Is Islamic Equity Index an Investment Heaven? A Comparative Study between SHA 50 and Nifty 50 of India

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Abstract

Bombay Stock Exchange, in the year 2010, had embarked on India's first Shariah compliant Islamic index, alias SHA 50. Apprehensively, the present study aims to compare the performance of SHA 50 and Nifty 50. The data is derived from the official website of Bombay Stock Exchange and National Stock Exchange. It is found that SHA 50 is giving higher return than that of Nifty 50 and at the same time the volatility of SHA 50 is lesser than that of Nifty 50. But when risk adjusted return using Capital Asset Pricing Model is used Nifty 50 performs better than SHA 50. Nonetheless, the Islamic index can be considered to develop financial product which is acceptable to those people who are averse to investing in the stock market due to the religious constraints.

***Keywords**: Islamic Index, Shariah Compliance, SHA 50, Nifty 50.*

1. Introduction

A growing economy requires a progressively rising volume of savings and adequate institutional arrangements for the mobilisation and allocation of savings. A well-developed and efficient financial system is indispensable prerequisite for the effective allocation of savings in an economy. A financial system consisting of financial institutions, instruments and markets provides an effective payment and credit supply network and thereby assists in channelling of funds from savers to investors in the economy (Bezborah and Singh, 2010).

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There are different types of financial arrangements of which Shariah Finance is one. In India, the Banking companies (Regulation) Act, 1949 prohibits any kind of banking arrangements which prohibits the payment of interest. But the demand for inclusion of Shariah Finance in the financial system is being raised by several corners of the society in the past. However, there are different institutions other than the bank which are working on the basis of Shariah finance. Prime Minister's Economic Advisor Prof. Raghuram G. Rajan has already advocated in his report on financial sector reforms about the inclusion of Interest-free finance in our financial system. This will help a large number of people to be included in the financial system. These are the people who are not the part of financial system because of religious constraints.

Shariah Finance is also popular under several other names. It is also called as Islamic Finance, Ethical Finance, Interest-free Finance or special finance in various countries. It has its roots in the Islamic religion. Concerns for equity and justice, lawful (*halal*) and prohibited (*haram*) and a sense of responsibility towards the weaker sections of society are some of the highlighted principles which guide and control the economic activity of the believers in Islam as well as of Shariah Finance.

This system is already successfully functioning in many numbers of countries including those from Europe and North America. This symbolises the fact that the system has more than just religious merit. During the financial crisis of 2008, the resilience of the system has been noticed as well as appreciated by the different regulators of financial system all over the world.

In U.S.A., the Dow Jones Islamic Index tracks Shariah-compliant companies and funds. American investment funds, like those offered by TD Ameritrade and Charles Schwab, can invest in Shariah-compliant companies, and those companies can offer investments in American companies (Fox News, 2008). The Obama administration after the turmoil of 2008 has announced the appointment of Shariah specialist in his advisory board (Chelsea, S. 2011).

1.1 Sources of Shariah Law

Shariah is an explanation of Islamic Law. It is a wider term denoting an abstract form of law capable of adaptation, development and further interpretation in the light of emerging situations. The most important sources of Shariah law are Quran and recorded traditions of the Prophet Mohammad (TSIS Research, 2010). There are some secondary sources also which includes analogical deduction, consensus of scholars, customs which are not contrary to Islamic ethos and aim at public welfare. But the secondary sources derive their authority from the primary sources. The few fundamental aspects are unalterable which are prohibited in the Quran and Sunnah.

1.2 Shariah Finance or Islamic Finance

Shariah puts a ban on certain types of economic activities. Major prohibitions under these include:

- Receipt and payment of interest (known as Riba)
- Excessive ambiguity (known as Gharar)
- Any kind of non-productive speculative activities such as gambling, wagering, etc. (Known as Maysir).

In addition, there are certain other prohibited activities under Shariah. These are mentioned below:

1. It prohibits any economic and business activities related to products or services which are perceived to be harmful to human society. For example, the activities related to tobacco, alcohol, armaments, drugs, pornography, etc. are prohibited.
2. The followers of Islam are strictly ordained not to snatch each others' wealth and property by wrongful or deceitful means.
3. Shariah prohibits any trade if it is not with mutual consent. Thus, the emphasis is put on trade with mutual consent and sharing of risk.
4. As per Shariah, money is a medium of exchange and store of value. It is considered only as potential capital and hence entitled to a return only when risked along with labour and effort. In Shariah Finance, therefore, money is not allowed to be bought and sold like a commodity.
5. Any charge on money lent for social causes, such as helping the poor in meeting their consumption, medical or other dire needs is abhorred on account of the inherent exploitation involved.
6. Any predetermined or fixed return for partnering in business is considered inequitable due to the unknown outcome of the business.

1.3 Islamic Finance in India

Islamic finance is no longer an alien concept for Indian bankers, finance professionals, regulators and policy makers. Indeed a softening of attitude towards Islamic finance at various levels is witnessed. This soft attitude is seen especially in the field of Islamic equity investments. A number of Shariah compliant stock brokerage services have appeared on the scene. However, beneficiaries of such services exclude very large sections of Indian Muslims who are poor and have very little savings or investment potential. Further, major regulatory constraints remain that preclude the possibility of establishing mainstream Islamic banks and insurance companies in India in the short-run. Realizing this, some of the financial institutions have decided to focus on the microfinance and entrepreneurship development as an immediate and appropriate approach to introduction of Islamic finance in India (Shariah Finance Watch, 2008).

Islamic Finance is close to a trillion dollar industry today and is emerging as one of the fastest growing areas of international finance (Moody's Investor Service, 2010). In the past few years, Indian regulators have approved schemes with exclusive claims of Shariah compliance. The following table gives a glimpse of the important actions that Indian government and institutions have taken in the recent past. These actions are seen to have important ramifications for Shariah-compliant business in the country.

Table 1
Developments in the Field of Shariah Finance in India

Action	Year
Establishment of Anand Sinha Committee under RBI for studying Islamic financial products	2005
Appointment of Justice Rajinder Sachar Committee to report on the Social, Economic, Educational status of Muslims of India	2005
Raghuram G. Rajan led committee recommended for interest-free banking for financial inclusion of Muslims of India	2008
Govt. of India calls for bids in connection with reconstruction of National Minority Development Finance Corporation on Shariah lines	2008
SEBI permits India's first Shariah tolerant mutual fund	2009
SEBI permits India's first Shariah tolerant venture capital fund	2009
Government owned General Insurance Company starts international re-takaful operations	2009
Government of Kerala announced Shariah compliant investment company	2009

Source: Research by TASIS, 2010

1.4 Potential of Islamic Finance in India

Muslims constitute 13.4 per cent of India's total population (Census 2001). In absolute terms their population in India is second only to that of Muslims in Indonesia. 60% per cent of the community's population is below 25 years of age and over 35 per cent of the community's total population lives in urban areas. It makes Muslims one of India's youngest and most urbanised communities. They are not much dependent on agriculture which is the mainstay of a major part of India's population (TASIS Research, 2010). Sachar Committee (2006) has reported that almost 50 per cent of the concerned population is excluded from the formal financial sector. According to a Report by the RBI, Credit-deposit ratio of Muslims is 47 percent against the national average of 74 percent. Zachariahand and Rajan (2007) found that remittances coming from the Middle East to the Indian state of Kerala for

about INR 120,000 million annually and a substantial portion of this money is either lying idle in savings bank accounts or is invested in real estate and jewellery. These findings indicate the community's indifference towards the financial system for religious reasons.
Of late it has been realised by the regulators and policy makers. Keeping this fact in mind, Bombay Stock Exchange has started a Shariah compliant index known as Shariah 50. This will be helpful in developing a financial product by the fund houses which is Shariah compliant.

2. BSE TASIS Shariah 50 Index

The Bombay Stock Exchange (BSE) and Taqwaa Advisory and Shariah Investment Solutions (TASIS) have jointly developed the first Shariah compliant equity index in India to be publically disseminated on a real-time basis. The index is constructed using the strict guidelines and local expertise of a domestic, India-based Shariah advisory board. The BSE TASIS Shariah 50 index (Popularly known as SHA 50) consists of the 50 largest and most liquid strictly Shariah compliant stocks from the BSE 500. It has adopted stock screening norms that are more conservative than its peers so that it becomes an ideal for Islamic investors. SHA 50 provides a new tool for use by Islamic and other investors to track the performance of India's largest and most liquid Shariah compliant stocks. The index can be licensed for the construction of Shariah compliant financial products including mutual funds, ETFs, and structured products. It is also India's first equity index to employ index constituent weight capping. Index constituent weights are capped at 8% at rebalancing, in an effort to increase the diversification within the index and ensure greater compliance with international regulatory and statutory investment guidelines (BSE TASIS Shariah Fact Sheet, 2011).

2.1 Shariah Screening Process

Shariah law does not permit investors to invest in companies that derive significant benefit from interest or the sale of other goods/services deemed sinful within the Islamic faith (e.g. alcohol, tobacco, firearms, etc.). Shariah compliant companies included in the BSE TASIS Shariah 50 are screened by TASIS, to ensure compliance with Islamic law. Stocks are reviewed monthly for Shariah compliance. Screening includes:

1. **Business Screening:** Ensures that companies selected are in businesses that do not harm society as per Shariah law
2. **Interest Activity Screening:** Ensures that companies involved in interest-bearing activities are within Shariah tolerance levels

2.2 Advantages of Shariah Compliant Index

Shariah compliant indices can be used to construct investment products suitable to Muslim investors who do not wish to invest in stocks of companies that engage in activities that they deem to be against their beliefs. These kinds of product or investment instruments allow followers of the Islamic faith to invest without violating their religious principles. Several prominent studies in recent years have identified the fact that Muslim participation in India's financial system is minimal. The creation of this kind of index will help to promote financial inclusion of the Muslim population in India and attract investment flows from international funds that must adhere to Shariah norms.

3. Review of Literature

There are wide observations across European and American capital markets which have corroborated the consistency and normal or excess returns given by the Islamic indices, in comparison to unscreened indices, both in bearish and bullish stances. Hussein (2004) in his study on FTSE Global Islamic Index has shown that returns from the same are significantly different from its index counterpart FTSE All- World Index. Another study by Beik and Wardhana (2009) has reckoned that Jakarta Islamic Index though affected by financial tremors in the short term, but show strong resistance and consistency in the long run in comparison to its US Counter Parts. Other studies performed by McMicken (1997), Hee (2002), show that Islamic indices prevalent in the southeast capital markets gave higher returns and are less volatile. Also according to the TASIS research report (2010), the SHA 50 has outperformed the SENSEX by nearly 25% and the BSE 500 by over 30%. Over this period, annualized volatility for the SHA 50 was also less than both SENSEX and the BSE 500 by nearly 5 percentage points (TASIS Research, 2010). Shachmurove, BenZion, Klein, and Yagil (2001) conducted a moving average comparison of Tel-Aviv 25 and S & P 500 Stock Indices.

4.1 Objectives of the Study

The objectives of the present study are given as follows:

1. To examine and compare the performance of the SHA 50 with the Nifty 50
2. To examine and compare the volatility of SHA 50 with the Nifty 50.

4.2 Hypotheses of the Study

The following hypotheses are considered for the present study:

1. H_{01}: There is no significant difference between the return given by SHA 50 and Nifty 50.
2. H_{02}: There is no significant difference between the variance of SHA 50 and Nifty 50.

4.3 Justification of Considering SHA 50 and Nifty 50

Both SHA 50 and S&P Nifty 50 are indices based on the stock prices of 50 companies and have a base value of 1000. Besides it has been also researched by TASIS that Nifty has more number of Shariah compliant companies Listed in NSE (TASIS Research, 2010).

4.4 Research Methodology

1. **Data**: The Data for the SHA 50 have been collected from the BSE website and that of the S&P Nifty 50 have been extracted from NSE website and yahoofinance.com. The period of the study is three (3) years that is 2008, 2009 and 2010
2. **Model and formulae Used:** To calculate the raw returns from the indices the following formulae were used:

$$\mathbf{R} = \frac{P_{it} - P_{it-1}}{P_{it-1}} \quad \text{……………..Equation (i)}$$

Where R is the raw return, P_{it} is the price of the index I at time t and P_{it-1} is the price of the index I at time $t-1$.

Since the SHA 50 and the Nifty 50 belong to different category of risk and the raw returns are not risk adjusted therefore Capital Asset Pricing Model is applied in order to calculate the risk adjusted return.

$$\boldsymbol{R_p = R_f + \beta\,(R_m - R_f)} \quad \text{………………Equation (ii)}$$

Where R_p is the Return of the portfolio in relation to the return from the market index, R_m. R_f is the risk free rate which is taken to be the interest rate on the savings bank account for the years 2008-09, 2009-10. The interest on savings bank account is taken at 3.5%. Beta, β is the measure of the sensitivity of the portfolio to the market index. In the present study the market index is considered to be S&P Nifty 50 as the proxy market index. Further to analyse the performance of the two indices, the Treynor ratio (TR) and the Jenson's Measure, given by the value of α is also calculated.

The Treynor ratio is given as

$$\text{TR} = \frac{R_p - R_f}{\beta} \quad \text{……………………..Equation (iii)}$$

And the Jenson's measure $,\alpha_p$ is given by

$$\alpha_p = R_p - E(R_p) \quad \text{…………..…………Equation (iv)}$$

Where $E(R_p) = R_f + \beta\,(R_m - R_f)$

All the symbols have their usual meanings.

Because the Shariah index constitutes of shares of fifty companies weighted and capped accordingly it can be presumed to represent a portfolio.

3. **Type of study:** The study is descriptive and analytical in nature.
4. **Tools of data analysis:** Statistical tools such as F test, standard deviation, Variance, Coefficient of Variation, have been used using Microsoft Excel and SPSS 17.0 to arrive at logical conclusions.

5. Analysis and Findings

The analysis and findings of the study is presented in the following paragraphs:

5.1 Performance of the Indices

The returns for the SHA 50 and Nifty 50 have been given in Table 1.

Table 1
Returns for Shariah 50 and Nifty 50

Returns	SHA 50	Nifty 50
YTD(1 Jan 2008-31Dec 2010)	24.96%	1.11%
Two Years (4Jan2009 - 31 Dec2010)	57.73%	44.35%
Three Years (1 Jan2008 -31 Dec 2010)	22.35%	12.29%
Risk Adjusted Return (CAPM)	10.44%	12.29%

Source: Calculated by Authors from Data Collected from BSE & NSE Website

An analysis of the Year to Date return from the SHA 50 index shows that it provides a return of 24.96 %, which is substantially higher than a meagre 1.11% return provided by the Nifty 50. It becomes evident from the above table that the return over the two year period (4 Jan 2009 to 31 Dec 2010) from SHA 50 stands quite high at 57.73% from that of Nifty 50 which stands at 44.35%. Moreover the results of annualized return over a period of three years (1 Jan2008 – 31 Dec 2010) shows that SHA 50 provides the return which is almost double than that of provided by Nifty 50.

By applying the CAPM model the risk adjusted return for the SHA 50 and Nifty 50 is given as 10.44% and 12.29% respectively [By using Equation (ii)].

The performance of the SHA 50 and Nifty 50 calculated by using the Treynor Ratio using Equation (iii) comes to 25.13% and 11.13% respectively. The Jenson measure given by Equation (iv) is measured to be 11.91% for SHA 50. As Nifty 50 is considered as the proxy of market portfolio, hence calculation of Jenson Measure for Nifty becomes redundant.

From the above results it can be construed that the returns from the SHA 50 in the post slump period (after 2008) has been proficiently better than that of the country's premier index, S&P Nifty 50. Also the Treynor Ratio indicates that SHA 50 is a better performer than Nifty 50. However, when the risk factor is considered to calculate the return using the CAPM model Nifty 50 shows higher return. The findings, therefore, capture a tinge of ambivalence when the risk factor is considered.

5.2 Volatility of the Indices

In order to measure volatility, the standard deviation and variance are considered. These are presented in table 2 and table 2.

Table 2
Index Volatility

Volatility	**SHA 50**	**Nifty 50**
Standard Deviation	221.8643	968.1681
Coefficient of Variation	25.53%	20.82%

Source: Calculated by Author from Data Collected from BSE & NSE Website

Table 3
Result of F-Test

	SHA 50	**Nifty 50**
Mean	868.8965484	4633.4244
Variance	49223.77834	930797.73
Observations	733	733
Df	732	732
F	0.052883432	
P(F<=f) one-tail	0	
F Critical one-tail	0.885440431	

Source: Calculated by Author from Data Collected from BSE & NSE Website

The table 3 clearly explains that the standard deviation of the Nifty 50 is quite higher than that of the SHA 50. The variance as a measure of the volatility of the share prices for the SHA 50 and Nifty 50 is significantly different because the *f test* value is less than 0.5(i.e. 0). Hence the null hypothesis is rejected. Thus, it is evident that SHA 50 is less volatile than that of Nifty 50. But after comparison of their respective coefficient of variation [Table 2], it is seen that SHA 50 is relatively more volatile than that of Nifty 50. This provides an explanation as to when the risk factor is adjusted to the raw returns, Nifty 50 show better performance.

6. Conclusion

Though no previous research have been conducted comparing the two respective indices, research papers on capital markets across the various economies have shown that Islamic Indices have been giving more strong returns and are less volatile over longer periods, both in bearish and bullish market in comparison to Non Islamic counterparts. The study made by Hussein (2004), Beik and Wardhana (2009) and Beik (2008) also supports this finding. The present study too confirms that returns from the SHA 50 in the post slump period (after 2008) have been proficiently better than that of the country's premier index, S&P Nifty 50.

It is also found that SHA 50 is less volatile than nifty 50. The studies performed by McMicken (1997), Hee (2002) likewise provide mixed results about the volatility of Islamic Indices. Their study has shown that the Jakarta Islamic Indices shown higher volatility in short run in comparison to its non Islamic counterparts; but in the long run the movement of the same is more consistent than that of its counterparts.

6.1 Policy implications

It is worthwhile to mention here that the business of Shariah Finance is not supposed to be conducted only by certain groups or adherents of a certain faith. Anybody who adheres to the Shariah prescriptions irrespective of his/her faith or religion would be considered Shariah-compliant. Shariah compliant indices can be used to construct investment products that are attractive to Islamic investors. This will help in the inclusion of a large section of the Muslim population into the formal financial system of the country who are not the part of the formal financial system due the religious constraints. Another implication of constructing an Islamic index is that it will help the country in attracting more amount of foreign direct as well as indirect investment from the international fund houses which adhere to Shariah norms. For Asset Management companies the index provides a very strong opportunity to construct funds as the Islamic index provides higher returns than that of its contemporary indices and is also comparatively stable.

6.2 Limitation

Though the present study makes a comparison between the Nifty50 and SHA50, it should be noted that the SHA 50 was launched in 27 Dec, 2010 and the remaining values of the share prices, receding back to 1Jan, 2008 have obtained via back testing, and therefore might not reflect the real share prices. The study also makes no attempt to investigate a pattern or trend in the movement of the share prices over the period of three years considered.

6.3 Scope of Further Research

More research can be performed on the index, three or five years forward, because then its real values and not the back tested values would be available. The present study also makes no attempt to investigate the behaviour of the SHA 50 in the bearish market. Such a work would be beneficial so that a better understanding of its performance is available. Besides various methods of technical trading such as moving average, filter tests can also be performed to reckon the points of buy or sell for the investors.

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