified portfolio, systematic risk cannot be eliminated. The higher the Treynor ratio is, the higher the return for each unit of systematic/market risk taken; hence, the better the performance from a risk–return perspective. A negative ratio indicates that the return generated by the portfolio is lower than the return of the risk–free asset and hence, investors were better off by investing in the risk–free asset over a risky portfolio, and vice versa with a positive ratio.

Jensen's Alpha

Jensen's *alpha* measure was developed by Michael Jensen in 1968. It measures the portfolio's performance compared to the required rate of return, as predicted by the equilibrium CAPM. In other words, Jensen's *alpha* indicates the difference between the portfolio's actual return and its expected return. It is argued that Jensen's single CAPM index model is the standard measure of performance evaluation, and has been the most widely–employed model in studies of investment portfolios. The popularity of Jensen's *alpha* is attributed to its direct application from the popular CAPM equilibrium. It is calculated as follows:

Jensen Alpha = $R_i - [R_f + \beta_i (R_m - R_f)]$

Where α_i is the model's constant (intercept) which represents Jensen's *alpha* measure for portfolio performance, $(R_i - R_f)$ is the portfolio's excess return over risk free rate at time t, $(R_m - R_f)$ is the market risk premium over risk free rate at time t, β_i is *beta* of the portfo lio i (measures the market/systematic risk exposure of portfolio i).

3.7   Limitation of the research

However, there are several limitations in the Islamic Equity Investing that has been analyze. *First*, limited amount of indexes used in this analysis. We focus only on indexes from four of the most known international financial agencies. Adding more information from other financial agencies might give a different results. *Second*, only several agencies used in this analysis has all of the required types of investment indexes. The more agencies that have all required types of indexes, the more detail result will be, for example socially responsible can add detail to the yielded result. *Third*, the research limited only in certain period of time. Similar research conducted in a different period of time can give a different result. *Fourth*, our analysis are highly depended on the components of indexes of research, such as country and/or industry of operations. Detail information are hardly found since most of it is a closed information. *Fifth*, our study uses investment indexes, while previous research focus on investment funds. Financial performance evaluation methods used in this study is the same, however, it is possible that certain measures developed for certain indexes could give a different results. *Sixth*, we use a basic statistic method. The more advance method used, the deeper the analysis. Thus, deeper conclusions of Islamic equity investments could be made.

Chapter 4: Data Analysis

The objective of this study is to proof that screening criteria although it is negative or positive does not effects the performance of the fund and furthermore could be used as an addition of current literature that criticize the Islamic Index to include the positive screening criteria.

In doing so, the analysis of the data began with collecting all constituent companies of FTSE4GOOD and FTSE Shariah. Constituents that compliance or included in both indices are separated and become FTSE4GOOD Shariah Index. The next step was gathering the monthly stock

prices and dividend shares of those indices from Bloomberg to get their average monthly returns.

The risk–free rate that been used was the monthly rate 3–months US Treasury Bill and all the data were downloaded from www.federalreserve.gov.

Since the research question is to get the result of those indices performance, I used Sharpe Index and Treynor Index to calculate the performance. The beta that needed to calculate the Treynor Index was collected from Bloomberg as well. All the calculation was done using Microsoft Excel to make it simple.

4.1   Number of Constituents

To get to know the constituents that compliance with FTSE4GOOD and FTSE Shariah, all the constituents from both indices were collected and the result shows as the table follows:

Table 2.

Indices	Number of constituents
FTSE4GOOD	782
FTSE Shariah	1428
FTSE4GOOD Shariah	345

All the companies were the member of FTSE4GOOD and FTSE Shariah until nowadays which is 2015. It shows that the constituents of FTSE Shariah is more than FTSE4GOOD. Interestingly, the constituents that SRI and Shariah compliance reach 345 companies and from that data, we can see that almost half of the FTSE4GOOD constituents are also member of FTSE Shariah which is quite significant. I believe this number will increasing through time since the ethical investment keep growing faster than the other, although unfortunately it is hard to find the number of those indices from previous years to see their growth until this moment.

4.2   Average return

As mentioned before in the previous chapter, the data used are monthly data of FTSE4GOOD index, FTSE Shariah Index, FTSE4GOOD Shariah Index and MSCI All world as a benchmark. Thus, we obtain their monthly average or mean return from 2010–2014 and furthermore it would help in obtaining the Sharpe index, Treynor Index and Jensen Alpha. Numbers and figures of them are provided in data below.

Table 3.

Year	FTSE4GOOD	FTSE Shariah	FTSE4 GOOD Shariah	MSCI All World	FTSE All-World
2010	0.0396	0.0398	0.0450	0.0393	0.0399
2011	0.0207	0.0181	0.0258	0.0211	0.0193
2012	0.0416	0.0324	0.0494	0.0395	0.0403
2013	0.0442	0.0375	0.0583	0.0450	0.0422
2014	0.0396	0.0312	0.0325	0.0279	0.0276

Figure 2.

Average Return
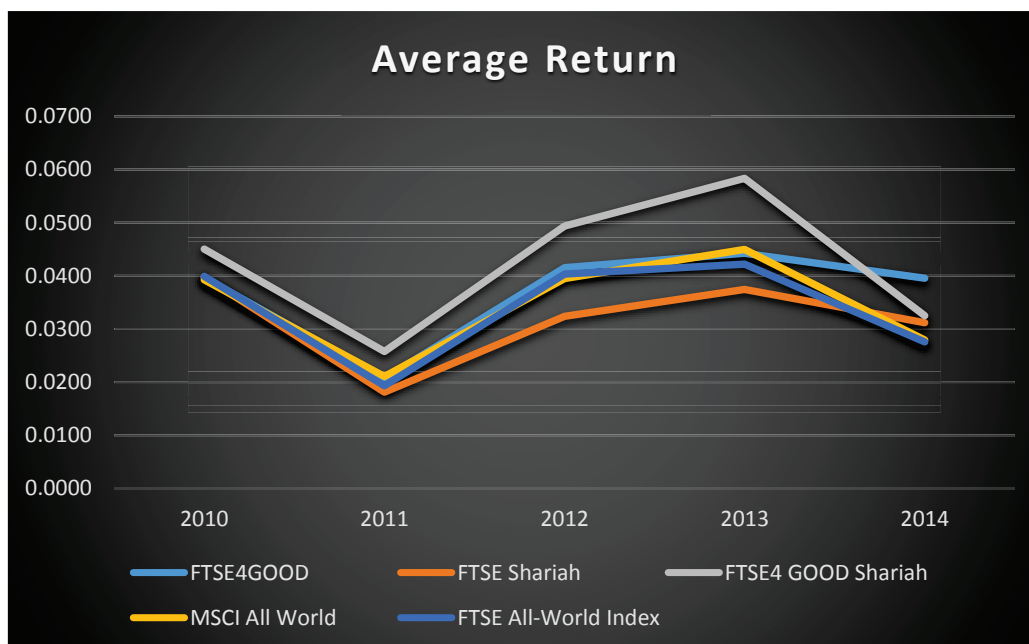
From the table and graph above we can see that FTSE4GOOD Shariah Index has higher return for most of the time from 2010 and only in 2014 showing the downturn but still manage to have better return than the benchmark or market return. The highest return of overall period of study shown in 2013 where FTSE4GOOD Shariah achieve 0.0583 of their return. Meanwhile, FTSE4GOOD Index shown their stability by never became the lowest in entire period of the study. On the market return side, MSCI All–World and FTSE All–World have almost similar trends with MSCI All–World managed to beat FTSE All–World particularly in 2013 with only 0.0028 which became the biggest gap between them.

4.3   Standard Deviation

In Finance, the risk–adjusted return for an investment is defined as the ratio of the mean to the standard deviation. This can be useful for selecting a portfolio. Standard deviation is the average distance from the mean of a sample. More specifically, the standard deviation represents a dispersion of returns from the mean. This dispersion gives an idea of the volatility of a stock, bond, fund, or other instrument based on the spread of returns over a given time period. Historically, the higher the investment's standard deviation, the greater the volatility, and the more risky the investment.

According to U.S. fund-ranking company Morningstar, standard deviation is "probably used more than any other measure to gauge a fund's risk." Essentially, standard deviation measures the variability of returns. But a standard deviation for a fund's (or a stock's, or bond's) return cannot be seen in isolation.

Table 4.

Year	FTSE4GOOD	FTSE Shariah	FTSE4 GOOD Shariah
2010	0.0677	0.0607	0.0766
2011	0.0541	0.0557	0.0732
2012	0.0426	0.0380	0.0711
2013	0.0290	0.0260	0.0633
2014	0.0206	0.0248	0.0604

From the table above could be seen all standard deviation from 2010 until 2015 for each indices. For FTSE4GOOD and FTSE Shariah indices, they have almost similar standard deviation and FTSE4GOOD gets lowest standard deviation in 2014 which means it has lower volatility and less risk than the other. However, FTSE Shariah standard deviations stay closely to them. The contradictory, FTSE4GOOD Shariah has the highest standard deviation in every year compare to the other indices even though it keep declining gradually since 2010. It is meaning that FTSE4GOOD Shariah has high volatility and higher risk but it also a sign that FTSE4GOOD Shariah has higher return as we can see in average return table because high risk stocks tend to describe as a high return investments

4.4   Beta

According to Tofalllis (2006), beta means the slope in linear relationship fitted to data on the rate of return on an investment and the rate of return of the market (or market index). One can interpret this as a comparison of volatility of an asset to the financial market when measuring the risk. The table below shows beta in each indexes.

Table 5.

Year	FTSE4GOOD	FTSE Shariah	FTSE4 GOOD Shariah

2010	1.177	1.022	1.020
2011	1.244	1.140	0.974
2012	1.305	1.277	0.914
2013	1.148	1.132	0.893
2014	0.845	0.816	0.875

What we can see from the table is that in general, all the indexes had values around 1, where 1 means that an index has the same rate of return as the market. Values over 1, for instance 1.2, mean that if the market will increase the rate of return by 1 %, then the index will respond by increasing the rate of return by 1.2%.

As could be seen from the table, the highest values of betas during the total period belonged mostly to the socially responsible indexes. This means that they were more volatile than the market in general and this also confirms our previous statements about the highest volatility of the socially responsible indexes in this dissertation. Both FTSE4GOOD index and FTSE Shariah index slightly decline in the last two years, it is simply means that both indices reach their peak of beta in 2012. The lowest values for overall period (2010–2014) shown by FTSE4GOOD Shariah index. Only in the last year in 2014 they have highest value of beta compare to others betas although it keep declining gradually since 2010.

4.5   Sharpe Index

As mentioned previously, the Sharpe ratio measures the excess return per unit of risk, where risk is measured by the standard deviation. The higher the ratio the better, as this implies greater returns per unit of risk.

Table 6.

Year	FTSE4GOOD	FTSE Shariah	FTSE4GOOD Shariah

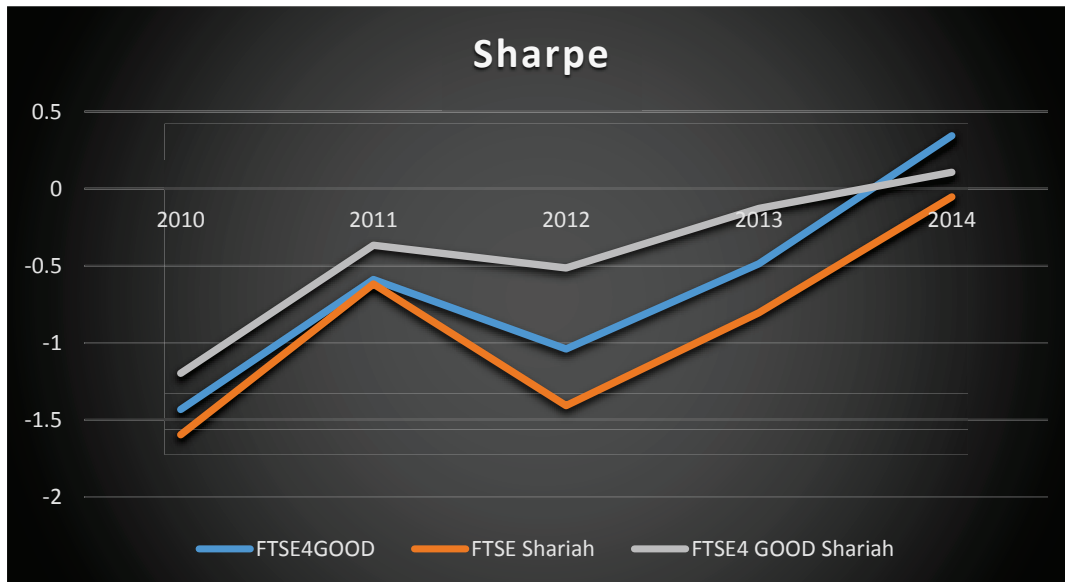| 2010	-1.4324	-1.5964	-1.1969
2011	-0.5878	-0.6170	-0.3654
2012	-1.0394	-1.4071	-0.5128
2013	-0.4864	-0.8038	-0.1273
2014	0.3432	-0.0532	0.1071

Figure 3.

Table provide the comparison of performance between FTSE4GOOD, FTSE Shariah and FTSE4GOOD Shariah indices through Sharpe ratio. As mentioned on the previous chapter, Sharpe ratio using standard deviation to divided the average returns after reduced by risk–free rate in order to calculate the performance. It shows that FTSE4GOOD Shariah outperform almost in every year to the other indices, only in 2014 FTSE Shariah slightly better than FTSE4GOOD Shariah.

4.6   Treynor Index

The Treynor ratio, as mentioned above, measures excess returns per unit of risk, where risk is defined by beta. The higher the value of the Treynor ratio the better, since this indicates greater returns per unit of risk.

Table 7.

Year	FTSE4GOOD	FTSE Shariah	FTSE4GOOD Shariah

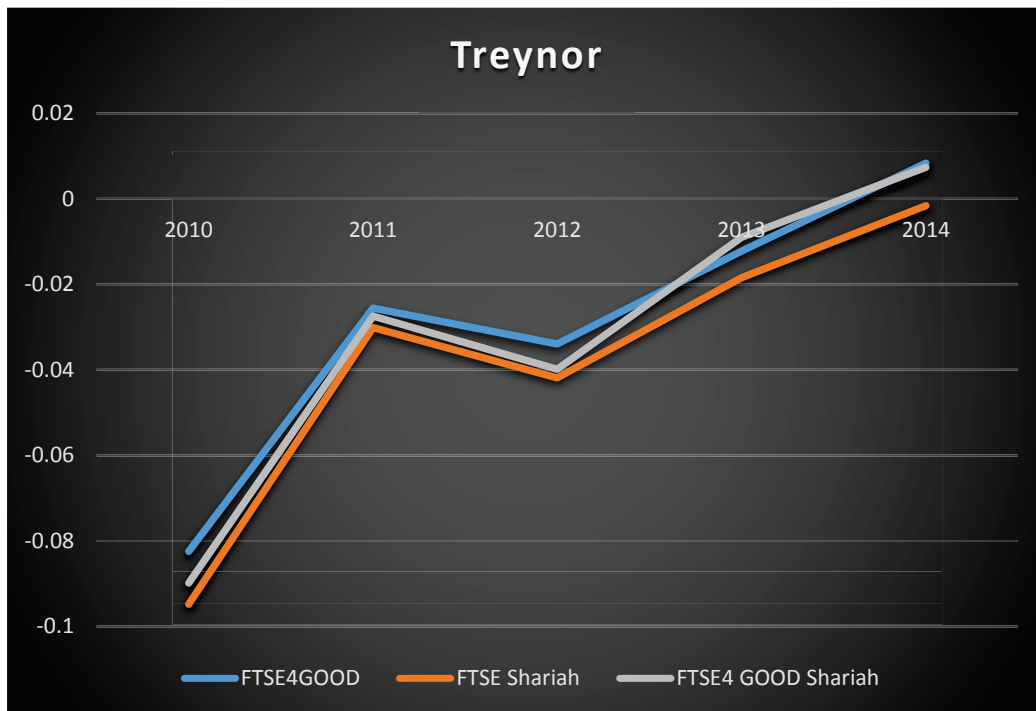| 2010 | -0.0825 | -0.0948 | -0.0898 |
2011	-0.0256	-0.0302	-0.0274
2012	-0.0339	-0.0419	-0.0399
2013	-0.0123	-0.0184	-0.0090
2014	0.0084	-0.0016	0.0074

Figure 4.

Table provide the comparison of performance between FTSE4GOOD, FTSE Shariah and FTSE4GOOD Shariah indices through Treynor ratio. As mentioned on the previous chapter, Treynor ratio using beta to divided the average returns after reduced by risk–free rate in order to calculate the performance. It shows that FTSE4GOOD outperform in the first three year to the other indices, but in the last two year FTSE4GOOD Shariah become the best of all.

4.7   Jensen's Alpha

As mentioned previously, Jensen's Alpha measures the excess return over the expected return. This implies that a higher value of alpha is desirable. Risk is represented again by beta, estimated from the CAPM formula. After taking a look at the graphs representing Jensen's alphas of

the indexes that are being researched it can be seen that this measure was fluctuating quite a bit for all kinds of indexes within all the researched index families. In this research the researcher using two indexes as a benchmark to see the differences between them to have brighter ideas to be analyzed.

Jensen's Alpha using MSCI All-World as a Benchmark

Table 8.

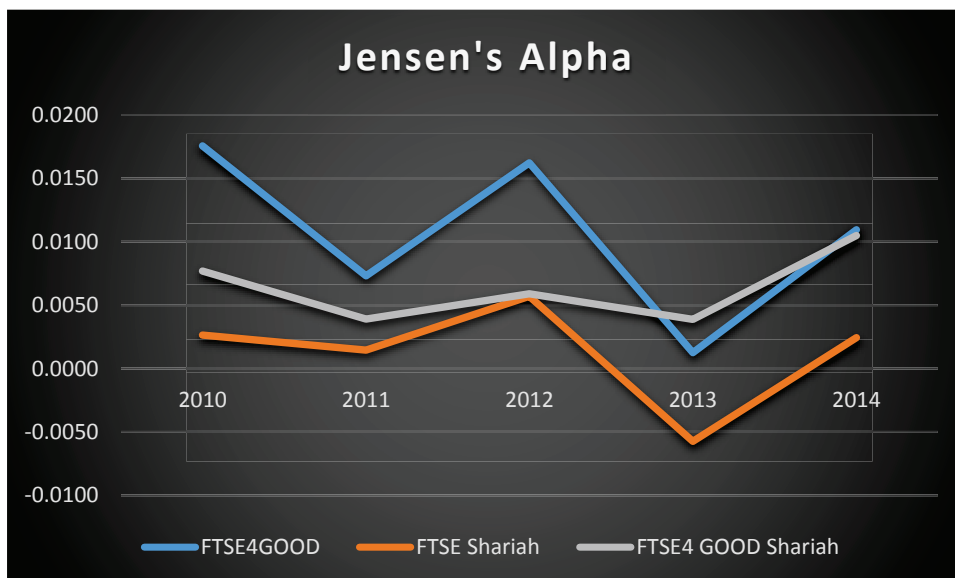| Year	FTSE4GOOD	FTSE Shariah	FTSE4 GOOD Shariah
2010	0.0176	0.0026	0.0077
2011	0.0073	0.0015	0.0039
2012	0.0162	0.0057	0.0059
2013	0.0013	-0.0057	0.0039
2014	0.0110	0.0024	0.0105

Figure 5.

Table provide the comparison of performance between FTSE4GOOD, FTSE Shariah and FTSE4GOOD Shariah indices through Jensen's Alpha using FTSE All-World as a market return. As mentioned on the previous chapter, Jensen's Alpha using market return as a benchmark in their equation to calculate the performance. It shows that FTSE4GOOD outperform in the first three year to the other indices, but in the 2013 FTSE4GOOD Shariah become

the best with 0.0039 and compete with FTSE4GOOD in the final year where FTSE4GOOD outperform FTSE4GOOD Shariah by 0.0005 difference.

Jensen's Alpha Using FTSE All-World as a Benchmark

Table 9.

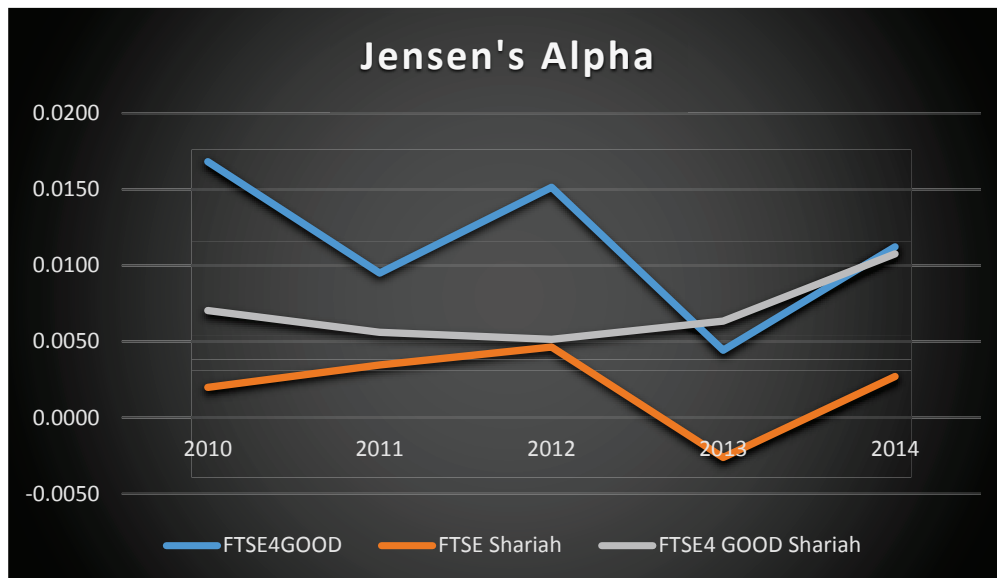| Year	FTSE4GOOD	FTSE Shariah	FTSE4 GOOD Shariah
2010	0.0168	0.0020	0.0070
2011	0.0095	0.0035	0.0056
2012	0.0151	0.0046	0.0051
2013	0.0044	-0.0026	0.0063
2014	0.0112	0.0027	0.0108

Figure 6.

Table provide the comparison of performance between FTSE4GOOD, FTSE Shariah and FTSE4GOOD Shariah indices through Jensen's Alpha using FTSE All-World as a benchmark. Similar to previous Jensen's Alpha, FTSE4GOOD still outperform in the first three year to the other indices, and beaten in the 2013 by FTSE4GOOD Shariah which has become the best with -0.0002 and compete with FTSE4GOOD in the final year where FTSE4GOOD outperform FTSE4GOOD Shariah by 0.0010 difference. It can be argue that both benchmarks have the same trends with only little differences.

Surprisingly, according to Jensen's Alpha either with MSCI All-World or FTSE All-World as a benchmark, the result shows completely different with the previous risk-adjusted performance results (Sharpe Index and Treynor Index). On that result, FTSE4GOOD Shariah strongly dominant and beaten the other indexes while on Jensen's Alpha results, FTSE4GOOD became the best for overall period. This phenomena could be caused the period of the study is very thin which only 5 years. The different result may occur with the longer period of study such as 10 years like have been done by most of previous researcher.

In conclusion for those 3 risk adjusted method including Sharpe Index, Treynor Index and Jensen's Alpha, FTSE4GOOD Shariah outperform for overall period of study particularly on Sharpe and Treynor Index where the result shows the dominancy of FTSE4GOOD Shariah having stands out alone in most of period of the study from 2010 until 2014. However, for Jensen's Alpha, FTSE4GOOD became the best of all and only beaten by FTSE4GOOD Shariah in 2013 and compete closely in the following year which is 2014. On the other hand, FTSE Shariah turns out to be the worst in the overall period of study mainly because they are global index which have constituents across the world including developed and developing countries while FTSE4GOOD and FTSE4GOOD Shariah are having constituents from developed countries only. In addition to that, FTSE Shariah could not compete to other indexes because they have larger constituents than their counterparts.

FTSE All-World

MSCI All-World commonly used by most of researcher who want to procure the performance of indexes. Nevertheless, in this dissertation researcher try to use another benchmark which is FTSE All-World since all the data being calculated are from FTSE families. To be more robust, FTSE All-world is provided to calculate the Jensen's Alpha and eventually the difference between MSCI All-World and FTSE All-World could be acquired.

Furthermore, researcher try to explain what is FTSE All world and can be seen in the next paragraphs.

The characteristics of a good benchmark portfolio are defined comprehensively by Bailey (1992). These include the requirement to be transparent, unambiguous, easy to replicate and measurable.

The FTSE All World Index is the Large/Mid Cap aggregate of 2700 stocks from the FTSE Global Equity Index Series. It covers 90-95 percent of the investable market capitalisation. Indexes are calculated at regional, national and sector levels, and divided into three segments: Developed, Advanced Emerging, and Emerging, which include global, regional, country, economic and sector indexes.

FTSE GEIS has a broader coverage of the investible market; MSCI's implementation of smaller capitalised stocks has meant the MSCI Index Series has a significant double-counting of stocks, unseen in FTSE GEIS; Lower turnover and more accurate index subdivisions (size & market category) in FTSE GEIS allow better, cheaper benchmarking.

By adopting the FTSE Global Classification System leading Exchanges are able to calculate a clearly defined set of industry indices, giving Investment Houses and Investment Consultants access to a comprehensive sector allocation & attribution tool.

Stock Coverage

By covering a total of over 7,000 securities, which account for 98 per cent of the world's total market capitalisation, the FTSE Global Equity Index Series aims to eliminate benchmark risk. To meet the needs of international investors, each security is tested for liquidity, free float, the exclusion if required of unnecessary multiple lines, and for minimum appropriate size, given that only stocks with a market capitalisation in excess of US$100million are eligible.

Transparency

The FTSE Global Equity Index Series was designed following extensive consultation with market professionals, including our independent index

committee, which governs the indices to ensure they continue to meet market needs. The committee is also responsible for making any changes to the Ground Rules, and decides on the treatment of complex corporate actions. As with any FTSE index, the FTSE Global Equity Index Series is driven by a transparent methodology document, available to view or download at www.ftse.com.

Turnover

The FTSE Global Equity Index Series' all-inclusive nature reduces turnover and its associated costs. To reduce unwanted index movement between Large, Mid, and Small Cap stocks, the regional index annual reviews utilise a unique banding structure, thereby creating a more stable benchmark.

Seamless with no overlaps or double counting

Whilst the combined indices offer the investor more options than ever before,
FTSE ensures no company is double-counted in any index.

An index to meet every global investors' needs

To complement the FTSE Global Equity Index Series a multitude of overlays such as style and currency hedging are available to meet the ever-growing needs of a global investor. These overlays allow investors to break down or screen any index component to create the index of their choice. FTSE also provide a customised service called Custom Solutions, which allows a tailored index calculation service to meet any mandate.

4.8   Correlation

The table presented below is showing the correlations between SRI index (FTSE4GOOD), Shariah-compliant index (FTSE Shariah) and the inclusion index that compliance with both SRI and Shariah (FTSE4GOOD Shariah) , for the total time-frame of this study, i.e. 2010-2014.

Table 10.

	FTSE4GOOD	FTSE Shariah	FTSE4 GOOD Shariah
FTSE4GOOD	1		
FTSE Shariah	0.9971	1	
FTSE4 GOOD Shariah	0.9972	0.9966	1

As can be seen from the table, all the indexes that we have tested for correlation can be said to have perfect positive correlations, since they are all very close to being equal to +1. This implies that they are all moving in the same direction, meaning that they are reacting almost exactly in the same way to events taking place on the market. This may not come as a chock, as indexes on the stock market should be more or less correlated, since they are all subject to the happenings on the world market.

Chapter 5: Conclusion and Recommendation

In this era, Socially Responsible Investment (SRI) and Islamic equity or Shariah–compliant investment have become fancy alternative asset classes in the equity investment where investor very keen to put their money in to. Accordingly, in the last two decades both alternative investments are the most rapidly growing sector from all the financial industries. Nontheless, Shariah compliant Investment has to deal with several criticism against them to be more ethical and consider non–profit aspects such as social, environment and human rights. From the previous chapter we can see some debates and discussion from previous research on performance of SRI indexes and Islamic equity indexes and some of them also include the conventional counterparts. However, most of them only tried to compare those indexes performance while the current criticism out there is about ethical criteria to be included by Shariah compliant investment.

This criteria is essential not only because it mentioned in the Holy Qur'an where Islam should be wholesome to human kind but also to the sustainability of the environment, social and governance as well as to accomodate investors who care about their religion (Islam) and their society.

The aim of this study is to investigate whether Islamic Investment or Shariah compliant investment will better perform after including the positive screening criteria from SRI. Accroding to the result receive from chapter four I strongly believe that it is necessery to add positve criteria to Shariah compliant screening method since the result shows FTSE4GOOD Shariah outperform its counterparts which is FTSE4GOOD and FTSE Shariah especially on Sharpe Index and Treynor Index where FTSE4GOOD Shariah beaten the other indexes and show their dominance over the two. From that result I also can argue that screening on stocks does not necesserily make it bad stocks compare to unscreened one.

This findings inline with studies from Irfan Ahmed (2009) where he concluded FTSE4GOOD Shariah UK and US outperform FTSE4GOOD UK and US while he also outlined the importance of Shariah compilance constituents should also concern about ethical side because it could be asshamed if

company that take part in Islamic index causing damages on environtment and society. Apart from what said in Holy Qur'an, the ignorance on those aspects could make ruin the likes of investors on Islamic Investments.

It is also similar to studies from Khaled (2004) who finds that FTSE Global Equity Index overperformed their conventional counterparts and then argue that screening on stocks does not limit the return on that stocks.

Thus, I hope this dissertation research will bring something new to add more debate and discussion on Shariah screening method and resulting the application of positive screening criteria as well as negative screening criteria and financial ratios that already exist on Islamic equity investment screening method.

There is still plenty of shortcoming from this dissertation like the very thin priode of study. In the future, I recommend to have longer period of study minimum 10 years as studied by most of previous researcher in order to have a clear result from those indexes in the bull and bearish period.

After all, to sum up all the explanation above from previous sections, we hope the Islamic equity or Shariah-compliant investment will perform better than before after including the positive screening criteria from ethical or Socially Responsible Investment (SRI) to give the contribution to Shariah Scholars, Investors, and the people to see the performance of Islamic finance in the future.

We are expecting to come up with contributions to both theory and practice in the real occasions. First of all, as is seen from what has been written above, the existing findings in the field differ. Second, there are only a few existing studies which examine the financial performance inclusion of Islamic equity or Shariah-compliant investment and ethical or Social Responsibility Investment (SRI). Thus, this thesis could be treated as a pioneer in analysing the financial performance of the Islamic or Shariah-compliant investment after including the positive screening criteria from ethical or Social Responsibility Investment (SRI). Furthermore, it could be another perception for Shariah Scholars in order to consider the positive screening of the Islamic Investment criteria so it could give a better perspective from the investors and the people about Islamic Investment.

Therefore, it would add to theory what types of investments that perform better from a global perspective. By doing so, it is expected also to bring insights about the financial performance of the inclusion of Islamic equity or Shariah-compliant investment and ethical or Social Responsibility Investment (SRI) for the investors, both institutional and individual, as indexes are easily accessible for them. Moreover, the point about the relationship between ethical investments and faith-based investments, namely Islamic investments, will be clarified. By this, contribution to the process of investment portfolio diversification will be brought. In other words, investors will gain better knowledge about the opportunity to diversify Islamic investment portfolio by adding socially responsible or ethical indexes. Given all of the above, we hope to be able to close this knowledge gap that exists.

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