

A STUDY OF GLOBAL SHARIAH RETURNS PERFORMANCE WITH SELECT GLOBAL EQUITY AND COMMODITY MARKET RETURNS.

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ABSTRACT: Globally investments in shariah are slowly increasing because all the conventional investment had failed to perform when global economy experienced the financial recession in the recent days. This analysis has been examined to measure the performance returns and compare with the global equity and commodity segments performance. Granger causality test has been applied and found that global shariah index got influenced with MSCI, PIMCO and global economic factors such as GDP and Inflation. Global asset allocation index has been used as the benchmark and measured the performance by using Modigliani risk-adjusted performance measure. This performance measure tool result unveils that shariah returns performance is superior when it is compared with global equity and commodities performance this analysis is useful to the investors who follows conventional investment systems, FIIs, Regulators, pension funds and Mutual Funds.

KEYWORDS: Shariah index, MSCI, PIMCO, GDP and Inflation

INTRODUCTION: The Global shariah index reflects the returns of developed, emerging and frontier markets, including the Gulf Cooperation council (GCC) countries and Arabian markets. During the recession period 2008-2009 the shariah indices remained stable whereas the other global conventional indices were plunged. In the recent decades there has been a significant growth in Islamic based investments because of lesser risk than the conventional stocks.

The performance of shariah returns was better than the conventional stock market returns and the investors are also attracted to invest in ethical investments in the past decade. The difference between the conventional stock indices and the Islamic stock indices is that a stock whose activities are free from riba (interest), gambling, uncertainty and prohibition of activities like sale of alcohol, tobacco, pork products and pornography. The volatility in shariah stocks is lesser than the conventional stocks. This paper results show the performance of shariah returns is similar to the global equity index returns. The Islamic funds objective is to provide above-average total returns for a long time period of investments.

After a breakthrough in past decade the Islamic investment funds has been increased and the demand not only driven the Muslims but also the other communities attracting to invest in the shariah compliant stocks. The commodities funds generate more profits by buying and selling the halal commodities. The returns in shariah investments are lesser because of lesser risk involved in shariah-compliant stocks. Major stock exchanges have their own designed shariah indices which represents the returns performance of shariah stock.

LITERATURE REVIEW:

P. Natarajan and M. Dharani: The authors empirically examined the risk and returns behavior of the selected shariah stocks and the benchmark indices from 2007-2011. They found the returns of the shariah stocks and benchmark indices were almost similar. Their study revealed that the equity based shariah investment is viable and ethical investment avenue. Their study is limited to the risk and returns behavior of selected stocks and benchmark indices from 2007-11 where as we analyzing the performance of shariah returns with select global equity and commodity market returns.

Krishna Reddy & Mingli Fu: The authors examined the differences in performance of shariah compliant stocks and the conventional stocks which are listed on the Australian Stock Exchange (ASX) from 2001-2013. He found that there is a significant difference between shariah compliant stocks and the conventional stocks mainly in terms of risk and reported a significant relationship between returns of Islamic stocks and conventional stocks. These authors study is limited to finding the difference between shariah stocks and conventional stocks which are listed on Australian stock exchange where as we analyzing the performance of shariah returns with select global equity and commodity returns.

Hela Miniaoui , Hameedah Sayani & Anissa Chaibi: The authors measured the performance of Islamic and conventional indices of Gulf Cooperation Council (GCC) Countries after 2008 recession to test whether Islamic indices were less risky when compared with conventional indices. The authors used the data of six GCC markets and the Dow Jones Islamic indices. They found that 2008 recession impacted on the mean returns of Bahrain and other indices were not. These authors study is limited to find performance of shariah stocks and conventional indices of gulf cooperation countries where as we analyzing the performance of shariah returns with select global equity and commodity returns.

Raja Noor Jihan R. Abdullah, Nurul Syuhada Baharuddin, Norazidah Shamsudin, Wan Mansor W. Mahmood, Zahariah Sahudin: The authors study examines the weekend effect of the Shariah index return by the Kaula Lumpur Shariah index(KLSI, FBM Emas Shariah and FBM Hijrah Emas Shariah) for the period 21 May 2007 until 19 September 2008. Their study shown there is a weekend day effect on Malaysian Shariah market and not on FBM Emas Shariah and FBM Hijrah Shariah. These authors study is limited to find the weekend day effect on sharish index returns by the Kaula Lumpur Shariah index(KLSI, FBM Emas Shariah and FBM Hijrah Emas Shariah) for the period 21 May 2007 until 19 September 2008 where as we analyzing the performance of shariah returns with select global equity and commodity returns.

Nafis Alam and Mohammad Shadique Rajjaque: The authors examined the performance for shariah-compliant equities after the financial crisis during 2007-2009 to find whether shariah equities performed better in the market as compared to the general market. They constructed three portfolios based on S&P Europe 350 to represent the overall market and found that the portfolio of shariah-compliant stocks performed better than the other two portfolios in all aspects

of analysis. Their study is limited to finding performance of shariah stocks after post-recession period with S&P Europe 350 as the overall market where as we analyzing the performance of shariah returns with select global equity and commodity returns.

Hooi Hooi Lean and Parham Parsva: The authors' paper investigates the relationship between return and market risk for the Islamic stocks in Malaysia financial times stock exchange (FTSE) market. These authors study is limited to finding the performance of Islamic stocks in Malaysia FTSE market where as we analyzing the performance of shariah returns with select global equity and commodity returns.

Dawood Ashraf: The author's study focuses on Islamic equity indices (IEIs) rather than equity funds. The author found the returns performance of 29 IEIs versus conventional stocks from four major international index providers from December 2000 to May 2012. The author study is limited to finding the returns performance of 29 IEIs with conventional indices from four major international index providers where as we analyzing the performance of shariah returns with select global equity and commodity returns.

Shaista Arshada , Syed Aun Raza Rizvib: The authors study attempts to address the question whether Islamic indices are affected through fundamental changes or short-term influences by sudden changes in volatility as compared to their conventional counterparts. The authors focused on the world financial indices and Islamic indices of the world, Asia Pacific and emerging markets for the time period 1997-2011 where as we analyzing the performance of shariah returns with select global equity and commodity returns.

Md. Saheb Ali Mondal, Nazma Akter, Mohammad Afsar Kamal: The authors' paper identifies the failures of conventional stock market and favorable position of Islamic stock market. Study covered 201 respondents for collecting the data and analyzes that by using five point likert scales. The study found that they desire to get stable and minimum risk market for Islamic stock with halal income whereas they want to make more profit where as we analyzing the performance of shariah returns with select global equity and commodity returns.

OBJECTIVES:

1. To find the correlation of shariah index with select economic factors.
2. To measure the impact of global economic factors indices on shariah returns performance.
3. To measure the market performance of global shariah and compare with select global equity and commodity performance.
4. To measure the impact of global equity index and bond index on global shariah performance.

SCOPE OF THE STUDY:

This study has been emphasized to measure the performance of shariah from the global recession period onwards that is 2008-2013 where global economy started getting stabilized. In this study global shariah index has been considered. The equity index of globe MSCI has been considered and in commodity segment CMPI, CPI, CARM, CFI has been considered for analysis.

NEED OF THE STUDY: when the financial recession occurred in the year 2008-09 most of the conventional investment systems had failed to give returns but shariah had succeeded in that period by giving superlative returns when it is compared with the other investments. We had reviewed articles and thesis and observed that there is no research has been found which has measured performance of global shariah in comparison with select equity and commodity indices. Hence there is a need to do research for the period of 2008-2013 by considering select global commodity indices and compare with the shariah returns performance.

EMPIRICAL STUDY:

MSCI- Global Equity index

CMPI- Commodity Metal Price Index

CARM-Commodity Agricultural Raw Material Index

CPI- Commodity Price Index

CFI-Commodity Fuel Index

PIMCO-Global Bond Index

RESEARCH METHODOLOGY:

Bivariate Correlation: Bivariate correlation analysis is the simplest form of quantitative statistical analysis. This analysis involves two variables for determining the empirical relationship between them. For finding whether the variables are related to one another. The bivariate correlation is commonly used to measure correlation among pairs of variables and correlations within between sets of variables.

$$r = \frac{\sum f uv - \frac{(\sum f u)(\sum f v)}{n}}{\sqrt{\sum f u^2 - \frac{(\sum f u)^2}{n}} \times \sqrt{\sum f v^2 - \frac{(\sum f v)^2}{n}}}$$

Modigliani risk-adjusted performance (M²): It is used to measure the risk-adjusted performance of some investment portfolio. The returns of the portfolio are measured by adjusted risk for the portfolio relative to that of some benchmark or market index. This formula is derived from Sharpe ratio. It easier to understand the Modigliani measure compared to Sharpe ratio. The reason behind this was that their measure is expressed in percentage points. It shows how well the investor is rewarded for taking a certain amount of risk, relative to the benchmark and the risk free rate.

$$M^2 \equiv S \times \sigma_B + \overline{R}_F$$

Granger causality test: The granger causality test is used for determining whether one time series is useful in forecasting another. It is a statistical hypothesis test according to Granger causality, if a signal X₁"Granger-causes" (or "G-causes") a signal X₂, then past values of X₁ should contain information that helps predict X₂ above and beyond the information

contained in past values of X_2 alone. Its mathematical formulation is based on linear regression modeling of stochastic processes.

$$X_1(t) = \sum_{j=1}^p A_{11,j} X_1(t-j) + \sum_{j=1}^p A_{12,j} X_2(t-j) + E_1(t)$$

$$X_2(t) = \sum_{j=1}^p A_{21,j} X_1(t-j) + \sum_{j=1}^p A_{22,j} X_2(t-j) + E_2(t)$$

LIMITATIONS:

1. Global asset allocation index has been considered as benchmark to measure the performance.
2. Global inflation has been considered by taking 181 countries monthly.
3. Global GDP yearly averages were not included in few countries GDP.
4. Across the world different countries follow different methods to calculate such as CPI, TPI, and WPI. In this analysis we had considered CPI for Inflation.

DATA ANALYSIS:

1. To find the correlation of shariah index with select economic factors.

Correlations		shariah	infaltion	msci	gdp
shariah	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	6			
infaltion	Pearson Correlation	0.264	1		
	Sig. (2-tailed)	0.614			
	N	6	6		
msci	Pearson Correlation	.982**	0.314	1	
	Sig. (2-tailed)	0	0.544		
	N	6	6	6	
gdp	Pearson Correlation	.857*	-0.169	0.766	1
	Sig. (2-tailed)	0.029	0.749	0.076	
	N	6	6	6	6

Slabs: 0 - 0.3 slightly correlated, 0.3- 0.7 moderately correlated& 0.7- 1 strongly correlated

Interpretation: Bivariate correlation has been applied to find the relationship between Shariah returns, Global equity and economic factors and the results shows that MSCI & GDP with Shariah are strongly correlated.

2. To measure the market performance of global shariah and compare with select global equity and commodity performance.

modigliani risk-adjusted performance			
rank		M ²	
1	shariah	0.594	
2	msci	0.517	
3	cfi	0.504	
4	carm	0.434	
5	cpi	0.405	
6	cmpi	0.31	

Interpretation: Modigliani risk-adjusted performance test has been applied on all the Global Commodity prices and Shariah returns and the results shown that shariah index performance is higher than all other commodity prices.

3. To measure the impact of global equity index and bond index on global shariah performance.

Null Hypothesis:	Obs	F-Statistic	Prob.
MSCI does not Granger Cause SHARIAH	12	0.05427	0.9476
PIMCO does not Granger Cause SHARIAH	12	0.04187	0.9592

Interpretation:Granger causality test has been applied on Shariah index with MSCI and PIMCO and the null hypothesis rejected and accepted the alternate hypothesis. Hence the result shows that MSCI and PIMCO affected the Shariah returns.

4. To measure the impact of global economic factors indices on shariah returns performance.

Null Hypothesis:	Obs	F-Statistic	Prob.
INFLATION does not Granger Cause SHARIAH	12	0.05421	0.9476
GDP does not Granger Cause SHARIAH	12	0.01702	0.9832

Interpretation: Granger causality test has been applied on Shariah index with global economic factors and the null hypothesis rejected and accepted the alternate hypothesis. Hence the result shows that economic factors affected the shariah returns.

FINDINGS:

1. The Global equity index& GDP with Shariah index, GDP &MSCI are found strongly correlated.
2. From the performance measure analysis we found shariah index performance is better than all the commodity prices and MSCI.
3. The MSCI index and PIMCO indices did not impact the shariah returns.
4. The shariah is not affected by the global economic factors.

CONCLUSION:we conclude the analysis of shariah performance with select global equity and commodity market returns. This study has been emphasized from the period 2008-2013. In this analysis global shariah index had been considered and measured the performance by considering global asset allocation index as the benchmark. Global bond index and equity index along with the global economic variables were considered to measure the impact and observed that shariah is getting influenced by the indices and economic variables. In spite of financial recession which occurred in the year 2008-2009 shariah performance is superior to the global equity and commodity indices during the study period. Further study is recommended in shariah investments which is giving consistent performance in the last decade and also there is a need to measure which economic variable were having stronger influence on shariah investments.

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