CHAPTER -2
REVIEW OF LITERATURE

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CHAPTER - 2

Review of Literature

2.1. Introduction

The Islamic Investments is in budding stage and gradually growing around the world in the last one decade. The existing literature in the field of Islamic finance and Investments is limited especially in emerging economics. However, the available literature is presented here to give a lucid picture about the performance of Shariah Compliant Stocks and indices both at the global level and Indian context.

2.2. Review of Literature regarding Risk and Return performance of the Shariah Compliant Shares and Shariah Indices (38 No)

In this part of the chapter, the review of literature regarding risk and return of the Shariah Compliant Shares and Shariah indices are presented.

Mudasir and et al. (2000) measured the performing and non-performing of the Shariah Compliant stocks in industrial sectors. They employed 20 financial ratios, alpha Jensen technique, multiple discriminant analysis and logistic regression by using yearly data during 2000. The study finds that the cash / share ratio determined the performing and non – performing of the Shariah Compliant stocks according to the MDA model. The cash / share and cash ratio determined the performance of the Shariah Compliant stocks using logistic regression.

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Abdullah and Bacha (2001)\(^2\) examined the impact of inclusion and detection of the stocks in the Shariah index on return and trading volume of the Shariah stocks in Malaysia. The employed event study methodology for daily closing prices and trading volume of the Shariah stocks during 1997 to 1999. The study found that inclusion of the stocks in the Shariah index increased the returns and trading volume and exclusion of the stocks reduced the returns and trading volume of the Shariah stocks in Malaysia.

Ahamad and Ibrahim (2002)\(^3\) compared the risk and return performance of Kuala Lumpur Shariah Index (KLSI) with Kuala Lumpur Composite index (KLCI) during the period 1999 to 2002. The sample period of the study is divided into growing period, decline period and overall period. They have employed relative return technique, Standard deviation, risk adjusted performance measurement and two sample t-test to measure the performance of both indices. The study found that KLSI underperforms during overall period and decline period but it overperforms in growing period. Finally they find that there is no significant difference in performance of both indices during three sample period.

Hakim and Rashidian (2004b)\(^4\) analyses the risk and return of the Dow Jones Islamic World Index, Dow Jones World index and Dow Jones Sustainability (DJS) World index by using weekly closing value of the indices and LIBOR, a proxy of the


risk-free rate during period January 5, 2000 to August 30, 2004. By employing CAPM, the results of the study reveals that the most popular index is market competitive but has underperformed in relation to another morally restricted but non-Islamic index. The study concludes that investors in the Muslim index are not suffering a discernible cost for complying with the Shariah restriction.

**Hussein (2004)**\(^5\) evaluated the performance of ethical investment with their unscreened benchmarks. The study empirically tests whether returns of FTSE Global Islamic Index are significantly different from their index counterpart (FTSE All-World Index). The sample period is divided into two sub-periods, bull period (July 1996 – March 2000) and bear period (April 2000 - August 2003). Both indices performed similar manner during entire sample period. On the other hand, the Islamic index yields statistically significant positive abnormal returns in the bull market period, whereas it underperforms in the bear market period. In general, the results show that the application of ethical screening does not have an adverse effect on the FTSE Global Islamic Index performance.

**Hussein (2005)**\(^6\) made an effort to test whether monthly returns of Financial Time Stock Exchange (FTSE) Global Islamic index and Dow Jone Islamic Market Index are significantly different from their common index for the period January 1996 to December 2004. The sample period is divided into bull market and bear market. The study employs Capital Asset pricing model, Risk adjusted performance measurement, t–test, Wilcoxon Signed test, buy and hold return method and cumulative return method for examining long run and short run relationship between

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indices. In short run period, Islamic indices statistically overperform during whole period and second bull market period. In long run, Islamic indices overperform during entire period and second bull market period. Finally the study finds that there is a similar performance between indices.

Hussein and Omran (2005)\(^7\) examine the impact of ethical screening on the performance of the Dow- Jones Islamic indexes during December 1995 to June 2003 by using monthly closing value of the DJIWI and its 13 sub indexes. The sample period is divided into two sub periods, January 1996-March 2000 and April 2000-July 2003, in order to track the behavior of Islamic indexes under bull and bear market conditions. By employing CAPM, Sharpe ratio, treynor ratio, the study finds that Islamic indexes provide positive abnormal returns over the entire period and the bull market period, but they underperform their index counterparts over the bear market period.

Girard and Hassan (2006)\(^8\) took a look at the performance of seven indexes chosen from the Dow Jones Islamic Market Index (DJIM) vis-à-vis their non-Islamic counterparts using a variety of measures such as Sharpe, Treynor, Jenson and Fama’s selectivity, net selectivity and diversification during the period from January 1996 to November 2005 (118 data points). Further, the sample period is broken down into two sub-periods - i.e, January 1996 to November 2000 (59 data points) and December 2000 to November 2005 (59 data points). Second, they examined the persistence of performance using Carhart’s (1997) four factor pricing models. Third, the study uses co-integration to examine how the Islamic indexes compare to their non-Islamic


counterparts. The study found that there is no difference between Islamic and non-Islamic indexes. The Dow Jones Islamic indexes outperform their conventional counterparts from 1996 to 2000 and underperform them from 2001 to 2005. Overall, similar reward to risk and diversification benefits exist for both the Islamic and conventional indexes.

Rahman and Wajdi (2006)\(^9\) tried to examine whether Shariah-compliant firms pay higher dividend than non-Shariah-compliant firms during end of 2004. Further, they also attempted to provide empirical evidence on whether Shariah and non-Shariah compliant firms have different level of agency cost. The study uses Cost of sales, Sales and general administration expense, Annual sales, and Dividend per share as study variables. The result of the study shows that Shariah-compliant firms pay higher dividend to their shareholders than non-Shariah compliant firms. Further, this study found that Shariah-compliant firms facing less agency cost than non-Shariah compliant firms.

Bauer and et al (2007)\(^{10}\) examine the performance of ethical mutual funds and conventional mutual funds in Canada. By employing CAPM, three factor model, four factor model, the study finds that there is a similar performance between both mutual funds in Canada.


Sadegi (2008) investigated the impact of the introduction of Bursa Malaysia Islamic index on the financial performance and liquidity of the screening securities involved in the Islamic index in Malaysia. The study employed event study methodology to estimate mean cumulative returns of the Shariah compliant stocks in the days surrounding the event and also investigate the changes in liquidity using trade volume and bid ask spread surrounding the event days as liquidity proxies. The study found that the introduction of the Shariah index has positive and strong impact on the financial performance of the Shariah compliant stocks.

Derigs and Marzban (2008) compare the Shariah Investment screens for different Indices and Funds. The study finds that there is a small deviation among the Shariah Investment principles in different indices like Dow Jones Islamic Index Group, the Financial Times Islamic Index Series, the Standard & Poor’s Islamic Index Group, the Morgan Stanley Capital International Islamic Index Series (MSCI), Dubai Islamic Bank, the HSBC Amanah Fund, the Meezan Islamic Fund, the Amiri Capital Islamic Fund, and the Azzad Islamic Fund.

Shah Bin and et al. (2008) analyses the performance of Shariah compliance companies in the plantation industry during January 2000 to December 2006. The study uses 20 financial ratios classified under four categories such as solvency, management evaluation, profitability and performance ratios to identify the


performing and non-performing companies. The study also employs the multiple discriminant analysis (MDA) and multiple regression to distinguish between the performing and the under-performing companies. They find that the growth turnover ratio is the only ratio that could discriminate between the performing and non-performing companies in the plantation industry.

Bastaki (2008)\textsuperscript{14} assesses the effect of Islamic investment guidelines in security selection on investor’s wealth by using 156 Dow Jones based Shariah companies during July 1986 to July 2006 in London. By employing regression model, the study reveals that the Shariah-based investment strategies may be profitable over conventional strategies, moreover preferable during bear market conditions.

Jones and et al. (2008)\textsuperscript{15} investigate the returns performance of 89 ethical funds in Australia during the period 1986 to 2005 in Australia. Using a multi-factor CAPM model, the study finds that ethical funds significantly underperform the market in Australia during the sample period 2000 to 2005. Risk adjusted returns using Jensen alpha indicate that average annual underperformance is around 1.52\% in the 2000–2005 period for our sample and .88\% over the whole sample period. The results of the study reveal that there are not statistically significant differences in the performance of ethical funds relative to market benchmarks.


Mohd Dali and et al. (2008) identify the factors influencing the performance of the Shariah Companies by using financial ratio in Bursa Malaysia. By using the multiple discriminant analysis, the study identify that the ratios discriminate between the non-performing and performing companies.

Hashim (2008) tries to investigate the effect of adopting screening rules on stock indices risk using monthly data from FTSE Global Islamic indices during period from January 1999 to May 2007. The FTSE Global Islamic such as the FTSE Global Islamic index, the FTSE All-World index and the FTSE4Good index are compared with the benchmark index as Morgan Stanley All Country World Index. The study employs CAPM to tests the hypothesis that the Islamic index yields adequate returns for the level of risk undertaken. Results show that the Islamic index surpasses the socially responsible index in performance while operating in line with the market. This risk assessment result does not resolve the dilemma but assures the economic appropriateness of the procedures adopted in managing the Islamic index.

Benjelloun and Abdullah (2009) investigate how best to diversify in stock market by using monthly stock returns of 62 Shariah companies during the period January 2000 to June 2006 in Saudi Arabia. The study constructs the various portfolio sizes and employs Modified Statman diversification model to evaluate the performance of index funds in Saudi Arabia and thus assess the size of a diversified portfolio. The study finds that due to high index funds fees, investors are better off

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diversifying by purchasing stocks directly from the stock market and also a portfolio containing five randomly chosen stocks is sufficient to achieve diversification.

Kok and et al (2009)\textsuperscript{19} empirically studied the performance of Shariah Compliant Indices (SCIs) by evaluating the performance of number of SCIs, in comparison to similar mainstream indices, as well as in comparison to other ethical funds. Furthermore, the paper tested the co-integration among the SCI’s and the mainstream ones to establish whether there is any scope for diversification. The main findings are that SCIs offer an opportunity for portfolio diversification with mainstream indices and other ethical funds within the UK.

Smolo and Mirakhor (2010)\textsuperscript{20} evaluate the global financial crisis and its effect on the Islamic financial industry (IFI). The study aims to highlight, explain, and discuss the implications of the global financial crisis for IFI and suggest necessary steps for the future development of the industry. The findings show that although the crisis had limited impact on IFI the major flaws of the capitalist financial system are relevant to the development of IFI. The study suggested that the greater attention should be given to the fundamental principles of Islamic finance in order to ensure the future development of industry.

Ardiansyahan and Qoyum (2010)\textsuperscript{21} examine the impact of the default to the Islamic equity return in the year 2009. The study uses variables such as firm size,


book to market value, probability of default (PD) and Islamic Equity Return for 148 sample companies in Malaysia. First, the study uses the Merton’s model to determine and to predict the default probability of the Islamic company and later it uses regression to examine the impact of the size, BM to PD. In addition, the study also measures the impact of the PD to Islamic equity return by using regression model. First, size of Islamic company has negative influence to the PD. Second, Book to Market ratio has significant correlation with the PD. Third, this research also finds that the PD has no impact to the return of Islamic equity. It means that PD that is faced by Islamic company in Malaysia has no impact to the return of Islamic equity.

Shubbar (2010)\textsuperscript{22} investigates the performance of the Dow Jones Islamic Market Index and FTSE Shariah All-World Index in the 2008 credit crisis by using Sharpe Ratio, Capital Asset Pricing Model (CAPM), Jensen’s Alpha, Market Timing Ability, Appraisal Ratio, Treynor Ratio, and Modigliani & Modigliani Measure. The study compares the performance of Islamic indices with their counterparts (i.e. Dow Jones Global Total Stock Market Index and FTSE Global All-Cap Index) as well as with S&P 500 Index as a reference for all other indices. The results of the study show that there is no significant difference between performance of the Islamic and conventional indices during crisis period.

Rahman and et al. (2010)\textsuperscript{23} compare the Islamic stock screening norms between the Kuala Lumpur Stock Exchange Islamic Index (KLSESI) and the Dow

\textsuperscript{22} Shubbar, S. A. (2010). Empirical Performance of Islamic Stock Market Indices in 2008 Credit Crisis. Thesis, the University Library, University of Twente, PO Box 217, 7500 AE Enschede, The Netherlands. Available at essay.utwente.nl/60816/1/MSc_Sayed_Ahmed_Shubbar.pdf

\textsuperscript{23} Rahman A. A, Yahya. M.A. and Nasir M.H.M. (2010). Islamic norms for stock screening: A comparison between the Kuala Lumpur Stock Exchange Islamic Index (KLSESI) and the Dow Jones
Jones Islamic Market Index (DJIM) in Malaysia during the year end of 2006. Out of the sample size of 642 Shariah companies, complete information available only for 565 companies during study period. The study finds that among the 564 Shariah companies under KLSESI screening norms, only 198 companies conform to the criteria set up by the DJIM.

**Karim (2010)**\(^{24}\) compares the risk and returns of the Islamic based portfolio and conventional portfolio during the period 1989 to 2008 in Malaysia. The study uses the KL Composite Index (KLCI) and the FTSE Bursa Malaysia Shariah Index (FBMSHA) and Malaysian 3-month Treasury bills (T-bills) rates as proxy for risk-free rate investment instrument to compare the performance between both portfolios. The study find that there is no different between returns of the both portfolios during the study period but risk is more on conventional portfolio than Islamic based portfolio.

**Bialkowski and et al (2010)**\(^{25}\) investigate the impact of Ramadan effect on stock returns for 14 predominantly Muslim countries over the years 1989-2007. The study employs event study methodology and finds that stock returns during Ramadan are almost nine times higher and less volatile than during the rest of the year.

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Dewi and Ferdian (2010)²⁶ measure the performance of Islamic mutual funds in Indonesia and Malaysia by using daily NAV of the 10 Indonesian Islamic mutual funds and 14 Malaysian Islamic mutual funds from January 1st, 2006 to April 31st, 2009. The daily value of the Jakarta Islamic Index (JII) and Malaysia Dow Jones Islamic Market Index (DJIMY) are used as a bench mark indices and the daily rate of Malaysian Government Treasury Bills (MGIY5Y) and the daily rate Bank Indonesia Certificate (GIDN5YR) are used as risk free rate. By using 5 measurement tools, namely Sharpe, Treynor and Jensen Indices, as well as Snail Trail Methodology and Market Timing, the study finds that Malaysian Islamic stocks seem to outperform the Indonesian Islamic mutual funds, even in the period of global economic crises. This study also discovers that risk-return relationship of debt Islamic mutual funds is relatively stable as compared with asset allocation and equity Islamic mutual funds. Lastly, this study finds that market timing ability of investment managers of Islamic mutual funds in the two countries cannot increase the funds’ returns as a whole.

Liston and Soydemir (2010)²⁷ investigate relative portfolio performance between faith based returns and sin stock returns during 1965 to 2007 and compare them during 2001 to 2007. The study employs Capital asset pricing model (CAPM), Fama French three factor model, Carhart four factor model, rolling regression and risk adjusted performance measurement. The study finds that the sin stocks outperform faith based stocks relative to the market, especially during contractionary periods. A rolling regression technique reveals that faith based and sin betas tend to move in opposite directions during most of the sample period. Further, there is evidence that

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faith based beta has an average estimated beta of one, mimicking the market, and negative estimated coefficient for the book to market factor. Sin stocks, however, have an average estimated beta of one half, with positive estimated coefficients for size and book to market factors. This indicates that sin stocks are defensive and behave similar to value stocks, whereas faith based stocks behave similar to growth stocks.

Liston and Soydemir (2010)\textsuperscript{28} analyses the portfolio performance between sin stock returns and faith-based returns during July 2001 to December 2007. The study employs the Sharpe-Lintner-Mossin capital asset pricing model (CAPM), the Fama and French (1993) three-factor model, and the Carhart (1997) four-factor model and finds that faith-based and sin betas move in opposite directions during most of the sample period and the sin portfolio outperforms the faith-based portfolio relative to the market.

Shubbar (2010)\textsuperscript{29} investigates the performance of the Dow Jones Islamic Market Index and FTSE Shariah All-World Index in the 2008 credit crisis. The study employs Sharpe Ratio, Capital Asset Pricing Model (CAPM), Jensen’s Alpha, Market Timing Ability, Appraisal Ratio, Treynor Ratio, and Modigliani & Modigliani Measure to compare the performance of Islamic indices with their counterparts indices such as Dow Jones Global Total Stock Market Index and FTSE Global All-Cap Index and S&P 500 Index which is the reference for all other indices. The study finds that there is no significant difference between Islamic and conventional indices.


Further the study suggests that Islamic indices are more stable than conventional ones. In contrast, the conventional indices are performing quite better than Islamic ones in terms of gained returns which might be due to arbitrage opportunities and other business activities which are forbidden under Islamic finance.

Hassan and Antoniou (2010)\textsuperscript{30} examine the returns of the global Dow Jones Islamic Index (DJIM) against the Datastream Global Index (DGI) over the period January 1996 to March 2003. The study employs risk adjusted measurement such as Sharpe ratio, Treyner ratio and Jensen Alpha. The study finds that the Islamic index out perform during the crisis period than conventional indices.

Suherman and Buchdadi (2010)\textsuperscript{31} empirically investigate the difference of the performance between Shariah-based and non Shariah-based IPO firms. The sample consists of 8 Shariah-based and 37 non Shariah-based IPO firms from the Jakarta Stock Exchange (JSX) between July 2001 and December 2005. The results show that, when using equally-weighted cumulative abnormal returns (EWCARs) and equally-weighted buy-and-hold abnormal returns (EWBHARs), the long-run performance of IPOs between Shariah and non Shariah firms are significantly different. However, the significance disappears when the returns are calculated with value-weighted cumulative abnormal returns (VWCARs) and value-weighted buy-and-hold abnormal returns (VWBHARs). Further, the results show that Shariah-based IPO firms outperform the market in almost every month over two years, except month 7 and 10 when using VWCARs. However, non Shariah-based IPO firms underperform in almost every month over two years.


Ahamed and et al (2011)\textsuperscript{32} examine the financial performance of 16 Saudi IPO firms between 2003 and 2009 period by using regression model. The objective of the study is to measure Saudi Arabian initial public offerings’ (IPOs) financial performance before and after going public on the Saudi Stock Exchange Market. The paper also aims to explore factors associated with the financial performance variation between pre- and post-IPO. The study finds that the Saudi IPOs exhibit a significant decline in the post-IPO performance compared to the pre-IPO level as measured by the return on assets and return on sales. It was also found that the performance deterioration is associated with the IPO event.

Ferdian and et al (2011)\textsuperscript{33} tried to determine the Shariah Stock returns in Indonesian Shariah stock Market by using weekly closing price, market beta, book to market ratio, debt to equity ratio and firm size over the period of 14th September 2005 to 25th September 2009. They employed CAPM and Fama – French Three factor model to estimate the Shariah stocks returns. The study found that Shariah Stock returns are determined by market factor (market return minus risk free return), firm size and book to market factor. The study further supported that big and value firms generate superior returns as compared to small and growing firms.

Sadeghi (2011)\textsuperscript{34} investigates the impacts of index additions on the return and liquidity of Shariah-compliant shares during January 2008 to December 2009.


in Egypt and Jordan. The study uses the daily stock prices, market index, bid and ask prices, and volume of trade of the 25 Egyptian and 9 Jordanian companies added to the DJIM index between January 2008 and December 2009. By employing the Event study methodology, the study finds that stock prices of the sample Shariah companies are positively reacted to index addition events in these countries. The study also provides evidence that the returns and liquidity of added shares in the Shariah index are increasing in long-term. This indicated that the company’s activities reflect the beliefs and ethos of their investors in the Middle East.

**Girard and Hassan (2011)** examine the performance of seven indexes chosen from the Dow Jones Islamic Market Index (DJIM) and their non-Islamic counterparts using Sharpe, Treynor, Jenson, Fama’s selectivity, net selectivity and diversification, Carhart’s (1997) four factor pricing models and co-integration during the period January 1996 to November 2005. The sample period is further divided into two sub-periods i.e., January 1996 to November 2000 and December 2000 to November 2005. The study finds that there is no difference between Islamic and non-Islamic indexes. The Dow Jones Islamic indexes outperform their conventional counterparts from 1996 to 2000 and underperform them from 2001 to 2005. Overall, similar reward to risk and diversification benefits exist for both the Islamic and conventional indexes and also there is no co integration between Islamic index and common index.

**Abdullah and et al (2011)** test the day of the week effect and weekend effect of the Kuala Lumpur Shariah Index (KLSI), FBM Emas Shariah and FBM

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Hijrah Emas Shariah from 21 May 2007 until 19 September 2008 in Malaysia. Using the OLS technique, the study finds that the day of the week effect is presence only in Malaysian Shariah market of KLSI and not for FBM Emas Shariah and FBM Hijrah Shariah. Specifically, the result show that there is significant negative Monday return and positive Friday returns in the Kuala Lumpur Shariah Index. The result suggests that the market is not purely efficient, a findings similar to those of conventional stock market in many countries.

Dharani and Natarajan (2011a)\textsuperscript{37} compare the risk and return of the S&P CNX Nifty Shariah index and S&P CNX Nifty index at day wise, moth wise and quarter wise during 2nd January 2007 to 31st December 2010. The study finds that there is a significance return difference between both indices during third quarter in India. Finally, the study finds that Ramalan effect prevailing in the Shariah index during third quarter of the study period.

Dharani and Natarajan (2011b)\textsuperscript{38} empirically examine the risk and return of the Nifty Shariah index and Nifty index during the period 2nd January 2007 to 31st December 2010. The sample period is further divided into bull market period and bear market period based on the movement of the both indices during the study period. The objective of the study is to analyse the performance of the Islamic index and common index and to test whether any significant difference between both indices in India.


They employ Risk adjusted measurement such as Sharpe index, Treynor Index and Jensen alpha. The t-test is used to test the mean returns difference between both indices. The study concludes that Nifty Shariah and Nifty indices in India are performing in a similar manner.

2.3. Review of Literature regarding Relationship between the Shariah index and Common index (18 NOs)

In this part of the chapter, the review of literature regarding the relationship between Shariah index and common index are presented. Most of the studies are carried out in the developed and Muslim countries. However, relevant studies regarding the study objective are presented in this section of the study.

Hakim and Rashidian (2004a)\textsuperscript{39} investigated the risk and return of Dow Jones Islamic Stock Market Indices (DJIM) from 1999 to 2002. The study found that the three month T bill returns dominate both the Islamic Index and the Wilshire 5000 stock market index. However, return and risk of the Islamic index is less than the Wilshire 5000. The study also examined the long run and short run relationship existing among the variables using unit root test, co integration and causality test. The study found that T bill returns, Islamic index returns and Wilshire 5000 returns are not co-integrated.

Ahmad (2005)\textsuperscript{40} attempts to examine the relationship among the daily closing price of the Bursa Malaysia Shariah index, EMAS index and the daily Malaysian three months T-bills rate during the period April 1999 to December 2004 in Malaysia.


\textsuperscript{40} Ahmad, S. A. (2005). Dynamic linkages among BMSI, EMAS Index and T bills. A thesis submitted to the Faculty of Finance and Banking. Universiti Utara Malaysia. Malaysia.
The study employs the unit root test, Johansen- Juselius cointegration test, Granger Causality test and Vector Error Correction Model (VECM) to find the relationship among the variables. The results of the study reveal that the Bursa Malaysia Shariah index, EMAS index and three months T-bills share a long run relationship. In the short run, only changes in EMAS index tent to raise the value of BMSI and t-bills do not significantly affect both indices in Malaysia.

Achsani and et al. (2007)\textsuperscript{41} analyse the linkage among the Islamic indices by using weekly data during January 2000 to August 2007. The study employs correlation, Granger Causality and VAR model for the data set. The study finds that there is a strong correlation between Islamic indices. Further, the findings show that US market has strong influences on the other market.

Yusof and Majid (2007)\textsuperscript{42} seek to explore the long run and short run relationship between foreign portfolio investments (FII) and three markets such as the goods market, the money market and the security market in Malaysia during January 1999 to December 2006. The good market is considered as real income, the money market variables are the broad money supply, t- bills and Federal fund rate. The KLSI and KLCI are considered as security market variables. By employing the ARDL Model, the study finds that among the three markets studied, the securities market in Malaysia is the most significant market to attract the foreign investment.


Chapakia and Sanrego (2007)\(^{43}\) investigate the dynamic relationship among Shariah index, Composite index, and three-month Treasury bill rate in Malaysia during the period April 1999 to December 2003. The study attempts to examine the causality among the variables in the short run and long run by employing unit root test, co integration, Granger Causality and Vector Error Correction Model (VECM). The results of the study reveal that the returns of the Treasury bill rates are higher than the returns of the Shariah index and Composite index in Malaysia. The result of the co integration test shows that there is a long run relationship between the composite index and the Shariah index. Finally, the results of the causality explain that the Shariah index causes the composite index and the three month Treasury bill rates cause the Shariah index. The study concludes that there is a bidirectional relationship between the Shariah index and the composite index in Malaysia.

Albaity and Ahamad (2008)\(^{44}\) investigated the performance and relationship between KLSI and KLCE over the period of April 1999 to December 2005 in Malaysia. The study applied risk adjusted performance measurement, causality and Johansen co integration test. They found that there is an insignificant return difference and long run bidirectional relationship between both indices.

Yusof and Majid (2008)\(^{45}\) evaluate the dynamic effects of both Islamic and conventional stock markets on foreign portfolio investments (FPI) during January

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1999 to December 2006 in Malaysia. The study first examines the short and long-run relationships between FPI and the goods market, money market, and securities market respectively. The variables as real income (Y) for goods market, broad money supply (M2), treasury bill rate (TBR) and the US Federal Fund rate (FFR) for money market, and Kuala Lumpur Shariah Index (KLSI) and Kuala Lumpur Composite Index (KLCI) for security market are employed by using Autoregressive Distributed log model (ARDL), The variance decompositions (VDCs) and impulse-response functions (IRFs). The study finds that among the three markets studied, the securities market in Malaysia (both conventional and Islamic) is the most significant market in attracting FPI into the economy. This implies that to a certain extent, the government’s effort in promoting Malaysia as the international hub for the Islamic capital market has been successful.

Kassim and Abdul Manap (2008) analyze the information content of the Islamic interbank money market rate (IIMMR), with respect to several macroeconomic indicators such as the industrial production index (IPI), consumer price index (CPI), stock market index (the Kuala Lumpur Composite Index-KLCI), total bank loans (LOANS), total exports (EXPORTS) and total imports (IMPORTS) during the period January 2000 to December 2006 in Malaysia. The study employs the Toda-Yamamoto (1995) method to analyse the causality relationship between the policy indicator and macroeconomic variables. The results of the Toda-Yamamoto causality tests are supportive of the high information content of the IIMMR of the Malaysian economy.

Biek and Wardhana (2009) discovered the relationship between Jakarta Islamic Index and other selected markets indices during the period of January 2006 to December 2008. The study apply Unit root test, Co – integration and Vector autoregressive model (VAR) to examine the long run relationship among the selected sample indices in the study. The results confirmed that there is no long run relationship between Jakarta Islamic Index and other selected Market index during the study period.

Majid and Yusof (2009) assessed both the short- and long-run dynamics between the macroeconomic variables and Islamic stock market behavior in Malaysia during the post financial crisis of 1997 to 2006 by using Autoregressive Distributed Lag Model (ARDL). The macroeconomic variables such as real effective exchange rate (REET), money supply M3, Treasury bill rate (TBR) and federal fund rate (FFR) are considered in their study. The results suggest that REET, money supply M3, TBR and (FFR) seem to be suitable targets for the government to focus on, in order to stabilize the Islamic stock market and to encourage more capital flows into the market. The study found that money supply M3, TBR, and FFR are positively related Islamic stock market index whereas REER is negatively related. As for the interest rates and stock returns relationship, the paper finds that when interest rates rise either domestically (TBR) or internationally (FFR), the Muslim investors will buy more Shariah compliant stocks; thereby escalating the Islamic stock prices.


Othman and et al. (2009)\textsuperscript{49} examine the relationship between company’s characteristics such as size, profitability, board composition and type of industry and Islamic Social Reporting (ISR) for 56 companies during 2004 to 2006 in Malaysia. By employing multiple regression, the results show that the factors size, profitability and board composition significantly influence a company to provision of Islamic social reporting. Industry type, however, is not an important determinant to provision of Islamic social reporting. The findings in this study contribute to the body of knowledge a new dimension of corporate reporting.

Kok and et al. (2009)\textsuperscript{50} aim to study the performance of Shariah-Compliant Indices (SCIs) during the period from 1\textsuperscript{st} January 2007 to 29\textsuperscript{th} June 2007 in London and NY Stock Markets. The study compares the performance of the Shariah indices with the performance of a number of SCIs as well as in comparison to other ethical funds. The study employs co-integration among the SCIs and the mainstream ones to establish whether there is any scope for diversification. The main findings are that SCIs offer an opportunity for portfolio diversification with mainstream indices and other ethical funds within the UK.

Sukmana and Ascarya (2010)\textsuperscript{51} analyze the role of Islamic stock market to the economic in the Indonesian economy during January 2004 to December 2009 by using Islamic monetary instrument of SWBI and SBIS, Jakarta Islamic Index (JII) Islamic bank financing (IFIN), and Industrial Production Index (IPI) as the proxy of


GDP. The study employs the Johansen and Juselius cointegration model, Vector Error Correction Models, Variance Decomposition and Impulse Response Function to analysis the relationship among the variables. The result finds that there is no affect on the Islamic stock market to the economic growth. This means that the capital market in this current stage cannot support the real sector. Meanwhile this study found that Islamic financing is having a positive influence towards output.

Karim and et al (2010) examine the effects of the current global crisis on the integration and co-movements of selected Islamic stock markets using Johansen and Juselius cointegration over the period from 15th February 2006 to 31st December 2008. The study period divide into the pre-crisis period from 15th February 2006 to 25th July 2007 and during crisis period from 26th July 2007 to 31st December 2008. The study finds that there is no evidence of cointegration among the Islamic stock markets. Thus, it provides opportunity for the potential benefits from international portfolio diversification even after the subprime crisis. Further, the study reveals that the 2007 subprime crisis does not seem to affect the long-run co-movements among the Islamic stock markets of Indonesia, Malaysia, the USA, Japan and the UK. The prohibition of riba, gharar and maysir is one of the plausible reasons of no cointegration in the Islamic stock markets.

Sukmana and Kassim (2010) analyses the relevance of Islamic banks’ financing and deposit in channeling the monetary policy effects to the real economy by using the co-integration test, impulse response functions, and variance


decomposition analysis, focusing on the period from January 1994 to May 2007. The results show that both Islamic banks’ financing and deposit play important roles in the monetary transmission process in the Malaysian economy. In particular, both Islamic deposit and financing are shown to be statistically significant in linking the monetary policy indicator to the real output.

Kassim and Majid (2010)\textsuperscript{54} test the impact of financial shocks on the Islamic banks and the conventional banks during July 1997 to September 2009 in Malaysia. The study period is divided into three sub – periods namely the 1997 Asian financial crisis period (July 1997-September 1999), the non-crisis period (October 1999-June 2007) and the 2007 financial crisis period (July 2007-September 2009). The study employs the impulse response functions and variance decomposition analysis based on the vector auto-regression (VAR) method. The results indicate that both the Islamic and conventional banking systems are vulnerable to financial shocks. This is contrary to the popular belief that the Islamic financial system is sheltered from the financial shocks due to its interest-free nature.

Majid and Kassim (2010)\textsuperscript{55} assess the long term and causal relationship among five major Islamic stock markets, namely Malaysia, Indonesia, Japan, the UK and the US by using weekly closing values from 1 January 1999 to 31 August 2006. The study employs the Auto- Regressive Distributed Lag (ARDL) and the Vector Error Correction Model (VECM) based on the Generalized Method of Moments (GMM). The study finds that investors who are interested to diversify their


portfolio can gain benefits by diversifying in the Islamic stock markets across economic grouping such as that in the developed and developing countries. However, limited benefits are available if investors only diversify their investments within the same economic groupings.

Sukmana and Ascarya (2010)\textsuperscript{56} aims to determine the importance of the Islamic stock markets in the monetary transmission process in the Indonesian economy. The study employs co-integration test, vector error correction models, impulse response functions, and variance decomposition analysis during the period from January 2004 to December 2009. The data employed is Jakarta Islamic Index, SWBI/ SBIS, Islamic financing, and Industrial Production Index as a measurement of output. The result finds that there is no affect on the Islamic stock market to the economic growth. This means that the capital market in this current stage cannot support the real sector. Meanwhile this study found that Islamic financing is having a positive influence towards output.

2.4. Abstract of Literature regarding Volatility Estimation of the Shariah Compliant Shares and Shariah indices (9 NOs).

In this section, the reviews of the literatures regarding volatility estimation of the Shariah index are discussed.

Yusof and Majid (2007)\textsuperscript{57} attempted to explore the extent to which the conditional volatilities of both conventional and Islamic stock markets in Malaysia are related to the conditional volatility of monetary policy variables. The narrow money


supply (M1), the broad money supply (M2), interest rates (TBR), exchange rate (MYR), and Industrial Production Index (IPI) are used as monetary variables in this study, whereas the Kuala Lumpur Composite Index (KLCI) and Rashid Hussain Berhad Islamic Index (RHBII) are used as measures for conventional and Islamic stock markets, respectively. In order to capture the international influence on both stock markets, the volatility in the U.S. monetary policy variable measured by the Federal Funds Rate (FFR) is incorporated into the study. Generalized Autoregressive Conditional Heteroskedasticity (GARCH)-M, GARCH (1,1) framework together with Vector Autoregressive (VAR) analysis are employed for the monthly data starting from January 1992 to December 2000 in this study. The study found that interest rate volatility affects the conventional stock market volatility but not the Islamic stock market volatility. This highlights the tenet of Islamic principles that the interest rate is not a significant variable in explaining stock market volatility. The results provided further support that stabilizing interest rate would have insignificant impact on the volatility of the Islamic stock markets.

Aziz and Kurniawan (2007) evaluate the Volatility of the Kuala Lumpur Shariah Index (KLSI) and the Jakarta Islamic Index (JII) by using daily closing value for the period January 2001 to December 2006 in Malaysia. The study employs an ARCH and GARCH model to estimate the volatility of both indices. The results of the study show that KLSI is more persistence than JII for the future period.

Rahim and et al. (2009) examined the transmission of information and correlation between the Kuala Lumpur Syariah Index (KLSY) and Jakarta Islamic Index (JKSY) by using closing prices from 4th July 2000 to 29th December 2006 in South East Asia. Using the bivariate VAR-GJR GARCH model to the daily return of these two indices, findings suggest that unidirectional transmission of information at both return and volatility levels propagate from the KLSY to the JKSY. This shows that the KLSY is the main information producer for the Islamic stock market in South East Asia. Therefore, market participants such as market analysts and investors should look at the Malaysian Islamic stock market in forecasting the market price movement and volatility of the Indonesian Islamic stock market.

Lestari and Jusmaliani (2009) measure the persistence of the volatility of the Jakarta Islamic Index (JII), the Jakarta Composite Index (JCI) and LQ45 index during the period of 2006 to 2008 in Indonesia. The study uses ARCH and GARCH model to estimate the volatility between Islamic Index and Common index in Indonesia. The study results show that volatility persistence is more on Islamic index than Common index in Indonesia.

Mohammed (2009) analyses the volatility of the FTSE All World (FTSEAW) and FTSE Shariah All World (FTSESAW) indices by using daily closing value during the period from 22 September 2003 to 22 January 2009. By GARCH


family model, the study finds that the volatility of the both indices is significant during the study period.

Ismal (2010)\textsuperscript{62} analyzes the volatility of returns and expected losses of Islamic bank financing in Indonesian Islamic banking industry during 2000 to 2008 by using variance-covariance method to calculate VaR of multi-asset portfolios. First of all, equity and debt-based financing produce sustainable returns of bank financing. Moreover, they are also very resilient during unfavorable economic conditions. Second, the performance of service-based financing is very sensitive to the economic conditions. Lastly, VaR computation on the volatility of returns and expected losses of bank financing finds that risk of investment and expected losses are well managed.

Sukmana and Kholid (2010)\textsuperscript{63} studied the impact of global financial crisis on Jakarta Islamic index and Jakarta Composite index during 2001 to 2009 by using the daily closing values. The global financial crisis period is taken from March 2008 to July 2009 in their study. They employed ARCH and GARCH model to estimate the variances of the both indices. The study found that variance of the Islamic index less than composite index in Malaysia during the global financial period.

Albaity (2011)\textsuperscript{64} estimate the impact of the Monetary Policy Instruments on Islamic Stock Market Index Return by using monthly variables of both US and Malaysian market such as Kuala Lumpur Syariah Index (KLSI), Dow Jones Islamic


Market Index (DJIMI), Kuala Lumpur Inter-Bank Offer Rate (KLIBOR) M1, M2 and M3, Inflation rate, and the Federal Fund Rate (FFR) from April 1999 to December 2007. Using GARCH, the study finds that the variance univariate models of the conventional indices that M1, M3, inflation rate, and real growth in GDP are significant in influencing KLCI volatility, while M2, M3, inflation rate and interest rate affected DJINA volatility. On the other hand, in the Islamic indices, KLSI and DJIMI variance is influenced by M2, M3, and inflation rate. In addition, in the multivariate model, DJIMI is influenced by the interest rate and the inflation rate in the mean and variance equations. In contrast, KLSI is influenced commonly in the mean and variance equations by M3, and the inflation rate.

John (2011) examines how the intensity of volatility linkages varies in Islamic and non-Islamic markets and countries, using daily data from 31st May 2007 to 8th June 2010. The sample of the study consists with Islamic and conventional stock, bond and money market indices consisting of 9 Islamic countries, 38 non-Islamic countries and a world index. This study finds various differences between the intensity of volatility linkages in Islamic and conventional markets. Firstly, volatility linkages that involve at least one Islamic asset are lower than volatility linkages between two conventional assets. Secondly, this effect is stronger in Islamic countries relative to non-Islamic ones. These results suggest that investors and portfolio managers need to consider the differences in volatility linkages when they hold Islamic assets and they devise their investment and risk management strategies accordingly. While volatility linkages involving Islamic assets are lower than volatility linkages across conventional assets, these linkages should not be neglected in portfolio management as they often remain strong and positive.

2.5. Research Gap of the Study

The Islamic finance is an emerging area of research and only limited empirical researches were carried out in this field. The review of existing literature clearly states that Islamic investment has been flourishing in all over the world since 1970. The studies such as Ahamad and Ibrahim (2002), Hussein (2004), Hussein (2005), and Girard and Hassan (2006) were examined the performance of the Shariah index and common index. Hakim and Rashidian (2004), Albaity and Ahamad (2008) and Biek and Wardhana (2009) were investigated the relationship between Islamic index and common index. Yusof and Majid (2007) is studied the volatility of the Islamic index and common index. Sadegi (2008) has investigated the impact of the Islamic principles on underlying stocks. The studies reviewed were carried out in developed countries like USA, UK, Malaysia and culf countries. Research on this area were seldom took place in developing country like India. However, Dharani and Natarajan (2011a, 2011b) have carried out a study on comparison between of the seasonal anomalies and performance of the Shariah index and common index in India.

And also most of the studies were carried out on the basis of Shariah indices and common indices. The present study tries to analysis the risk & return, volatility of the Shariah Compliant Stocks as well as Shariah index and common index in the Indian context. Further, the present study examined the relationship between Shariah index and common index in India. And also, the researcher has made an attempt to examine the relationship between return, volatility and trading volume of the Shariah Compliant shares in Indian capital market. Finally, the study assessed the awareness and perception of the ethical investors about Shariah investment in Indian capital market.
CHAPTER - 3

ISLAMIC FINANCE AND INVESTMENT- AN OVERVIEW

Introduction

3.1. Islamic Finance Principles
- 3.1.1. Prohibition of Riba (Usury)
- 3.1.2. Promoting Partnership and profit Loss Sharing
- 3.1.3. Prohibition of gharar (uncertainty) and maysir (gambling)
- 3.1.4. Prohibition to invest in haram (unlawful) business/products
- 3.1.5. Transaction must be backed by tangible and identifiable assets
- 3.1.6. Business Ethics

3.2. Origin of Islamic Finance

3.3. Modern Islamic finance

3.4. Growth of an Islamic Finance

3.5. Islamic financial instruments

3.6. Regulatory Environment of Islamic Finance
- 3.6.1. Middle East and North Africa
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3.7. Components of Islamic Finance Industry
- 3.7.1. Islamic banking
- 3.7.2. Takaful
- 3.7.3. Real Estate
- 3.7.4. Islamic Capital Market

3.8. Components of Islamic capital market
- 3.8.1. The Islamic Equity Market and Indices
- 3.8.2. Islamic Bond Market (Sukuk)
- 3.8.3. Islamic derivatives market
- 3.8.4. Shariah Mutual Funds
- 3.8.5. Islamic Exchange Traded funds
- 3.8.6. Islamic Commodity funds

3.9. Conclusion