Market Behaviour in Times of Crisis: Comparing Islamic and Conventional Indices During COVID-19

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ABSTRACT

The main objective of this study is to analyze the impact of COVID-19 after and before on the conventional and Islamic Index and the volatility of S&P CNX500 Sharia with the Nifty 50. For this purpose, we cover the time duration before and after COVID-19 times. The researcher took the breaking date of 24/03/2020 because the first lockdown started on this date in India. Johansen Cointegration Test, Granger Causality Test in the short term, and GARCH model for volatility are the major tools used in this research. The correlation coefficient between the Conventional Index and Islamic Index and S&P 500 Sharia index is low. It's observed that NIFTY50 has the highest performance in post-Covid-19. Before Covid-19 there was no relationship between Conventional Index and Islamic Index. Lastly, the high volatility of the index is marked by the post-Covid 19 being close to one.

Keywords: *Covid-19, Islamic Index, GARCH, Granger Causality Test*

INTRODUCTION

The COVID-19 pandemic has had a profound impact on nearly every region of the world. Originating in Wuhan, China in late 2019, the virus rapidly spread across borders, severely disrupting lives and economies worldwide (World Health Organization, 2020). Governments responded with lockdowns, travel restrictions, and social distancing measures to contain transmission, which in turn led to widespread business closures and economic distress (Al-Awadhi et al., 2020).

Global stock markets experienced substantial volatility due to the pandemic. The initial financial tremors appeared in February 2020, when investors began to recognize the scale of the crisis. As panic escalated, investors moved away from riskier assets such as equities, redirecting their capital toward safer instruments like gold and government bonds. Major indices such as the S&P500 and FTSE100 plummeted, echoing patterns previously seen during the 2008 global financial crisis (Baker et al., 2020; Goodell, 2020).

This study aims to analyze the differential impact of COVID-19 on Islamic and conventional indices in India. Specifically, it investigates their behaviour and performance in the pre- and post-pandemic periods. While conventional indices follow structured financial norms and are based on selected sectoral performance, Islamic indices operate under Shariah-compliant principles, excluding industries considered unethical under Islamic law (Saiti & Abdullah, 2016).

Islamic finance has grown significantly over the past two decades, extending its presence beyond Muslim-majority countries to secular economies such as the United Kingdom, Singapore, the United States, and Germany (Ahmed, 2011; Ali, 2015). Guided by the Qur'an and Sunnah, Islamic commercial law offers a comprehensive framework for financial transactions, which is embedded into Islamic indices.

The COVID-19 crisis has had a considerable impact on India's financial markets. This research examines how both Islamic and conventional indices responded to pandemic-induced uncertainty, providing fact-based insights into their pre- and post-COVID-19 dynamics. The primary objective is to quantify and interpret the extent of financial disruption across these two index categories.\

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LITERATURE REVIEW

Several studies have examined the comparative dynamics of Islamic and conventional financial indices, particularly in contexts of crisis and volatility. In Pakistan, Rana and Akhter (2015) employed the GARCH-M model and Sharpe ratio to assess interest rate volatility across the KSE100 and KMI30 indices. Their findings indicated that interest rate volatility had no discernible impact on performance, and the Shariah-compliant KMI30 underperformed its conventional counterpart.

In contrast, Hazan Saka, Tukenmez Nevser Mine, and colleagues (2019) applied t-tests and GARCH-M models across markets in the US, Malaysia, Turkey, Japan, and India, concluding that Islamic indices were more resilient during bear markets and offered valuable portfolio diversification benefits. Similarly, Alli, Devi, and Sakti (2019) used Pearson's correlation coefficient to establish a positive association between the Human Development Index and Islamic financial inclusion scores, underscoring the socio-economic relevance of Islamic finance.

Abdelbari et al. (2021) utilized Treynor, Sharpe, and Omega ratios alongside the Promethee II method to rank indices across 38 countries. Their results showed that conventional indices generally outperformed Islamic ones, particularly in emerging markets. However, Arsian Shareef and colleagues (2022) applied Wavelet analysis to Malaysian data and found that COVID-19 induced short-term market volatility, reinforcing the pandemic's destabilizing effect on both Islamic and conventional markets.

Attar and Faleel (2020), using a philosophical paradigm and scientific method, explored Islamic finance preferences among SMEs. They found that products such as Ijarah and Murabaha were favored, and recommended increased product development and marketing efforts to enhance adoption. Meanwhile, Asutay, Avdukic, and Wang (2019) employed the CAPM-EGARCH model to show that Islamic indices outperformed conventional ones during and after the 2007–2008 global financial crisis.

Kausar and Jabeen (2020) attributed Islamic indices' superior performance to risk-sharing features and Shariah-compliant constraints, using Sharpe, Treynor, and Jensen's alpha ratios. During COVID-19, Abdullahi (2021) applied GMM, ARDL, and GARCH models to uncover herd behaviour , volatility transmission, and financial contagion within Islamic markets.

Ansari and Alam (2021) used Sharpe, Information, and Treynor ratios along with the Fama–French three-factor model, concluding that Islamic indices offered slightly better and ethically grounded lower-risk investment options. However, Dharani and Natarajan (2011) found no significant performance difference between Nifty Shariah and conventional indices, though the former marginally underperformed.

Irfan (2021), using Event Study Methodology and the TARCH model, demonstrated differential COVID-19 impacts between Indian and Indonesian markets. Islam and Habeeb (2020) applied CAPM, ADF, and Unit Root tests, reporting Islamic index underperformance in both raw and risk-adjusted returns.

Singh and Das (2020) used Treynor Ratio and Jensen's Measure to identify SHA 50 as less volatile and more profitable post-2008. Mzough et al. (2021) employed t-tests, GARCH, and Bivariate copulas, revealing COVID-19's role in altering volatility dynamics across crude oil, Islamic, and conventional indices.

Shaik and Salisu (2021) applied Benchmark and Predictive models, noting Islamic equities' hedging potential, which declined during the pandemic. Gedikli, Erdogan, and Cevik (2021) used DCC and Conditional Correlation models to suggest that investor fear triggered simultaneous collapses, favoring Islamic banking in Turkey.

Rahman, Gulzar, and Almonifi (2021) applied GARCH models and recommended against strict lockdowns in GCC nations due to their adverse effects on Islamic banking indices. Ali, Haseeb, and Anwar (2021) employed

EGARCH and Wavelet techniques, finding Islamic markets to be more volatile than conventional ones during COVID-19.

Abuhommous and Alqaralleh (2021) applied Wavelet-DCC-GARCH and showed that Islamic markets retained diversification advantages unlike conventional markets. Abbes (2012) used T-tests, EGARCH, CAPM, and Sharpe ratio to report asymmetric returns and volatility, but no significant crisis-related performance difference.

ElKhamlichi, Sharkar, and Arouri (2014) used Unit Root and Random Walk tests to conclude that the absence of cointegration points toward valuable diversification potential in Islamic indices—still underexplored in literature. Endri, Yasid, and Suryadi (2020) applied Sharpe ratio, Normality, and T-tests, reporting that conventional stocks fared better overall, while both categories exhibited low Sharpe ratios.

Alsayed, Al-Khazali, and Leduc (2020) employed Portmanteau, T-tests, and Variance Ratio tests, showing Islamic indices matched conventional ones in efficiency during recent bear markets. Finally, Jebrana, Chen, Zubair, and Taunia (2021) applied Johansen and Juselius cointegration, EGARCH, and Unit Root tests, highlighting how integration between Islamic and conventional indices in Pakistan may limit portfolio diversification benefits.

RESEARCH METHODOLOGY

This study adopts a quantitative, time series–based approach to examine the impact of the COVID-19 pandemic on Islamic and conventional financial indices in India. Specifically, it compares the volatility and performance of the S&P CNX500 Sharia index and the Nifty 50 across pre- and post-pandemic periods.

Data Sources

Secondary data were sourced from reputable financial platforms. Islamic index data were obtained from the S&P CNX500 Sharia index via the Bombay Stock Exchange (BSE) website, while conventional index data were gathered from the Nifty 50 through investing.com. To demarcate the pre- and post-pandemic phases, 24 March 2020—the date marking India's first nationwide lockdown was used as the structural breakpoint.

Analytical Tools and Techniques

The analysis employs several econometric and statistical tools to assess market behaviour and volatility dynamics:

- **Descriptive Statistics** to summarize key patterns across indices
- **Unit Root Tests** to examine stationarity of time series data
- **Johansen Cointegration Test** to detect long-run relationships between the indices
- **Granger Causality Test** for short-term directional relationships
- **GARCH Models** to estimate and compare volatility behaviour during the crisis period

Data visualization through charts, graphs, and tables supports interpretability and clarity, ensuring insights are presented in an accessible and reader-friendly manner.

This methodological framework provides a robust foundation to explore how Islamic and conventional indices responded to pandemic-induced financial shocks, thereby addressing a gap in existing research which has largely overlooked Islamic financial instruments within the Indian context.

Analysis and Findings

This study relies on secondary time series data to evaluate the effects of the COVID-19 pandemic on India's Conventional Index (Nifty 50) and Islamic Index (S&P CNX500 Sharia). The analysis spans two distinct phases:

- **Pre-COVID-19**: 26 March 2018 to 24 March 2020
- **Post-COVID-19**: 25 March 2020 to 24 March 2022 (following India's first lockdown)

The analysis is structured around two distinct periods: pre-COVID-19 (March 26, 2018 to March 24, 2020) and post-COVID-19 (March 25, 2020 to March 24, 2022). The objective is to compare the performance and statistical behaviour of Islamic and conventional indices during these phases of market disruption.

Table 1: *Descriptive Statistics Summary*

	Pre Covid		Post Covid	
	S&P CNX	**Nifty 50**	**S&P CNX**	**Nifty 50**
Mean	3990.70	11200.8	5810.1	14233.3
Minimum	3033.36	7610.25	3135.82	7801.05
Maximum	4370.06	122362.3	7711.53	18477.05
Standard Deviation	159.68	645.33	1289.36	2814.13
Correlation	0.99361	0.00000	0.83778	0.00000

Table 1 shows that the Nifty 50 index exhibited the strongest post-COVID performance, with significant increases in both mean returns and range. On the other hand, the S&P CNX500 Shariah index showed relatively lower performance during the pandemic, though its post-COVID recovery was notable. Contrary to expectations, Islamic indices showed higher mean returns overall, suggesting resilience under crisis, potentially due to ethical investment filters. Correlation coefficients indicate strong positive relationships between Islamic and conventional indices, particularly before COVID-19, highlighting co-movement and shared market influences.

Unit Root Test

Unit root testing was performed to examine the stationarity of both Islamic and Conventional stock indices during the pre- and post-COVID-19 periods. The Augmented Dickey-Fuller (ADF) methodology was employed to determine whether the time series exhibited constant statistical properties. Results are presented in Table 2, summarizing each dataset's behaviour.

Table 2: *Unit Root Test Results – Islamic and Conventional Indices (Pre & Post COVID-19)*

Index Type	Time Period	ADF Test Statistic	p-value	Critical Value (1%)	Critical Value (5%)	Critical Value (10%)	Conclusion
Islamic Index	Pre-COVID-19	–14.82914	0.0000	–3.443719	–2.867329	–2.569916	Stationary (Null Rejected)
Conventional Index	Pre-COVID-19	–15.08933	0.0000	–3.443719	–2.867329	–2.569916	Stationary (Null Rejected)
Conventional Index	Post-COVID-19	–22.08927	0.0000	–3.443307	–2.867147	–2.569818	Stationary (Null Rejected)
Islamic Index	Post-COVID-19	–20.88930	0.0000	–3.443307	–2.867147	–2.569818	Stationary (Null Rejected)

Unit root testing using the Augmented Dickey-Fuller (ADF) method was conducted on both Islamic and Conventional stock indices during the pre-COVID-19 and post-COVID-19 periods to evaluate their stationarity, an essential assumption for robust time series econometric analysis. The results, summarized in Table 2, reveal uniformly strong stationarity across all datasets, with each test statistic significantly exceeding the critical values at the 1%, 5%, and 10% levels and all p-values registering at 0.0000.

In the pre-COVID-19 period, both indices (Islamic and Conventional) show ADF values of –14.82914 and –15.08933, respectively. These values clearly reject the null hypothesis of a unit root, indicating that the time

series had stable statistical properties before the pandemic. This suggests that the financial markets were structurally well-ordered and predictable in normal conditions, which enhances the credibility of further historical modeling.

In the post-COVID-19 period, the indices exhibit even stronger stationarity with more negative ADF statistics (Islamic: –20.88930; Conventional: –22.08927). Despite the volatility and disruptions caused by COVID-19, the data's stationarity implies that markets quickly regained stability and resumed a consistent stochastic pattern—this is crucial for post-crisis resilience analysis. Notably, the Islamic Index demonstrates robust adaptation, further affirming its relevance in crisis-sensitive portfolio design.

Building upon the confirmed stationarity of all four indices, Islamic and Conventional, pre- and post-COVID-19, the next phase of our analysis employs advanced econometric models to uncover deeper insights into market behaviour . We now proceed with the Johansen Cointegration test to examine whether long-term equilibrium relationships exist between the Islamic and Conventional indices during both time periods. This will help determine the extent to which these markets move together structurally over time.

Following this, we conduct Granger Causality analysis to identify potential short-term predictive linkages specifically, whether fluctuations in one index can statistically forecast movements in the other. This test is crucial for understanding directional influence and interdependence, especially across crisis and recovery phases.

Lastly, we implement GARCH family models to investigate volatility clustering and conditional heteroskedasticity. These models will help quantify the varying intensity of market fluctuations, particularly in the post-COVID landscape where graphical trends have revealed pronounced spikes. The results will allow us to assess stability, risk behaviour , and the resilience of Islamic versus Conventional indices under real-world economic stress.

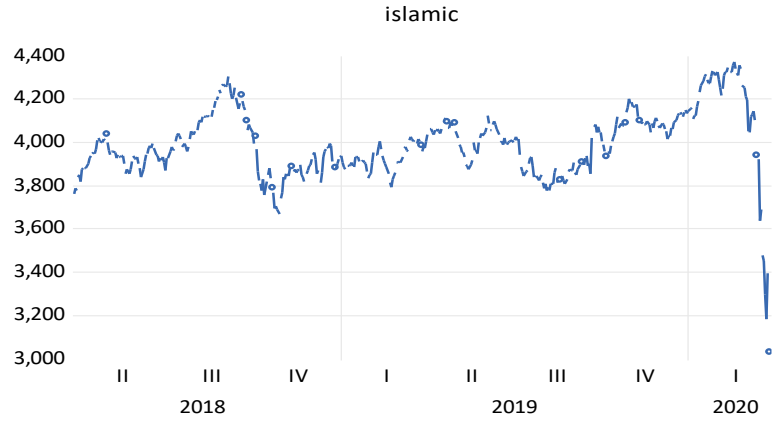

Figure 1: *Unit Root Test on Pre Covid-19 on Islamic Index*

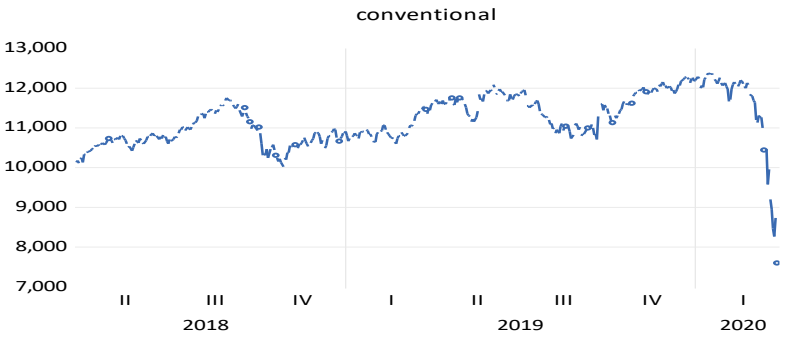

Figure 2: *Unit Root Test on Pre Covid-19 on Conventional Index*

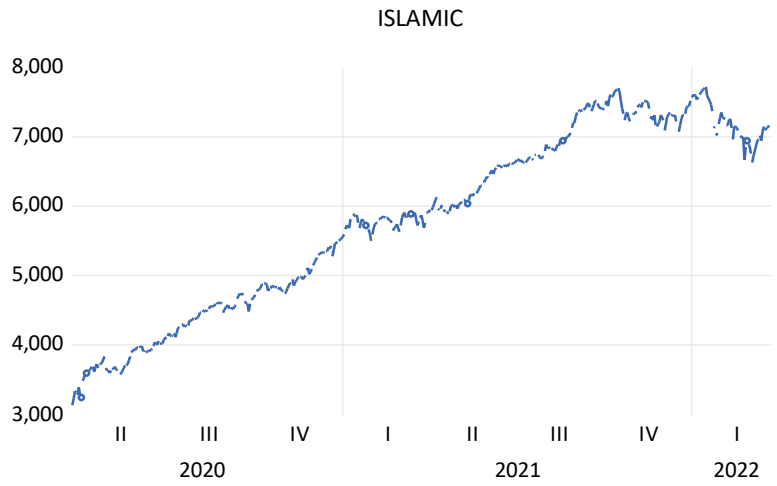

Figure 3: *Unit Root Test on Post Covid-19 on Islamic Index*

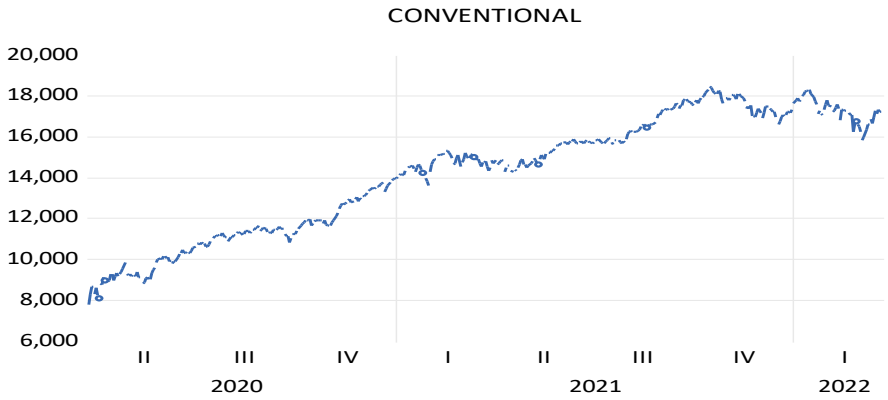

Figure 4: *Unit Root Test on Pre Covid-19 on Conventional Index*

The visual trend (Figure 1 to 4) analysis of both Islamic and Conventional indices across pre- and post-COVID-19 periods reveals coherent patterns that validate the ADF stationarity results and lay a strong foundation for advanced econometric testing. Prior to the pandemic, both indices exhibited cyclical fluctuations without any sustained directional trends, suggesting structural stability. The Islamic Index remained within the 3,000–4,400 range, while the Conventional Index moved between 7,000–13,000, reinforcing stationarity in normal economic conditions. Post-COVID visuals show sharp recoveries: the Islamic Index rose steadily to 8,000, and the Conventional Index surged toward 18,000. These movements confirm that, despite external shocks, both markets resumed a stationary trajectory, reflecting resilience and investor confidence. Together, these trend behaviour s support the progression to Johansen Cointegration, Granger Causality, and GARCH modeling, enabling deeper analysis of long-term alignment, predictive influence, and volatility dynamics between the indices.

JOHANSEN COINTEGRATION TEST

To assess the long-run interdependence between the Conventional and Islamic indices in the pre-COVID-19 period, the Johansen System Cointegration Test was applied using both Trace and Max-Eigen value statistics. These methods evaluate whether the two financial time series are cointegrated i.e., whether they move together over time despite short-term fluctuations. Establishing such a relationship would suggest a structural linkage or integrated market behaviour prior to the pandemic, thereby enabling more unified forecasting models and shared risk strategies. The test operates under the following hypotheses:

- **H_0**: There is no cointegration between the series (no long-term equilibrium relationship).
- **H_1**: The series are cointegrated (a long-term relationship exists).

Establishing cointegration would suggest a structural linkage or integrated market behaviour prior to the pandemic, enabling unified forecasting models and shared risk strategies. The results of this test are detailed in Table 3 and interpreted below.

Table 3: *Johansen System Cointegration Test – Pre-COVID-19 Conventional and Islamic Index*

Test	Hypothesis	Statistic	Critical Value (5%)	p-value	Conclusion
Max-Eigen Statistic	None	11.33934	14.26460	0.1294	Accept H_0: No cointegration
Max-Eigen Statistic	At most 1	2.757934	3.841465	0.0967	Accept H_0: No cointegration
Trace Statistic	None	14.09728	15.49471	0.0889	Accept H_0: No cointegration
Trace Statistic	At most 1	2.757934	3.841465	0.0967	Accept H_0: No cointegration

The Johansen Cointegration Test results for the pre-COVID-19 period indicate that both the Trace and Max-Eigen statistics fall short of their respective 5% critical values, with p-values > 0.05 in all cases. As a result, the null hypothesis (H_0), that no cointegration exist, is accepted, confirming the absence of a long-term equilibrium relationship between the Islamic and Conventional indices.

This lack of cointegration suggests that prior to the pandemic, the two financial systems operated independently in structural terms, with no consistent linkage governing their joint movement. Although both indices were stationary (as shown by ADF tests), they did not exhibit inter-market integration. This reinforces the view that investment strategies and market responses within conventional and Islamic financial domains remained distinct and segmented, even under stable macroeconomic conditions.

Granger Causality Test

To explore short-term predictive linkages between the Conventional Index and the Islamic Index, Granger Causality tests were applied for both pre- and post-COVID-19 periods, under the following hypotheses:

- **H_0**: One index does not Granger-cause the other (no predictive relationship)
- **H_1**: One index Granger-causes the other (predictive influence exists)

Table 4: *Granger Causality Test – Conventional and Islamic Indices (Pre- and Post-COVID-19)*

Time Period	Direction of Test	F-Statistic	p-value	Conclusion
Post-COVID-19	Conventional → Islamic	1.46285	0.2326	No Granger causality (Null accepted)
Post-COVID-19	Islamic → Conventional	3.24789	0.0397	Granger causality present (Null rejected)
Pre-COVID-19	Conventional → Islamic	1.87959	0.1538	No Granger causality (Null accepted)
Pre-COVID-19	Islamic → Conventional	0.84324	0.4309	No Granger causality (Null accepted)

Pre-COVID-19 Findings, in both test directions, the p-values exceed 0.05, leading to acceptance of the null hypotheses. This confirms that prior to the pandemic, neither index exerted short-term predictive influence on the other. The absence of causality mirrors the lack of cointegration, reinforcing that the indices operated independently, both structurally and temporally.

Post-COVID-19 Findings, the causality landscape changes post-pandemic. While the Conventional Index does not Granger-cause the Islamic Index ($p = 0.2326$), the reverse is statistically significant ($p = 0.0397$). This implies that Islamic Index movements can predict shifts in the Conventional Index, suggesting an emerging interdependence or leadership role of Shariah-compliant investments in shaping conventional market behaviour after the pandemic shock.

These findings highlight that, Islamic finance has gained short-term predictive relevance post-pandemic, possibly due to resilience strategies, ethical filtering, or investor sentiment during recovery. Conventional markets may be more reactive to Islamic market signals in volatile environments. The asymmetric causality provides a compelling reason to model both indices separately but account for lagged Islamic movements when forecasting conventional performance.

Volatility Analysis Using ARCH and GARCH (1,1) Models

To evaluate volatility behaviour in the Islamic and Conventional indices across pre- and post-COVID-19 periods, this study employs the ARCH and GARCH (1,1) models. These are well-established tools for identifying and modeling volatility clustering, where large changes in market returns tend to persist, and small ones remain subdued, indicating time-dependent conditional variance.

Before applying the GARCH (1,1) model, the **ARCH test** is performed under the following hypotheses:

- **H_0**: No ARCH effect exists; there is no volatility clustering.
- **H_1**: ARCH effect exists; volatility clustering is present.

All results across both indices and timeframes yield **p-values < 0.01**, justifying rejection of the null hypothesis and confirming the existence of volatility clustering, thereby validating the use of the GARCH (1,1) model.

GARCH (1,1) Model Equation

The conditional variance is modeled as: $\boldsymbol{\sigma}2= \boldsymbol{\alpha} + (\boldsymbol{\mu t}-\mathbf{1})2 + \boldsymbol{\beta}2(\boldsymbol{\mu t}\text{-}2)2$

Volatility Persistence is assessed; values approaching 1 signal lasting effects from shocks

Table 5: *GARCH (1,1) Model Parameters and Formulations*

Index Type	Model Equation	beta_1	beta_2	beta_1 + beta_2	ARCH p-value	Decision
Pre-COVID-19 Period Conventional Index	307.267+(0.213Et-1)2+0.797 $\boldsymbol{\sigma}$ t-1	0.213	0.797	1.000	0.0000	Reject H_0 → Significant clustering
Pre-COVID-19 Period Islamic Index	81.000+(0.202Et-1)2+0.745$\boldsymbol{\sigma}$ t-1	0.202	0.745	0.947	0.0000	Reject H_0 → Significant clustering
Post-COVID-19 Period Conventional Index	668.185+(0.69Et-1)2+0.962 $\boldsymbol{\sigma}$ t-1	0.069	0.902	0.971	0.0004	Reject H_0 → Significant clustering
Post-COVID-19 Period Islamic Index	68.992+(0.084Et-1)2+0.895 $\boldsymbol{\sigma}$ t-1	0.084	0.895	0.979	0.0001	Reject H_0 → Significant clustering

The findings from the GARCH (1,1) models indicate robust volatility clustering across both indices and periods. The sum of ARCH and GARCH coefficients nears or equals unity, confirming high volatility persistence.

During the pre-COVID-19 period, the Conventional Index exhibits perfect persistence, suggesting that past shocks fully carry over to current volatility. The Islamic Index, though slightly lower in persistence (0.947), still reflects a high clustering effect.

In the post-COVID-19 period, both indices continue to display elevated persistence, albeit slightly reduced, indicating that pandemic-related uncertainty kept markets reactive to new information.

The Islamic Index consistently demonstrates lower persistence than its conventional counterpart, suggesting faster mean reversion and greater resilience in absorbing shocks, particularly after the pandemic. This behaviour reinforces the role of the Islamic Index in volatility-sensitive investment strategies, and highlights how market responses to crises like COVID-19 evolve across structural domains.

FINAL DISCUSSION AND IMPLICATIONS

The comprehensive econometric analysis undertaken in this study provides a multidimensional understanding of how Islamic and Conventional financial indices behaved across pre- and post-COVID-19 periods. Each test offers a distinct lens into market behaviour , resilience, and structural alignment.

The ADF unit root tests confirmed stationarity in both indices across timeframes, indicating that despite external shocks, statistical properties remained consistent and predictable. This stability laid the foundation for further modeling, ensuring that the underlying data met key assumptions for time series econometrics.

The Johansen Cointegration tests revealed no long-term equilibrium relationships between the indices in either period. This suggests a fundamental structural separation between Islamic and Conventional financial systems, with independent movement dynamics and differentiated investor bases. The lack of cointegration affirms that portfolio strategies and policy interventions must treat these indices as distinct entities rather than interlinked markets.

Short-term dynamics were unpacked through the Granger Causality tests, which showed no predictive relationship in the pre-pandemic phase but a significant directional influence from the Islamic Index to the Conventional Index post-COVID. This marks a notable shift: Islamic finance appears to have gained informational or strategic relevance in the aftermath of crisis, possibly due to its ethical orientation, sectoral resilience, or perceived defensiveness by investors navigating uncertainty.

The GARCH (1,1) modeling revealed consistently high volatility persistence in both indices, with slightly greater mean reversion in the Islamic Index. These findings imply that market shocks—particularly those induced by the pandemic—had prolonged effects on volatility, making conditional variance estimation essential for forecasting. The Islamic Index's lower persistence and post-pandemic stability suggest that it may be better suited for inclusion in volatility-averse or risk-sensitive portfolios.

PRACTICAL IMPLICATIONS

- For Investors: The findings highlight the potential of Islamic financial instruments for hedging and diversification, especially during crisis recovery phases.
- For Policymakers: The lack of structural integration between indices signals the need for tailored regulatory frameworks for Islamic finance, rather than unified financial market reform.
- For Academics: The directional causality and differentiated volatility behaviour s underscore rich grounds for further comparative studies in emerging market finance, especially around ethical or value-based investing.

CONCLUSION

This study systematically examined the impact of the COVID-19 pandemic on India's financial markets, with specific focus on the Conventional and Islamic stock indices. Using 24 March 2020 as the structural break, the research dissected both pre- and post-pandemic behaviours through descriptive statistics, correlation analysis, and a suite of econometric techniques. Findings reveal that while both indices remained statistically stationary (via ADF tests), they lacked long-term integration, as confirmed by the Johansen Cointegration results. This indicates that the Islamic and Conventional markets evolved independently, structurally segmented across both periods. However, the Granger Causality test post-COVID-19 uncovered a directional short-term link: changes in the Islamic Index statistically predicted movements in the Conventional Index, but not vice versa. This reversal suggests that Islamic finance gained informational significance and possibly investor attention during the pandemic recovery, a shift not previously observed. The ARCH and GARCH (1,1) modeling affirmed significant volatility clustering and high conditional variance persistence in both indices. While pre-COVID models exhibited near-perfect persistence, post-COVID estimates remained elevated, pointing to sustained market sensitivity in the aftermath of pandemic-related shocks. The Islamic Index displayed slightly faster mean

reversion, reinforcing its perceived role as a more stable investment option during uncertain times. The study concludes that the pandemic intensified short-term linkages and market volatility while reinforcing the structural independence of Islamic and Conventional indices in India. These insights have practical value for investors, regulators, and academics seeking crisis-resilient financial strategies in emerging markets.

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