Journal of Commerce and Accounting Research
14 (1) 2025, 97-103
http://publishingindia.com/jcar/
doi: https://doi.org/10.21863/jcar/2025.14.1.008

Submitted: 09 July, 2023
Revision: 13 February, 2024
Accepted: 21 March, 2024

DAY-OF-THE-WEEK EFFECT DURING COVID-19 PANDEMIC: AN EMPIRICAL STUDY OF INDIAN STOCK MARKET

Monika Yadav*, Pushpender Kadian**

Abstract *In the context of an efficient market, it is conventionally anticipated that uniform returns would manifest across weekdays. This study empirically scrutinised the manifestation of the day-of-the-week (DOW) effect within the Indian stock market amid the COVID-19 pandemic. Utilising daily closing price data spanning the COVID-19 period from March 11, 2020, to September 30, 2021, for three key indices (BSE Sensex, Nifty-50, and SX 40) listed on the Bombay Stock Exchange (BSE), National Stock Exchange (NSE), and Metropolitan Stock Exchange of India (MSEI), respectively, dummy variable regression analysis was employed to probe the DOW effect. The findings indicate that Monday returns exhibit negativity, a significant trend observed solely for the BSE Sensex index. Conversely, significant positive returns are evident on Tuesday, Wednesday (excluding SX40 index), and Friday, throughout the remaining weekdays. Moreover, Tuesday records the highest returns, closely followed by Friday. Thus, collectively, it can be inferred that both the Tuesday effect and the Friday effect are discernible within the Indian stock market amidst the COVID-19 pandemic period.*

Keywords: *Efficient Market Hypothesis (EMH), Day-of-the-Week-Effect, COVID-19 Pandemic, Dummy Variable Regression*

INTRODUCTION

In the realm of efficient markets, it is anticipated that consistent returns would be observed across weekdays. Eugene Fama, a proponent of the Efficient Market Hypothesis (EMH), articulated in 1965 that "the expected return on a financial asset should be uniformly distributed across different units of time." However, despite this theoretical expectation, researchers have uncovered various calendar and seasonal anomalies within the stock market, including the January effect, turn-of-the-month effect, turn-of-the-year effect, and weekend effect. Among these anomalies, one of the most extensively studied phenomena is the "day-of-the-week effect" which suggests that returns on certain weekdays deviate abnormally from others. Cross (1973) was among the first to identify discrepancies in returns across weekdays, subsequently leading to the day-of-the-week (DOW) anomaly becoming a prominent and extensively documented feature in financial literature. Numerous studies have scrutinised and investigated the DOW effect in the Indian stock market, including works by Poskakwala (1996), Choudhury (2000), Goswami and Anshuman (2000), Ammanulla and Thiripalraju (2001), Bhattacharya et al. (2003), Kaur (2004), Patel and Patel (2011), and Archana et al. (2014), among others.

Numerous empirical inquiries have been undertaken to scrutinise significant systemic occurrences within the stock market. For instance, studies have delved into the repercussions of pandemic outbreaks, such as the investigation conducted by Chen et al. (2018) concerning the SARS outbreak. Similarly, precedent and political events like pre-election and post-election have been subject to examination, as evidenced by the work of Rizvi et al. (2022), Bash and Alsaifi (2019), while natural disasters have been explored, as exemplified by the research conducted by Wang and Kutan (2013), Mishra et al. (2021). The emergence and global spread of the COVID-19 pandemic, originating in China, have not only profoundly impacted human life but have also disrupted stock markets across the global economy. Numerous investigations, including those by Al-Awadhi et al. (2020), Ahmar and Val (2020), Karim and Shetu (2023) among others, have underscored the adverse effects of COVID-19 on stock markets. Against this backdrop, the present study endeavours to explore the DOW effect within the Indian stock market amidst the COVID-19 pandemic.

* Assistant Professor, Department of Commerce, Ahir (P.G.) College Rewari, Haryana, India.
Email: monikayadav760@gmail.com
** Assistant Professor, Department of Commerce, Central University of Rajasthan, Ajmer, Rajasthan, India.
Email: pushp.kadian@gmail.com

The remainder of this paper is structured as follows: Section 2 discusses the literature review, while Section 3 describes the objective and research methodology. Section 4 presents the analysis and interpretation of the results. Section 5 is the conclusion.

REVIEW OF LITERATURE

Dharani and Natarajan (2011) conducted a study on seasonal anomalies within the National Stock Exchange (NSE) spanning from 2007 to 2010, employing the t-test methodology. Their analysis did not reveal any significant differences in returns across various days. Sharma (2011) investigated the presence of the DOW effect within the Indian stock market between 2008 and 2009, utilising the Sensex and Nifty indices. This examination employed ANOVA and regression models, which indicated the absence of a DOW effect. Mehla and Goyal (2011) undertook a comparative analysis of the DOW effect anomaly during the pre-rolling and post-rolling settlement periods concerning the stock returns of the Nifty index. Employing GARCH (1,1) methodology with dummy variables, their findings revealed the presence of an anomaly specifically within the pre-rolling period.

Handa (2012) conducted an inquiry into the trading patterns of Foreign Institutional Investors (FIIs) throughout the weekdays within the period spanning from 2008 to 2010. Descriptive statistics alongside the ANOVA technique were employed for analysis, revealing the highest levels of both purchase and sale activities occurring on Thursday, while the lowest levels were observed on Monday. Overall, the study demonstrated the presence of a weekday effect. Kutchu (2012) scrutinised the weekday effect both before and after the implementation of the rolling settlement system, utilising the GARCH model across three indices of the NSE. The findings affirmed the existence of a Wednesday effect prior to the introduction of the rolling settlement system, which subsequently dissipated post-implementation, while a Friday effect became evident following the adoption of the rolling settlement system.

Sen (2013) conducted an analysis on the DOW effect within the Indian stock market, focussing on Nifty returns spanning from 1997 to 2012. Utilising the GARCH-M model, the study identified the presence of the DOW effect during the pre-T+2 rolling settlement period. However, following the introduction of T+2 settlement, this effect dissipated. Srinivasan and Kalaivani (2013) employed various models including GARCH (1,1), TGARCH (1,1), and EGARCH (1,1), over the period from 1997 to 2012 to investigate the week-day effect in both the NSE and BSE. Their findings indicated the presence of a week-day effect in both markets. Kumar and Mishra (2013) empirically examined the DOW effect within the Indian economy using Ordinary Least Squares (OLS) regression over the period from 2007 to 2012. Their results, however, revealed the absence of a weekday effect.

Sudarvel et al. (2015) conducted a study to ascertain the presence of the DOW effect within the Indian Information Technology (IT) sector spanning from 2005 to 2015. Utilising OLS regression analysis, their findings corroborated the existence of this effect. Aziz and Ansari (2015) examined the DOW effect from 1990 to 2013 within the Indian stock market. Employing the GARCH model, their investigation revealed a positive Wednesday effect within the Nifty index and a positive Monday effect within the Sensex.

Gnanasekar and Rajesh (2016) investigated the DOW effect, focussing on the CNX Nifty index from 2005 to 2015. Employing the GARCH (1,1) model alongside regression analysis, their findings highlighted a noteworthy trend of higher returns observed on Mondays compared to other days, thereby indicating a robust Monday effect. Mitra (2016) revealed an absence of any discernible DOW effect during the specified period, utilising the GARCH model for analysis.

Kothari et al. (2017) conducted a comprehensive analysis of the DOW effect within the NSE and BSE indices, focussing on returns and volatility patterns spanning from 2005 to 2014. The study employed a multifaceted approach, integrating ANOVA, t-tests, and the GARCH (1,1) model for examination. The findings revealed significant returns within the Nifty Junior index, while no notable distinctions were identified between the NSE and BSE through ANOVA analysis. Moreover, the results from the GARCH model underscored the presence of a week-day effect, particularly evident on Monday, Tuesday, Wednesday, and Friday. Bhuva and Thankachan (2017) delved into the examination of the DOW effect within the automobile industry on the NSE from 2009 to 2013. Employing regression analysis and t-tests, their investigation unveiled the highest returns occurring on Thursday, contrasting with the lowest returns observed on Monday within the auto sector.

Arora (2018) investigated the DOW effect concerning the volatility and returns of the Nifty-50 index, analysing data in 5-minute intervals across periods "before and after the introduction of the pre-opening session." Employing the GARCH (1, 1) model for analysis, the findings revealed significant returns on Mondays and Fridays before the introduction of the pre-opening session. However, following the implementation of the pre-opening session, no discernible DOW effect was observed.

Patjoshi and Nandini (2020) substantiated the presence of a noteworthy disparity in returns across weekdays within the BSE, employing the GARCH (1,1) model over the period

from 2000 to 2018. Anwar et al. (2021) investigated the DOW effect across thirty developing countries during the period from 2011 to 2019, employing a panel GARCH model. Their analysis unveiled Tuesday as exhibiting the highest returns during the week, thus confirming the existence of a DOW effect. Dutta and Das (2021) unveiled significant Monday and Friday effects within the Nifty Fifty index in India over the period from 2001 to 2015. Adavelli and Yelamanchili (2022) examined the DOW effect in the Indian market using the daily turnover of buying and selling of stocks by individual investors and found significant negative average returns on Monday during the study period of 16 years. Thomas (2022) investigated calendar anomalies such as the month of the year effect, turn of the month effect, and DOW effect using NSE and BSE data over the period from 1993 to 2013. The ANOVA technique was applied and results indicated the absence of DOW and month of year effect and the insignificant turn of the month effect.

Kumar and Singh (2023) checked the DOW anomaly in India over the period of 20 years, i.e. from 2000 to 2019, by categorising in three sub period- during 2008-09 crisis, before and after the crisis period. BSE Sensex return data was used and results pointed towards nonexistence of DOW effect as whole and also for sectorial indices. Aggarwal and Jha (2023) using NSE data examined DOW effect by adopting GARCH models and found positive and significant returns on all week days, hence evidences of the presence of DOW effect. Khan et al. (2023) compared DOW in the Asian market using GARCH, OLS, and Kruskal-Wallis test and depicted as in most of the market Monday is the least traded day. The study found significant DOW effect in Pakistan, China, Thailand, Taiwan, and South Korea whereas insignificant DOW effect showed by Malaysia and India. Overall, the study did not found evidence of co-occurrence of the DOW effect in returns data and volume data, hence affirms inconsistency.

Numerous empirical investigations have explored the phenomenon of the DOW effect within the Indian stock market, employing diverse methodological approaches such as regression models, GARCH models, t-tests, and ANOVA techniques. While some studies have revealed the presence of weekday effects, others have indicated their absence. Notably, in the latter half of the twentieth century, Monday consistently yielded significantly lower returns compared to other weekdays. Against the backdrop of the ongoing COVID-19 pandemic, global stock markets, including those in India, have experienced considerable adverse effects. Considering these circumstances, this study endeavours to scrutinise the week-day effect within the Indian stock market during the COVID-19 period.

RESEARCH METHODOLOGY

Research Objective

Given the backdrop of the ongoing COVID-19 pandemic, it becomes imperative to investigate the potential existence of the DOW effect within the Indian stock market. The current study aims to address this inquiry.

Data Collection

The dataset utilised for this study comprises the daily closing prices of three key market indices: the BSE Sensex from the Bombay Stock Exchange (BSE), the Nifty-50 from the National Stock Exchange (NSE), and the SX40 from the Metropolitan Stock Exchange (MSEI). These three stock exchanges are considered representative of the Indian stock market. Notably, they are among the nine active stock exchanges recognised by the Securities and Exchange Board of India (SEBI), as of January 17, 2020 (source: www.sebi.gov.in). While the NSE and BSE account for the majority of turnover in the market, the MSEI is unique in that it facilitates the trading of individual stocks alongside these two exchanges. Hence, these three stock exchanges are taken as sample. The time period spanning from March 11, 2020 (on which WHO declared COVID-19 as a pandemic), to September 30, 2021 was taken as a study period with 1164 as sample observation. The daily closing price data for all three indices were collected using secondary sources, i.e. from their respective official websites: www.bseindia.com, www.nseindia.com, and www.msei.in.

To explore the DOW effect, the daily closing price series of three indices were transformed into return series, computed as follows:

$$R_t = \ln(\frac{P_t}{P_{t-1}})\pi r^2$$

where,

- R_t = index return on current day t,
- l_n = natural logarithm,
- P_t = index closing price on current day t,
- P_{t-1} = index closing price on previous day t-1.

Research Methodology

In order to investigate the DOW effect, "Dummy Variable Regression" model is employed and is defined as:

$$R_t = \alpha + \gamma_1 D_1 + \gamma_2 D_2 + \gamma_3 D_3 + \gamma_4 D_4 + \mu$$

where,

- R_t = index return at time t,
- D_1 = dummy variable for Tuesday,
- D_2 = dummy variable for Wednesday,
- D_3 = dummy variable for Thursday,
- D_4 = dummy variable for Thursday,
- μ = the error term or residual.

A dummy variable for Monday is omitted to prevent multicollinearity, a common issue known as the dummy variable trap, from arising in the model.

In the aforementioned equation, the coefficient α represents the mean return on Monday, which is also regarded as the benchmark day. Meanwhile, the coefficients γ_1, γ_2, γ_3, and γ_4 signify the deviation in mean returns of the other days from this benchmark. A significant α suggests the presence of a weekend effect, whereas significance in any of the coefficients γ_1, γ_2, γ_3 or γ_4 indicates the existence of a DOW effect.

Analysis and Interpretation

Table 1 presents the descriptive statistics of the returns for all three indices: BSE Sensex, Nifty-50, and SX40, accompanied by the outcomes of the Jarque-Bera test for normality.

Table 1: Descriptive Statistics and Jarque-Bera Normality Test Results of Index Return

Particulars	BSE Sensex	Nifty-50	SX40
Mean	0.131	0.135	0.132
Minimum	-14.101	-13.904	-13.764
Maximum	8.595	8.400	8.50
Standard Deviation	1.720	1.682	1.678
Skewness	-1.806	-1.908	-1.853
Kurtosis	16.749	17.217	17.075
Jarque-Bera test (p-value)	4803* $< 2.2e^{-16}$	5087.8* $< 2.2e^{-16}$	4995* $< 2.2e^{-16}$

Source: Authors' computation, * significant at 5%.

Table 1 illustrates that during the COVID-19 pandemic period, the Nifty-50 index exhibited the highest mean return (0.135), followed by the SX40 and BSE Sensex indices, with values of 0.132 and 0.131, respectively. The BSE Sensex had the highest standard deviation (1.720) compared to the Nifty-50 (1.682) and SX40 (1.672). Additionally, the skewness results indicate negative skewness for the returns of all three indices, while the kurtosis values suggest leptokurtic distributions, indicating non-normality in the return data. This observation is further supported by the statistically significant results of the Jarque-Bera test for all indices, indicating non-normality in the data distribution.

Nevertheless, for time series data, the concern lies more with stationarity rather than normality. To proceed with the analysis, it is imperative to ensure the stationarity of the data, which is examined using the Augmented Dickey-Fuller (ADF) test and Phillips-Perron (P-P) unit root test. The findings from these tests are presented in Table 2.

Table 2: Results of ADF and PP Unit Root Test for Indices Return

Particulars	BSE Sensex	Nifty-50	SX40
ADF test value (p-value)	-7.7423* (0.01)	-7.7132* (0.01)	-7.7447* (0.01)
P-P test value (p-value)	-443.87* (0.01)	-454.43* (0.01)	-453.23* (0.01)

Source: Authors' computation, * significant at 5%.

The results presented in Table 2 indicate that the Augmented Dickey-Fuller (ADF) and Phillips-Perron (P-P) unit root test statistics are statistically significant for all three indices. This suggests that the return data series exhibits stationarity throughout the study period.

Given the stationarity of the return series, the analysis proceeds with a dummy variable regression to investigate the DOW effect during the COVID-19 pandemic period. The results of the dummy variable regression, along with the outcomes of the Durbin-Watson (D-W) test for autocorrelation and the Breusch-Pagan (B-P) test for homoscedasticity of the residuals from the dummy variable regression model, are presented in Tables 3, 4, and 5 for the BSE Sensex, Nifty-50, and SX40 indices, respectively.

Table 3: Results of Dummy Variable Regression Model for BSE Sensex

Particulars	BSE Sensex	Nifty-50	SX40
α	-0.3904	-1.997	0.046*
γ_1 (Tuesday)	0.9440	3.447	0.001*
γ_2 (Wednesday)	0.5466	1.996	0.047*
γ_3 (Thursday)	0.4982	1.813	0.071
γ_4 (Friday)	0.5955	2.147	0.032*

Particulars	BSE Sensex	Nifty-50	SX40
R-squared:		0.03089	
Adjusted R-squared:		0.01821	
F-statistic:		2.435 (p-value: 0.03433*)	
Durbin-Watson test:		2.2216 (p-value: 0.987)	
Breusch-Pagan test:		6.3751 (p-value:0.2714)	

Source: Authors' computation, * significant at 5%.

The results presented in Table 3 indicate a significant negative value for the coefficient α, suggesting the presence of a weekend effect in the BSE. Additionally, the coefficients γ_1, γ_2, γ_3, and γ_4 demonstrate positive values during the weekdays, with statistical significance observed for all days except Thursday (Tuesday, Wednesday, and Friday), indicating the presence of a DOW effect. The overall fit of the model is supported by the significant f-statistics value (p-value = 0.03433), indicating its adequacy. Moreover, the results of the Durbin-Watson (D-W) test and the Breusch-Pagan (B-P) test confirm the absence of autocorrelation and heteroscedasticity issues in the model residuals, as both test values are statistically insignificant. Therefore, based on these findings, it can be concluded that both weekend and DOW effects exist in the BSE.

Table 4: Results of Dummy Variable Regression Model for Nifty-50

Particulars	BSE Sensex	Nifty-50	SX40
α	-0.3702	-1.936	0.054
γ_1 (Tuesday)	0.9117	3.404	0.001*
γ_2 (Wednesday)	0.5292	1.976	0.049*
γ_3 (Thursday)	0.4719	1.756	0.080
γ_4 (Friday)	0.5916	2.180	0.030*
R-squared:		0.03038	
Adjusted R-squared:		0.01769	
F-statistic:		2.3940 (p-value: 0.03719*)	
Durbin-Watson test:		2.2356 (p-value: 0.991)	
Breusch-Pagan test:		6.2875 (p-value:0.2792)	

Source: Authors' computation, * significant at 5%.

The results presented in Table 4 reveal a negative value for the coefficient α, although it is found to be statistically insignificant, indicating the absence of a weekend effect in the NSE. Conversely, positive coefficients γ_1, γ_2, γ_3 and γ_4 are observed during weekdays, with statistical significance observed on Tuesday, Wednesday, and Friday. This confirms the presence of a DOW effect. The significance of the f-statistic (p-value = 0.03719) supports the adequacy of the regression model. Additionally, the results of the Durbin-Watson (D-W) test and the Breusch-Pagan (B-P) test indicate the absence of autocorrelation and heteroscedasticity in the model residuals. Consequently, based on these findings, it can be concluded that while there is no weekend effect present in the NSE, there is indeed evidence of a DOW effect.

Table 5: Results of Dummy Variable Regression Model for SX40

Particulars	BSE Sensex	Nifty-50	SX40
α	-0.3683	-1.931	0.054
γ_1 (Tuesday)	0.8997	3.367	0.001*
γ_2 (Wednesday)	0.5218	1.953	0.051
γ_3 (Thursday)	0.4686	1.748	0.081
γ_4 (Friday)	0.5945	2.196	0.029*
R-squared:		0.02985	
Adjusted R-squared:		0.01715	
F-statistic:		2.351 (p-value: 0.04036*)	
Durbin-Watson test:		2.2391 (p-value: 0.9918)	
Breusch-Pagan test:		6.1061 (p-value:0.296)	

Source: Authors' computation, * significant at 5%.

The findings presented in Table 5 reveal a negative value for the coefficient α, which is deemed statistically insignificant. However, coefficients for Tuesday and Friday exhibit positive and statistically significant values, while those for Wednesday and Thursday are positive but lack statistical significance. This suggests the presence of a DOW effect specifically on Tuesday and Friday within the MSEI. The significant p-value (0.04036) associated with the f-statistic supports the adequacy of the regression model. Furthermore, the results of the Durbin-Watson (D-W) test and the Breusch-Pagan (B-P) test confirm the absence of autocorrelation and heteroscedasticity in the model residuals. Consequently, based on these findings, it can be inferred that while there is no weekend effect present in the MSEI, there is indeed evidence of a DOW effect specifically on Tuesday and Friday within this market.

CONCLUSION

In line with the efficient market hypothesis, which posits that the anticipated returns on financial assets should be uniformly distributed across various temporal intervals, the findings derived from the analysis employing dummy variable regression suggest distinctive patterns in the returns within the Indian stock market during the COVID-19 pandemic period. Specifically, negative returns are discerned solely on Mondays and are statistically significant solely for the BSE Sensex index. Conversely, the remaining weekdays—Tuesday, Wednesday (excluding the SX40 index), Thursday, and Friday—exhibit statistically significant positive returns,

with Tuesday and Friday demonstrating the highest returns. Consequently, it can be inferred that the Indian stock market manifests discernible Tuesday and Friday effects on returns during the COVID-19 pandemic era. While these effects present opportunities for investors to potentially enhance returns by strategically navigating this anomaly, they also raise questions regarding market efficiency. The results of the study are also useful for academicians to check EMH as it points towards a low level of efficiency.

The present study is limited to only the stock market, it may be further applied to other markets such as crypto currency markets, derivative markets, etc. Also, the researchers may examine the DOW effect before and after the COVID-19 pandemic period. It will be more beneficial if the investigated along with DOW effect, as it will provide a broader picture regarding market efficiency in the Indian market.

REFERENCES

Adavelli, S. R., & Yelamanchili, R. K. (2022). Individual investor trading activity and day of the week anomaly-Indian evidence. *Journal of Commerce and Accounting Research*, *11*(4), 1-8.

Aggarwal, K., & Jha, M. K. (2023). Day-of-the-week effect and volatility in stock returns: Evidence from the Indian stock market. *Managerial Finance*, *49*(9), 1438-1452. doi:https://doi.org/10.1108/MF-01-2023-0010

Ahmar, A. S., & del Val, E. B. (2020). Sutte ARIMA: Short-term forecasting method, a case: COVID-19 and stock market in Spain. *Science of the Total Environment*, 729.

Al-Awadhi, A. M., Al-Saifi, K., Al-Awadhi, A., & Alhamadi, S. (2020). Death and contagious infectious diseases: Impact of the COVID-19 virus on stock market returns. *Journal of Behavioral and Experimental Finance, 27.*

Amanulla, S., & Thiripalraju, M. (2001). Week-end effect: New evidence from the Indian stock market. *Vikalpa, 26*(2), 33-50.

Anwar, C. J., Okot, N., & Suhendra, I. (2021). Day of the week effect of exchange rate in developing countries. *Journal of Asian Finance, Economics and Business*, *8*(2), 15-23.

Archana. S., Mohammed, S., & Kevin, S. (2014). A study on market anomalies in Indian stock market. *International Journal of Business and Administration Research Review*, *1*(3).

Arora, H. (2018). Day of the week effect in returns and volatility of nifty-50: An evidence using high frequency data. *Pacific Business Review International*, *10*(8), 61-66.

Aziz, T., & Ansari, V. A. (2015). The day of the week effect: Evidence from India. *Afro-Asian J. Finance and Accounting*, *5*(2), 99-112.

Bash, A., & Alsaifi, K. (2019). Fear from uncertainty: An event study of Khashoggi and stock market returns. *Journal of Behavioral and Experimental Finance*, *23,* 54-58.

Bhattacharya, K., Sarkar, N., & Mukhopadhyay, D. (2003). Stability of the day of the week effect in return and in volatility at the Indian capital market: A GARCH approach with proper mean specification. *Applied Financial Economics, 13,* 553- 563.

Bhuva, K. K., & Thankachan, K. J. (2017). Week of the day impact on share market - Reference to automobile industry. *Journal of Management Research and Analysis*, *4*(2), 56-62.

Chen, L., Qiao, Z., Wang, M., Wang, C., Du, R., & Stanley, H. E. (2018). Which artificial intelligence algorithm better predicts the Chinese stock market? *IEEE Access, 6,* 48625-48633.

Choudhury, T. (2000). Day of the week effect in emerging Asian stock markets - Evidence from GARCH model. *Applied Financial Economics, 20,* 235-242.

Cross, F. (1973). The behavior of stock prices on Fridays and Mondays. *Financial Analysts Journal*, *29*(6), 67-69.

Dharani, M., & Natarajan, P. (2011). Seasonal anomalies between S&P CNX nifty shariah index and S&P CNX nifty index in India. *Journal of Social and Development Sciences*, *1*(3), 101-108.

Dutta, A., & Das, S. (2021). Day of the week and month of the year anomalies in the Indian stock market using multiple regression techniques. *International Journal of Management*, *12*(5), 101-111.

Gnanasekar, I. F., & Rajesh, E. (2016). Is there any miracle on Monday! Day of the week effect in NSE (CNX NIFTY) index: Evidence from GARCH(1,1) model. *International Journal of Research in Social Sciences*, *6*(2), 224-238.

Goswami, R., & Anshuman, R. (2000). Day of the week effect on Bombay Stock Exchange. *ICFAI Journal of Applied Finance, 6,* 31-46.

Handa, H. (2012). Efficient market hypothesis foreign institutional investors and day of the week effect. *International Proceedings of Economics Development and Research*, *50*(20), 98-102. doi:https://doi.org/10.7763/IPEDR.2012.V50.20

Karim, M. R., & Shetu, S. A. (2023). COVID-19 pandemic, profitability, and adaptability: Empirical evidence from the south Asian economy. *Journal of Commerce and Accounting Research*, *12*(2), 27-37.

Kaur, H. (2004). Time varying volatility in the Indian stock market. *Vikalpa*, *29*(4), 25-42.

Khan, B., Aqil, M., Kazmi, S. H. A., & Zaman, S. I. (2023). Day of week effect and market liquidity: A comparative

study from emerging stock markets of Asia. *International Journal of Finance and Economics*, *28*(1), 544-561.

Kothari, H. C., Singh, P., & Patra, S. (2017). Existence of day of the week effect in returns of some selected indices of the Indian stock market. *Indian Journal of Research in Capital Markets*, *4*(1). doi:https://doi.org/10.17010/ijrcm/2017/v4/112884

Kumar, R., & Mishra, S. (2013). An empirical investigation of day of the week effect in stock return: Evidence from CNX nifty. *International Journal of Business Analytics and Intelligence*, *1*(2), 22-25.

Kumar, S., & Singh, G. (2023). The day-of-week effect in the Indian stock market revisited. *Journal of Commerce and Accounting Research*, *12*(3), 12-17.

Kutchu, V. (2012). An empirical study on day of the week effect in Indian stock market during different settlement regimes using GARCH framework. *International Journal of Commerce & Management Studies*, *3*(3), 85-91.

Mehla, S., & Goyal, S. K. (2011). Day of the week anomaly in nifty returns and volatility: A study on impact of rolling settlement. *Indian Management Studies Journal, 15,* 65-79.

Mishra, S., Vyas, V., & Meena, V. K. (2021). Abnormal returns and impact of information of natural disaster on Indian stock market. *Journal of Commerce and Accounting Research*, *10*(3), 25-35.

Mitra, P. (2016). Day of the week effect on stock market return and volatility: Evidence from Indian stock market. *IOSR Journal of Economics and Finance*, *7*(4), 99-107.

Patel, R., & Patel, M. (2011). An econometric analysis of Bombay stock exchange: Annual returns analysis, day-of-the-week effect and volatility of returns. *Research Journal of Finance and Accounting*, *2*(11), 1-10.

Patjoshi, P. K., & Nandini, G. (2020). Stock market anomaly: Day of the week effect in Bombay stock exchange with the application of GARCH model. *International Journal of Innovative Technology and Exploring Engineering*, *9*(5), 2244-2249.

Poshakwala, S. (1996). Evidence on weak form efficiency and day of the week effect in Indian stock market. *Finance India*, *10*(3), 605-616.

Rizvi, S., Sharma, A. M., & Mishra, S. (2022). Reaction of precedented and unprecedented events on the Indian stock returns. *Journal of Commerce and Accounting Research*, *11*(2), 1-17.

Sen, S. S. (2013). An investigation of the day of the week effect on returns and volatility of NSE nifty. *International Journal of Financial Management*, *3*(4), 69-79.

Sharma, S. (2011). Day of week effect: Evidences from Indian stock market. *Indian Journal of Commerce and Management Studies*, *2*(6), 25-30.

Srinivasan, P., & Kalaivani, M. (2013). Day of the week effect in Indian stock market. Retrieved from http://mpra.ub.uni-muenchen.de/46805/MPRA Paper No. 46805, posted 7th May 2013 17:47 UTC

Sudarvel, J., Dhanu, P., Velmurigan, R., & Dharmaraj, A. (2015). Day of the week effect in Indian IT sector with special reference to BSE IT index. *International Journal for Scientific Research & Development*, *3*(8), 706-708.

Thomas, R. P. (2022). The study on calendar anomalies in the Indian stock market. *International Journal of Creating Research Thoughts, 10*(4), 448-454.

Wang, L., & Kutan, A. M. (2013). The impact of natural disasters on stock markets: Evidence from Japan and the US. *Comparative Economic Studies*, *55*(4), 672-686.