

NIFTY SHARIAH 50 PERFORMANCE DURING COVID-19 FIRST WAVE



MUHAMMED SAFWAN K K

Research Scholar, Department of Commerce,
Central University of Tamil Nadu, Thiruvavur, Tamil Nadu, INDIA
ORCID: 0000-0001-8332-2395

ABSTRACT

Shariah-based indexes have gained popularity nowadays, as almost every stock market have their own Shariah indexes like Dow Johns Islamic index and Kaulalmbur Stock exchange sharia index. As there are several sectoral and thematic indexes, nifty sharia is a thematic index in NSE, India. There are several sharia indexes like nifty sharia 25,50 and 500. Several studies are analyzing the performance of sharia indexes using different parameters, the current study focuses on the efficiency of the nifty sharia by comparing its performance with the Nifty 50 during the recent financial crisis, due to the COVID-19 pandemic. For this study, the researcher has taken the daily stock return of the Nifty 50 and nifty sharia. The risk-adjusted return ratios like Sharpe, Treynor, and Jensen's Alpha have been taken as a proxy for the performance of the indexes. The study found that the nifty sharia has outperformed the Nifty 50 during the COVID-19 pandemic period. Considering the volatility, the Nifty Shariah was less volatile and thereby less risky during the pandemic period.

Keywords	Risk-adjusted returns, shariah index, stock market index, nifty 50, Nifty Shariah
JEL Classification	G14, G15, G10
Cite this Article	Muhammed Safwan K K. (2021, April). Nifty Shariah 50 performance during COVID-19 first wave. In Perspectives on Business Management & Economics (Vol. IV, pp. 144-150). Retrieved from http://www.pbme.in/papers/134.pdf
Article History	Received: April 24, 2021; Accepted: April 25, 2021; Published: April 30, 2021



INTRODUCTION

Nifty Shariah is one of the several thematic indices on the National Stock Exchange (NSE) – a leading Indian stock exchange. The Nifty Shariah is based on Sharia Islamic laws. So the stocks which would be included in the Nifty Shariah should be compatible with Islamic laws like interest-free, no sales of alcohol or other toxic products, etc (Powell & Delong, 2014). Several world indices are based on sharia like Dow Jones Islamic index in the USA and Kaulalambur stock exchange Sharia Index in Malasia. Dow Jones was the first to introduce the Islamic index in the stock market (Habib & UI Islam, 2014). NSE has several indexes based on the sharia index Nifty Shariah 25, Nifty Shariah 50, and Nifty Shariah 500. Now the world economy and economic powers have identified the importance of Islamic indices and Islamic finance, so they are trying to introduce products and services based on the Islamic laws of sharia.

As the sharia indexes and the sharia-compliant stocks are being popular and accepted all over the world (Pranata & Nurzanah, 2015), the researcher gained interested in analyzing the performance of sharia indexes, especially in the Indian context because India is such a country a lot of sharia complaint stocks are available as listed in the market. There are several studies that analyzed the performance of Islamic indices using different methods. But the author is interested in knowing the performance of the sharia index in the recent global crisis due to the spread of the COVID-19 pandemic. The COVID-19 pandemic triggered an in-depth crisis to the economy in general and the stock markets. (Sravani & Sruthi, 2020) The stock market crashed heavily, and the stock prices declined largely. A few sectors like pharma, health care, and IT were performing well while all other sectors fell drastically.

This study compares the performance of Nifty 50 and Nifty Shariah during the COVID-19 pandemic using risk-adjusted returns. So that investors can understand the capacity of the stocks in the Nifty Shariah to understand the importance of sharia stocks during economic crisis times. The paper also evaluates the reason behind the difference between the risk-adjusted returns of Nifty Shariah and Nifty 50. The study's findings will help understand the market behavior during the bloodshed in the stock market.

REVIEW OF LITERATURE

Banani & Hidayatun, (2017) compared the performance of the Jakarta Islamic Index and Dow Jones Islamic Market Turkey along with its major market indices using the risk-adjusted methods like Sharpe, Treynor, and Jensen's and found that the Islamic index is not underperforming but outperforms the market index even though that insignificant. It seems that the Islamic index slightly outperforms.

Bassar, (2019) studied the Indonesian stock market in light of Shariah indexes and observed that the shariah trading activities have no positive impact on Shariah stocks the activities identified were trading volume, trading frequency.

Dharani, (2011) studied the Islamic index in the Indian stock market NSE, the nifty-sharia, and compared it with Nifty 50 for analyzing seasonal variations and to compare the performances of both indices. They found that there is a Ramadan effect in the sharia index. Moreover,



identified that there is no significant difference between the performance of Nifty 50 and Nifty Shariah during the study period.

Sheikh & Siddiqui, (2016) studied the indices like Nifty 500 and Nifty Shariah 500 using the parameters like return and risk. The study was conducted using the data of the financial crisis period. And found that the Nifty Shariah could generate a better return than the Nifty 50 in half of the period, but it is notable in the study that the Nifty Shariah was less volatile during the study period thereby making it suggestable to fewer risk-takers.

Habib & UI Islam, (2014) analyzed the performance of Islamic indexes with conventional indexes in the Malaysian stock market using beta and standard deviation. And found that Islamic index has out-performed the conventional index during the crises period

OBJECTIVES

This study aims to analyze the difference in the performance of two stock market indices in the NSE based on risk-adjusted return, the same as used by Banani & Hidayatun, (2017). The study aims to understand the reason behind the differences. The indices under the study are Nifty 50 and Nifty Shariah.

METHODOLOGY

The study period consists of 01/03/2020 to 30/09/2020. The data consist of the daily values of Nifty 50 and Nifty Shariah.

For calculating the daily return of the indexes. Daily closing prices are used from that the daily returns of the indexes are calculated as follows

$$R_d = (CP_d - CP_{d-1}) / CP_{d-1}$$

To measure the risk-adjusted return, three main risk-adjusted ratios are used which are Sharpe ratio, Treynor Ratio, and Jensen's alpha. The risk-adjusted return is considered as a proxy for the performance of the indices.

Sharpe Ratio provides the return of the indices adjusted to its own volatility i.e. Standard deviation The formula for the Sharpe ratio is

$$SI_i = [(AR_i - ARFR_i)] / \sigma_i$$

The Treynor ratio provides the return adjusted to the market volatility i.e. the Beta. The formula for the Treynor ratio is

$$TI_i = [(AR_i - ARFR_i)] / \beta_i$$

The Jensens alpha provides the excess return than market return adjusted towards the market volatility. The formula for the same is

$$JAI_i = AR_i - [AR_i + \beta_i (AR_{mt} - ARFR_i)]$$

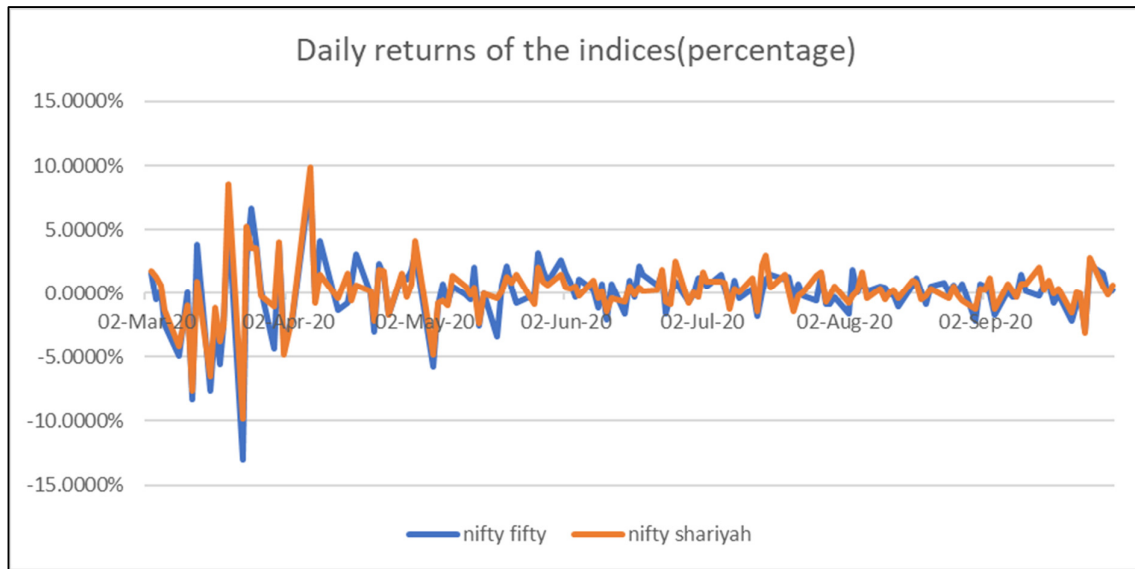


For analyzing the volatility and risk, standard deviation and the market beta are used the same method was used by Habib & UI Islam, (2014). The Karl persons correlation analysis is used to understand the association between the indices.

ANALYSIS AND INTERPRETATIONS

The current study is based on the daily returns of the Nifty 50 index and the Nifty Shariah index.

Figure 1: Daily returns of the indices



Source: Author compilation

Both indices are highly volatile during the period, especially at the beginning of the period. However, the Nifty 50 index seems to be more volatile than the Nifty Shariah index, especially in the downside volatility.

Table 1: Statistics & Overall performance

	Mean	Std. Deviation	Beta
Nifty 50	.0376%	2.45071%	1
Nifty Shariah	.1455%	2.18294%	0.99619

Source: Author compilation

During the study period, Nifty 50 return was worst hit by the mean return of 0.037% on a daily basis. But the Nifty Shariah has given a better return than the Nifty 50, with a mean return of 0.145%. Considering the volatility, the market index was riskier than Nifty Shariah. The Nifty 50 showed volatility of 2.45%, where the Nifty Shariah was less with 2.18%. So, during the first

wave of a COVID-19 pandemic, the Nifty Shariah has performed better than Nifty 50. while considering the beta, it is evident the Nifty Shariah was exposed to the market volatility

It will be interesting to know the association between Nifty Shariah and Nifty 50 during the first wave of the COVID-19 Pandemic. This shows how they moved together and the extent of their association.

Table 2: Correlation Analysis

	Correlation	Sig.
Nifty 50 & Nifty Shariah	.887	.000

Source: Author compilation

While analyzing Karl Pearson's correlational values, the Nifty 50 and Nifty Shariah were highly correlated with a positive value of .88. The Nifty can be said to be positively associated with Nifty Shariah during the pandemic period. The association is statistically significant.

To understand the performance and compare both indices, the researcher has taken the risk-adjusted return ratios as a proxy for performance. The Sharp ratio, Treynor ratio, and Alpha have been considered for the same are tabulated.

Table 3: Risk Ratios

	Sharp	Treynor	Alpha
Nifty 50	0.86%	0.02%	0.00%
Nifty Shariah	5.91%	0.13%	0.00%

Source: Author compilation

Considering the Sharpe ratio, the Nifty has performed very low compared to the Nifty Shariah, so the Nifty has given less return after adjusting to its own volatility (standard deviation). The Treynor ratio also shows the same pattern and outperformance of the Nifty Shariah. However, the Alpha shows more or less the same result for both indices.

RESEARCH FINDINGS

The first wave of the COVID-19 pandemic has severely affected the stock markets in India. The flagship index of NSE India has fallen drastically during the early stages of the pandemic wave. And the market was highly volatile making it riskier especially for day traders. In the first months of the pandemic, Nifty seems to be more volatile than Nifty Shariah it as confirmed by the studies like (Sheikh & Siddiqui, 2016). The notable point is nifty showed more on downside volatility than Nifty Shariah. throughout the pandemic period especially during the study period, the Nifty Shariah was less volatile than the Nifty 50 exhibiting the consistency of Nifty Shariah.

The average daily return for the Nifty Shariah was far higher than the Nifty 50 during the period within average daily return of 0.037% for Nifty 50 and 0.14% for the Nifty Shariah. The Nifty Shariah suffered volatility of 2.18% which is less than the standard deviation of Nifty 50 which is 2.45% so the Nifty Shariah was more stable than Nifty Shariah during this time. From Karl Pearson's correlation coefficient, it is seen that the Nifty Shariah was positively associated with Nifty 50 which is statistically significant.

From the risk-adjusted return ratios, it is evident that the Nifty Shariah has outperformed the Nifty 50 during the period. The Sharpe ratio tells how the Nifty Shariah could generate a good return than Nifty Shariah adjusted to standard deviation. The Treynor ratio confirms the domination of the Nifty Shariah. But alpha shows more or less the same performance of both indices. This study confirms the findings of Habib & UI Islam, (2014) The outperformance of the Nifty Shariah over Nifty 50 may have occurred due to the stocks from the financial services and media sectors being part of Nifty 50 but not part of the Nifty Shariah. The stock of finance and banks were highly affected by the pandemic. However, these stocks cannot be included in the Nifty Shariah because these are non-acceptable provisions by Sharia like interests and formidable entertainments. Most of the pharma stocks and the IT stocks are Sharia-compliant stocks. Hence, both these sectors were performing in a high mood during the pandemic period.

SUGGESTIONS AND CONCLUSIONS

The first wave of the pandemic has worst affected the stock markets in similar lines to the economies across the world. The Indian stock market was not exceptional. The Nifty 50 ill performed during the pandemic times, during which times some select sectoral and thematic indices have outperformed the Nifty 50. Nifty Shariah is one such outperformer that gave good return than Nifty 50 with less volatility. So, during the bloodsheds in the markets, thematic indices like Nifty Shariah are preferable and suggestable for investments. This would be because the worst affected sectors such as financial services and media have minor inclusion in the Nifty Shariah compared to those sectors that have ill performed during the pandemic period.



REFERENCES

1. Banani, A., & Hidayatun, N. A. (2017). Performance of Islamic Indices: Risk-Adjusted Returns of Sharia Compliant Stocks on Jakarta Islamic Index and Dow Jones Islamic Turkey. *Journal Economics and Business Atmajaya Indonesia*. <https://doi.org/10.25170/jebi.v1i1.18>
2. Bassar, T. S. (2019). Analysis of the Effect of Sharia Stock Trading Activity Factors and Macroeconomic Factors on the Performance of Sharia Stocks in the Capital Market in Indonesia. *International Journal of Tax Economics and Management*. <https://doi.org/10.35935/tax/27.2812>
3. Dharani, M. (2011). Seasonal Anomalies between S&P CNX Nifty Shariah Index and S&P CNX Nifty Index in India. *Journal of Social and Development Sciences*. <https://doi.org/10.22610/jsds.v1i3.633>
4. Habib, M., & Ul Islam, K. (2014). Performance of Shariah Compliant Index: A Comparative Study of India and Malaysia. *International Journal of Interdisciplinary and Multidisciplinary Studies*.
5. Investing.com, <https://in.investing.com/rates-bonds/india-10-year-bond-yield-historical-data>
6. NSE, <https://www.nseindia.com>
7. Powell, R. and DeLong, A. (2014). The Possible advantages of Islamic Financial Jurisprudence: An Empirical Study of the Dow Jones Islamic Market Index. *Fordham Journal of Corporate & Financial Law*. Vol. XIX, No.2, pp.393-423
8. Pranata, N., & Nurzanah, N. (2015). Conventional and Islamic indices in Indonesia: A Comparison on Performance, Volatility, and the Determinants. *Indonesian Capital Market Review*. <https://doi.org/10.21002/icmr.v7i2.5004>
9. Sheikh, S. P., & Siddiqui, S. (2016). Movement of Shariah Indices in Financial Crisis Period: Exploring Evidences from National Stock Exchange of India. *Journal of Islamic Economics Banking and Finance*. <https://doi.org/10.12816/0028328>
10. Sravani Kumari, B., & Sruthi, A. (2020, June). Impact of COVID-19 on the Indian Economy. In *Perspectives on Business Management & Economics* (Vol. 1, pp. 1-14). Retrieved from <http://www.pbme.in/papers/3.pdf>

