

Chapter 10

Stock Market Volatility: A Pre- to Post-COVID-19 Analysis of Emerging Markets

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ABSTRACT

Researchers examine stock volatility in emerging (E7) nations prior to and during COVID-19 announcements using multiple volatility estimations. The correlation coefficient matrix indicates that there is a strong positive correlation between the specified volatility estimators in the pre-COVID-19 and post-COVID-19 periods. Rogers-Satchell standard deviation has the first rank, and Garman-Klass has the last position in the pre-post-COVID-19 analysis volatility estimators. However, the authors discover a considerable influence of pre-post COVID-19 on the world's E7 countries. The findings' primary implication is that post-COVID-19 volatility is greater than pre-COVID-19 volatility. This means that investors' financial portfolios should be rebalanced to favor industries that are less impacted by COVID-19. Additionally, it serves as an early warning signal for investors and the government to take preventative measures in the event that it occurs again in the future.

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INTRODUCTION

The World Health Organization (WHO) formally declared the coronavirus a Nobel illness and labeled its outbreak a global pandemic on March 11, 2020, the coronavirus's announcement date. Global c Corona-virus cases have surpassed, and the virus's spread continues. The entire world is afflicted by this disease; coronavirus cases have been reported in over 170 nations (WHO, 2020). The COVID-19 breakout has had a discernible effect on the global economy. Different countries used a variety of tactics to safeguard their people, resources, and economies. Certain countries implemented rigorous short-term quarantine regulations, adhered to them, and isolated all economy resources throughout the country. It noticed widespread long-term unemployment, industrial breakdown, corporate failure, aviation, and tourism stagnation around the world. The population undoubtedly had problems as a result of the coronavirus (Zhang, Hu, & Ji, 2020). The new regime's focus on intraday volatility contributes significantly to the significantly, and historical volatility is slowing in the covid19 event. Intraday volatility within pre- and post-trade has been shown to have trouble determining the order of stocks (El-Khatib & Samet, 2020; Mitchell & Catalano, 2021). Significantly impacted the behavior and performance of several algorithmic (algo) techniques, implying a rise in the volatility of the effect used to price-limit stocks. Prior to the crisis, data was less useful in anticipating algos' future decision-making performance. It is preferable to have a diversified portfolio and to weigh the distribution of obtained data in light of the new market conditions (Cree, 2020).

Yes, historical events have an effect on stock market volatility and liquidity, which the financial analyst must consider when making recommendations and suggestions to the client. Covid19 established that market friction occurs as a result of information flow in the market, causing prices to diverge greatly from their equilibrium value. The findings indicate that covid19 contributes to the industry's instability, particularly in the Meals, Games, and Mines sectors (Baek, Mohanty, & Glambosky, 2020). Second, Covid19's liquidity has deteriorated significantly in the market for ElcEq, Carry, and Other (Christensen, 2020). Due to Covid19, the financial industry has been disrupted, with India's stock market experiencing extreme volatility (Bora & Basistha, 2021). The study examined the period between September 2019 and July 2020. Comparative comparison of pre- and post-Covid19 results. The GARCH model was used to determine the Indian stock market's volatility. It established that pre-Covid19 returns were higher than post-Covid19 returns and indicated that BSE and NSE returns reached a nadir during the first lockdown period from March 24 to March 06, 2020. (Bora & Basistha, 2020).

Volatility is generally caused by new information entering the market, whether it is public, private, or semi-public private. It is derived by calculating the standard deviation of stock price changes from close to close of trading over a specified number of days, which is frequently 5, 10, 20, or 90 days. Indeed, historical price volatility is calculated as a standard deviation based on the daily returns on the stock price (Oyelami & Sambo, 2017). Volatility is a statistical term that refers to the measure of risk. It is used to determine the market risk associated with a single script or a portfolio of scripts. It could possibly have represented a different definition that finance refers to as a variable's standard deviation. Volatility is a critical factor in the stock market, as evidenced by historical statistics. This data was combined with a change in stock price, which reflected the difference between yesterday's and today's prices. The movement and pace of a stock price or future contract are quantified using the change rate. This change will be seen on a daily, weekly, quarterly, and annual basis. The more the volatility, the more stock price experience; it also determines the direction of a trend (John Summa, 2016).

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