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Day of the Week effect in Indian Stock Market

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Abstract
Day of the Week effect is a calendar anomaly which suggests that stock returns vary systematically by weekday, challenging the Efficient Market Hypothesis. Even though it has been extensively documented in global market, recent evidence from India remains limited, especially in light of the evolving market dynamics and technology. This study investigates the Day of the Week effect in the Indian stock market using 15 years of nifty 50 data divided into five sub groups of 3 years each. The study also uses Indian volatility index (VIX) as a control variable to account for uncertain risk. The findings from the OLS and GARCH models indicate a robust and statistically significant positive Monday effect across most periods, along with a negative Thursday effect in the recent years. The study highlights the persistence and changing pattern of the Day of the Week effect and provides insights for the investors and help them understand and anticipate week-day based return patterns.

Keywords
Market Efficiency, Day of the Week Effect, Calendar anomaly, GARCH, NSE

Introduction

The financial markets are complex and dynamic in nature, as such, understanding and predicting stock price movements has become very crucial for investors, analysts and policymakers. It has become a subject of extensive research aimed at uncovering patterns and anomalies. One of the fascinating features of market behaviour is the existence of calendar anomalies, in which stock returns show regular patterns determined by the calendar. One such anomaly is "The Day of the Week Effect", a phenomenon in which the day of the week is found to have a systematic impact on stock returns. The seminal works by (French, 1980), (Gibbons & Hess, 1981) and (KEIM & STAMBAUGH, 1984) highlighted the presence of negative returns on Mondays and positive returns on Fridays in the U.S. stock markets. After its first discovery in developed markets, it has garnered significant attention. Studies over the past have extended this investigation to international markets, revealing diverse patterns. Day of the week effect suggests that stock returns exhibit a distinct pattern, with some days of the week continuously exhibiting better or lower returns than others. On days with abnormally low returns, investors can purchase stocks and sell them on days when returns are abnormally high.

Investigating these anomalies is crucial for several reasons, making it a compelling area of study. Historically, such patterns have been documented in various global markets, including the U.S. and European stock exchanges. However, Given the dynamic nature of the stock market and growing importance of emerging markets like India, revisiting this phenomenon in the context of NSE becomes particularly relevant. This attempts to investigate the Day of the Week Effect by reassessing its existence and evolution in relation to the Indian National Stock Exchange using the most recent data.

Literature Review

The Efficient Market Hypothesis (EMH), given by (Fama, 1965), argues that asset prices reflect all information available in the market and prevents investors from earning profitable returns. Yet, many empirical studies have identified deviations from expected patterns under EMH. Early investigations by Fama (1965) and French (1980) observed irregularities in stock returns, particularly negative returns on Mondays.

Several studies have extended this research over the years. (Agrawal & Tandon, 1994) observed 19 global equity markets, confirming the presence of the DOW effect. (Dubois, 1996) observed this pattern in nine countries. (Zhang et al., 2017) examined 28 stock markets across 25 different countries using GARCH models and found significant DOW patterns. (Winkelried and Iberico, 2018) found that negative Monday returns and positive Friday returns were statistically significant in five of six Latin American markets. (Chiah & Zhong, 2019) reported a positive Monday effect and a negative Friday effect in 24 developed economies. (Plastun et al., 2019) on examining the Dow Jones Industrial Average (DJIA) from 1900 to 2018 concluded that the Day of the Week effect peaked in the middle of the 20th century but has subsequently subsided as a result of improved market efficiency.

In emerging markets, (Basher & Sadorsky, 2006) detected the Day of the Week effect in Pakistan, Taiwan and the Philippines. Ariss et al. (2011) found a Wednesday effect in Gulf Cooperation Council (GCC) markets due to regional trading schedules. (Caporale & Zakirova, 2017) found evidence of Monday-Friday anomalies in the Russian market. Explanations for the day of the week effect ranges from studies like (Rystrom & Benson, 1989) which suggest that investor psychology could explain the Day of the Week effect to speculative trading behaviours (Kazemi et al., 2023) and institutional investor patterns (Sias & Starks, 1995) .

Despite strong empirical support, some studies dispute the persistence of the Day of the Week effect. (Fortune, 1999), (Simon & Schwert, 2002) and (Olson et al., 2011) argue that the weekend effect has weakened over time due to evolving market efficiency. (Robins and Smith, 2016) contend that the anomaly has disappeared in developed markets, though it may still exist in emerging economies. (Dharani and Natarajan, 2013) and other scholars found no evidence of a weekend effect in stock markets such as India, Oman, Karachi, and Egypt. However, certain anomalies persisted in specific regions, as reported by (Noor et al., 2011) in Malaysia and (Ulussever et al., 2011) in Saudi Arabia.

Beyond the commonly observed Monday and Friday effects, research has identified additional day of the week effects. (Zhang et al., 2017) found that the US and Canada experienced a Tuesday effect, Australia and Germany experienced a Wednesday effect, and the Czech Republic and the Philippines experienced a Thursday effect. (Wong et al., 1992) noted in several Asian markets that, Fridays saw good returns while Mondays and Tuesdays saw negative returns. For emerging European markets, (Ajayi et al., 2004) found that Russia saw a reverse Monday effect and Estonia and Lithuania experienced negative Monday returns for emerging European markets. (Borges, 2009) discovered that Iceland had negative Monday returns whereas Greece, Iceland, Ireland, and Norway had positive Friday returns. Other studies noted a Thursday effect in Norway (Cinko et al., 2015) and a Friday effect in Denmark and Finland.

The literature on "The Day of the Week" in the Indian stock market presents a comprehensive overview of the phenomenon, highlighting varying degrees of significance and patterns across different studies and time periods. (Srinivasan & Kalaivani, 2014a) investigated the NSE-Nifty and BSE-SENSEX and found that returns were notably higher on Mondays and Wednesdays, with these days also exhibiting increased volatility. Their study suggested that these effects might be due to systematic behavioural patterns among investors or institutional trading strategies. (Gnanasekar et al., 2016) corroborated these findings through the application of GARCH models, which revealed significant positive returns on Mondays and Wednesdays, indicating that these effects were robust to the inclusion of volatility in the models. Conversely, (Kaushik, 2017) reported that while small-cap indices showed significant positive returns on Mondays however, mid-cap and large-cap indices did not exhibit similar patterns, suggesting that the day of the week effect might be more pronounced in smaller, less liquid segments of the market. (Paital & Panda, 2018) examined various Nifty indices and found that Monday was a high-risk, high-return day, whereas Tuesday had a negative influence and weekends had a favourable effect. They analysed data over a period of 20 years, which included the global financial crisis and suggested that there was no significant day of the week effects during this extended period, indicating that such anomalies might be ephemeral or subject to change over time due to evolving market dynamics and investor behaviour.

Even though the Day of the week effect has been extensively studied, there is limited research examining the its persistence and evolution. At the same time, they overlook key measures of uncertainty like volatility index. Therefore, the main objective of this study is to study capture the nature of the Day of the week effect over time by introducing uncertainty measure like Indian volatility Index (VIX).

Methodology

For the purpose of the study, we use the closing prices of Nifty 50 index obtained from nseindia.in website. The sample period spans from 1st January 2010 to 31st December 2024, divided into five subsets of three years each, providing a comprehensive dataset that captures various market phases. Additionally, the study also uses the first difference of the VIX as a control variable to account for market volatility effects. The VIX reflects the market uncertainty and investor sentiment. Using it as a control variable isolates the true nature of the Day of the week effect by accounting for time varying risk. The Stock returns were computed using the logarithmic difference of daily closing prices to ensure stationarity and help normalize the return distributions and mitigates the impact of extreme price movements. The return (R_t) at time t is calculated as:

$$R_t = ln(P_t) + ln(P_{t-1})$$

Where, R_t is the daily stock return, P_t is the closing price at time t, P_{t-1} is the closing price at time t−1, ln denotes the natural logarithm.

To examine the Day of the Week Effect, the study first uses an OLS regression model, where daily stock returns are regressed on dummy variables representing different weekdays.

The OLS model is specified as follows:

$$R_t = \beta_1 D_1 + \beta_2 D_2 + \beta_3 D_3 + \beta_4 D_4 + \beta_5 D_5 + \Delta VIX_t + \epsilon_t$$

Where, Rt denotes daily stock return at time t; D_1, D_2, D_3, D_4 and D_5 are dummy variables for Monday to Friday (1 if the day corresponds, 0 otherwise); β_1, β_2, β_3, β_4 and β_5 are estimated coefficients for daily return effects, ΔVIX_t is the first difference of the Indian Volatility Index to control for market risk, and ϵ_t is the error term.

Further, traditional OLS assumes constant variance in error terms but financial time series often exhibit volatility clustering.

Therefore, to account for the Heteroscedasticity, the study also employs a Generalized Autoregressive Conditional Heteroscedasticity (GARCH) model proposed by Bollerslev in1986. The GARCH (1,1) model is specified as:

Mean Equation:

$$R_t = \beta_1 D_1 + \beta_2 D_2 + \beta_3 D_3 + \beta_4 D_4 + \beta_5 D_5 + \Delta VIX_t + \epsilon_t$$

Variance Equation:

$$\sigma_t^2 = \omega + \alpha_1 \varepsilon_{t-1}^2 + \beta_1 \sigma_{t-1}^2$$

Where, σ_t^2 is the conditional mean at time t, ω is the constant term, α_1 is the coefficient for the lagged squared error and β_1 is the coefficient for the lagged conditional variance.

To further investigate the impact of each trading day separately, the study follows the (Borges, 2009) approach to model seasonal anomalies, estimating five sets of mean and variance equations to identify specific Day of the week effect. The model specification remains the same as the GARCH (1,1) model above, but the dummy variable for each day is analysed independently to evaluate how market volatility behaves on specific weekdays.

Mean Equation:

$$R_t = \alpha + \beta_1 D_1 + \Delta VIX_t + \varepsilon_t$$

Here the dummy variable D_1 in the model denotes Monday, the average excess return on Monday is represented by β_1 and the mean daily returns of the remaining days is represented by α. The same logic holds for the other coefficients β_2, β_3, β_4, and β_5, which identify other Day of the week effects. The variance equation is same as above.

Analysis and findings

Figure 1 shows the time series plot of stock market returns from 2010 to 2024 exhibits notable fluctuations, indicating the presence of volatility clustering. There are several extreme spikes, suggesting market shocks or significant economic events impacting returns. This pattern supports the appropriateness of using GARCH models to capture volatility dynamics in analysing the Day of the week effect in the Indian stock market.

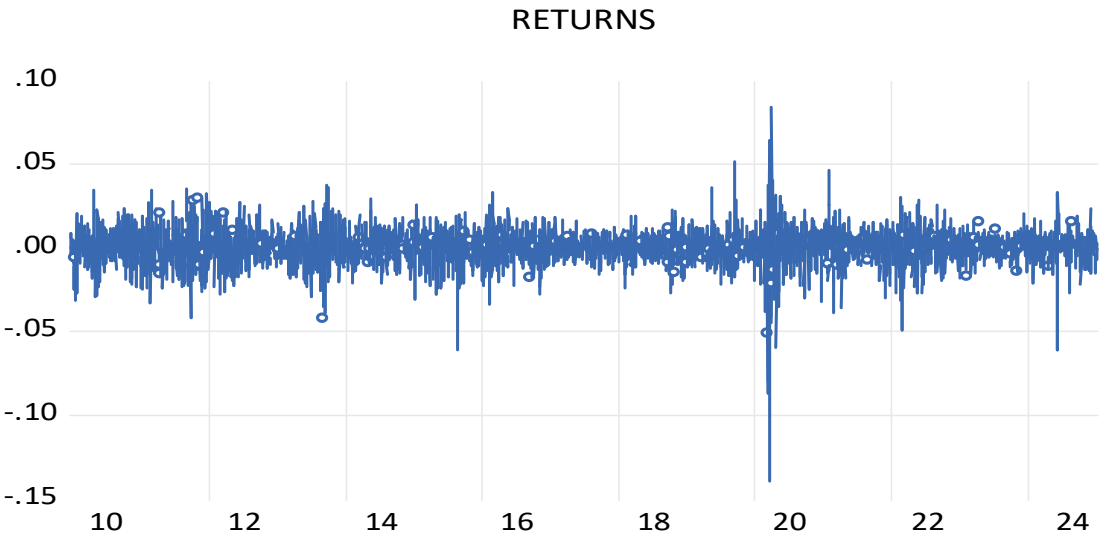

Figure 1: Daily stock market returns

Table 1 and Figure 2 show the Descriptive statistics and the average returns across various weekdays. The stock returns show a notable negative Monday returns, with the lowest mean

return (-1.73E-05) and highest volatility (0.012456), indicating frequent large negative returns. Tuesday and Wednesday exhibit positive returns further Thursday shows slightly negative skewness, while Friday has the lowest kurtosis, indicating fewer extreme fluctuations.

Descriptive statistics				
DAY	**Mean**	**Std. Dev**	**Skew**	**Kurt**
Monday	0.0000	0.0125	-2.6517	27.2625
Tuesday	0.0008	0.0101	0.3795	11.5908
Wednesday	0.0007	0.0092	0.1828	8.8313
Thursday	0.0001	0.0104	-1.0193	10.7658
Friday	0.0005	0.0105	0.2231	5.4703
All	0.0004	0.0106	-0.9361	16.6234

Table 1: Day wise Descriptive of stock returns

Figure 2: Day wise average stock returns

Table 2 represents the outcomes of OLS regression. The results suggest a strong and consistent Monday effect, as returns on Mondays are significantly positive across most sub-periods. The coefficients for Monday are positive and statistically significant at 1% level of significance for all periods except 2019-2021 where results are significant at 10%, with the highest return observed during 2022-2024 indicating that Mondays tend to yield higher returns, aligning with the well-documented phenomenon where traders react to information accumulated over the weekend. Similarly, Thursday reveals a negative and statistically significant effect in multiple sub-periods, notably 2010-2012, 2016-2018, 2022-2024 and the overall sample period 2010-2024, confirming that returns on Thursdays tend to be lower than on other days, suggesting that investors might adopt a cautious approach before the weekend, leading to a decline in stock prices on Thursdays.

Table 2: Results of the OLS

Period	2010-2024		2022-2024		2019-2021		2016-2018		2013-2015		2010-2012	
DAY	**Prob**	**Coeff**	**Prob**	**Coeff**	**Prob**	**Coeff**	**Prob**	**Coeff**	**Prob**	**Coeff**	**Prob**	**Coeff**
D1	0.0000***	0.0029	0.0000***	0.004	0.0977*	0.0017	0.0000***	0.0032	0.0000***	0.0029	0.0002***	0.0025
D2	0.6485	0.0001	0.7622	0.0002	0.0056***	0.0027	0.7303	-0.0002	0.0603*	-0.0013	0.2155	-0.0008
D3	0.3533	0.0003	0.9374	0	0.8653	0.0002	0.4454	0.0004	0.9794	0	0.2255	0.0008
D4	0.0001***	-0.0012	0.0009***	-0.0019	0.1644	-0.0014	0.0234**	-0.0012	0.8681	-0.0001	0.0349**	-0.0015
D5	0.6713	-0.0001	0.6604	-0.0003	0.9883	0	0.9809	0	0.5154	0.0005	0.3101	-0.0007
VIX	0.0000***	-0.1198	0.0000***	-0.111	0.0000***	-0.1338	0.0000***	-0.1116	0.0000***	-0.1002	0.0000***	-0.1388

Table 3: Results of the GARCH model

Period	2010-2024		2022-2024		2019-2021		2016-2018		2013-2015		2010-2012	
DAY	**Prob**	**Coeff**	**Prob**	**Coeff**	**Prob**	**Coeff**	**Prob**	**Coeff**	**Prob**	**Coeff**	**Prob**	**Coeff**
D1	0.0000***	0.0032	0.0000***	0.0039	0.0000***	0.0024	0.0000***	0.0031	0.0000***	0.0029	0.0000***	0.0029
D2	0.6793	0.0001	0.8759	0.0001	0.0003***	0.0024	0.6461	0.0002	0.0321*	-0.0015	0.0346*	-0.0014
D3	0.2186	0.0004	0.658	0.0003	0.4908	0.0004	0.2971	0.0005	0.9169	0.0001	0.3882	0.0007
D4	0.0000***	-0.001	0.0017***	-0.0017	0.533	-0.0003	0.1653	-0.0007	0.3277	-0.0006	0.0912*	-0.0011
D5	0.515	-0.0002	0.3825	-0.0004	0.6154	-0.0003	0.5159	0.0003	0.2669	0.0007	0.1385	-0.0009
VIX	0.0000***	-0.1116	0.0000***	-0.108	0.0000***	-0.1133	0.0000***	-0.11	0.0000***	-0.1024	0.0000***	-0.1419
						Variance Equation						
C	0.0000***	0.0000	0.0109**	0.0000	0.0000***	0.0000	0.0523*	0.0000	0.0043***	0.0000	0.0025***	0.0000
RESID	0.0000***	0.1245	0.0002***	0.1492	0.0000***	0.3665	0.0000***	0.0801	0.0002***	0.0529	0.0005***	0.0842
GARCH	0.0000***	0.8099	0.0000***	0.7385	0.0000***	0.5238	0.0000***	0.8975	0.0000***	0.9076	0.0000***	0.8301

Returns on other days do not exhibit any consistent day of the week. While Tuesday shows a significant positive impact during 2019-2021, it remains statistically insignificant in other periods, suggesting a temporary rather than systematic anomaly. Wednesday's coefficients are close to zero across all sub-periods, indicating no meaningful pattern, while Friday also fails to show any significant impact, contradicting the traditional weekend effect observed in some markets. Additionally, the Volatility Index consistently exhibits a strong negative and highly significant impact on returns across all periods.

To examine if ARCH effect is present in the residuals, an ARCH-LM test was conducted. Heteroscedasticity was strongly supported by the test's F-statistic of 264.5813 and matching p-value of 0.0000. This justifies the use of a GARCH model to capture the time-varying volatility.

Table 3 represents the outcomes of the GARCH model. The results provide insights into the existence of the Day of the week effect. The coefficient for Monday is consistently positive and highly significant across all periods, suggesting that Monday returns are higher than the average returns of other days, confirming the presence of a strong and persistent Monday effect. The effect remains stable over time, indicating that investors may be reacting to weekend news or adjusting positions after a break. However, Thursday remains negative but insignificant, indicating that no strong Thursday anomaly existed during these years, except for the period 2022-2024 and overall period 2010-2024 suggesting that Thursday returns have declined significantly in recent years. This may be due to investors adjusting positions ahead of the weekend, increased market uncertainty.

Tuesday initially exhibits a negative and significant impact on stock returns in the periods 2010-2012 and 2013-2015, suggesting lower returns on Tuesdays during these years. However, from 2016-2018 onward, this effect disappears, with coefficients becoming statistically insignificant, on the other hand Wednesday and Friday remains neutral across all periods, with consistently insignificant coefficients, suggesting no abnormal return patterns. VIX is consistently negative and highly significant across all periods suggesting that higher market volatility is associated with lower stock market returns, confirming the negative relationship between volatility and returns.

To verify whether the GARCH model successfully captured the conditional heteroscedasticity in the series, ARCH-LM test was applied to the standardized residuals. The test yielded an F-statistic of 1.1866 with a p-value of 0.2761. Therefore, we fail to reject the null hypothesis of Heteroscedasticity. Which indicates that the GARCH model has effectively modelled the time-varying volatility present in the data.

Table 4: Results of the (Borges, 2009) GARCH Model on Weekday basis

Period	2010-2024		2022-2024		2019-2021		2016-2018		2013-2015		2010-2012	
Day	**Prob**	**Coeff**	**Prob**	**Coeff**	**Prob**	**Coeff**	**Prob**	**Coeff**	**Prob**	**Coeff**	**Prob**	**Coeff**
α	0.1665	-0.0002	0.1322	-0.0004	0.0353**	0.0005	0.7125	0.0001	0.3291	-0.0003	0.0490**	-0.0007
D1	0.0000**	0.0033	0.0000**	0.0043	0.0035**	0.0019	0.0000**	0.003	0.0000**	0.0032	0.0000**	0.0035
VIX	0.0000**	-0.1109	0.0000**	-0.1059	0.0000**	-0.1128	0.0000**	-0.1027	0.0000**	-0.1025	0.0000**	-0.1403
C	0.0000**	0	0.0126**	0	0.0000**	0	0.0509**	0	0.0048**	0	0.0036**	0
RESID	0.0000**	0.1246	0.0001**	0.1686	0.0000**	0.4033	0.0000**	0.0801	0.0003**	0.049	0.0009**	0.0792
GARCH	0.0000**	0.8106	0	0.6944	0.0000**	0.4874	0.0000**	0.897	0.0000**	0.9123	0.0000**	0.8367
α	0.0000**	0.0006	0.0637*	0.0005	0.0341**	0.0006	0.0007**	0.0008	0.0191**	0.0008	0.2645	0.0004
D2	0.1085	-0.0005	0.5973	-0.0003	0.0155**	0.0018	0.3846	-0.0005	0.0036**	-0.0023	0.0249**	-0.0017
VIX	0.0000**	-0.1041	0.0000**	-0.0943	0.0000**	-0.1066	0.0000**	-0.0978	0.0000**	-0.0974	0.0000**	-0.1382
C	0.0000**	0	0.0234**	0	0.0000**	0	0.0432**	0	0.0062**	0	0.0087**	0
RESID	0.0000**	0.1131	0.0000**	0.132	0.0000**	0.3513	0.0000**	0.0768	0.0011**	0.0438	0.0015**	0.0866
GARCH	0.0000**	0.8295	0.0000**	0.7405	0.0000**	0.5495	0.0000**	0.8985	0.0000**	0.9223	0.0000**	0.8092
α	0.0000**	0.0005	0.0533*	0.0005	0.0004**	0.001	0.0013**	0.0007	0.2437	0.0004	0.7298	-0.0001
D3	0.6166	-0.0002	0.7139	-0.0003	0.4796	-0.0005	0.6141	-0.0003	0.7419	-0.0003	0.3304	0.0008
VIX	0.0000**	-0.1039	0.0000**	-0.0942	0.0000**	-0.1076	0.0000**	-0.0975	0.0000**	-0.0972	0.0000**	-0.1369
C	0.0000**	0	0.0222**	0	0.0000**	0	0.0384**	0	0.0095**	0	0.0160**	0
RESID	0.0000**	0.1127	0.0000**	0.1337	0.0000**	0.3734	0.0000**	0.0778	0.0016**	0.0406	0.0036**	0.0798
GARCH	0.0000**	0.8302	0.0000**	0.733	0.0000**	0.5266	0.0000**	0.8972	0.0000**	0.9257	0.0000**	0.7334
α	0.0000**	0.0009	0.0005**	0.0009	0.0000**	0.0012	0.0000**	0.001	0.1269	0.0005	0.3338	0.0003
D4	0.0000**	-0.0018	0.0000**	-0.0026	0.0167**	-0.0015	0.0020**	-0.0017	0.159	-0.0011	0.0536*	-0.0014
VIX	0.0000**	-0.1055	0.0000**	-0.0975	0.0000**	-0.1097	0.0000**	-0.0993	0.0000**	-0.0982	0.0000**	-0.1364
C	0.0000**	0	0.0189**	0	0.0000**	0	0.0409**	0	0.0074**	0	0.0231**	0
RESID	0.0000**	0.113	0.0001**	0.1059	0.0000**	0.393	0.0000**	0.0799	0.0013**	0.0448	0.0057**	0.067
GARCH	0.0000**	0.8288	0.0000**	0.8096	0.0000**	0.5039	0.0000**	0.8958	0.0000**	0.9178	0.0000**	0.8285
α	0.0000**	0.0007	0.0142**	0.0007	0.0000**	0.0012	0.0009**	0.0008	0.5017	0.0002	0.4343	0.0003
D5	0.0095**	-0.0008	0.1	-0.001	0.0192**	-0.0016	0.3596	-0.0005	0.5162	0.0005	0.106	-0.0012
VIX	0.0000**	-0.1045	0.0000**	-0.0955	0.0000**	-0.1075	0.0000**	-0.0976	0.0000**	-0.097	0.0000**	-0.1373
C	0.0000**	0	0.0167**	0	0.0000**	0	0.0399**	0	0.0088**	0	0.0127**	0
RESID	0.0000**	0.1142	0.0000**	0.1477	0.0000**	0.3559	0.0001**	0.076	0.0017**	0.0417	0.0030**	0.0824
GARCH	0.0000**	0.8273	0.0000**	0.7036	0.0000**	0.5474	0.0000**	0.8992	0.0000**	0.9244	0.0000**	0.7932

Table 4 demonstrates the analysis of the Day of the week Effect in the Indian stock market reveals significant anomalies in stock returns across different trading days over the period 2010-2024. Monday consistently exhibits a strong positive effect across all periods, indicating higher returns at the beginning of the week. This could be attributed to market optimism, institutional buying or information accumulation over the weekend. In contrast, Tuesday shows no consistent pattern, with negative and significant returns in early years (2010-2015) but turning weakly positive in 2019-2021, suggesting that the Tuesday effect is not persistent. Wednesday does not exhibit any statistically significant effect, confirming the absence of a midweek anomaly in the Indian market. However, Thursday demonstrates a strong and persistent negative effect from 2016 onward, with significant declines in stock returns, suggesting that investors engage in pre-weekend risk adjustments or profit-booking, leading to lower returns before the weekend. Similarly, Friday has an emerging negative effect, becoming significant in 2019-2021 and in the overall period (2010-2024). This decline in Friday returns could be linked to profit-taking behaviour or investors closing positions to avoid weekend uncertainties. Overall, the findings confirm the presence of a strong positive Monday effect and a negative Thursday effect.

Conclusion

The study of the Day of the week Effect in the Indian stock market reveals significant anomalies in stock returns across different trading days. Monday consistently shows a substantial positive effect, suggesting that stock returns are often higher at the start of the week, this may be possibly due to market optimism after the weekend. This pattern is robust across all time periods, confirming the presence of a Monday effect. In contrast, Thursday demonstrates a persistent and significant negative effect from 2016 onwards in individual day of the week analysis, suggesting that investors engage in pre-weekend risk adjustments, portfolio rebalancing, or respond to derivatives market influences, leading to lower returns. Tuesday and Wednesday do not exhibit any consistent or statistically significant anomalies and results of Friday effect are inconclusive, indicating that midweek returns remain neutral and do not follow any specific pattern. The findings across OLS, GARCH, and individual day analyses using (Borge, 2009) approach align well with findings of (Kaushik, 2017) (Gnanasekar et al., 2016) and (Srinivasan & Kalaivani, 2014b) reinforcing the presence of significant anomalies in positive Monday effect but denies the existence of Wednesday effect. The study further indicates a potential a Thursday effect. The persistence of these anomalies in recent years indicates that despite market efficiency improvements, certain behavioural and structural factors continue to influence return patterns. Thus, understanding these trends can help market participants refine their trading strategies, optimize risk management, and make more informed investment decisions based on predictable return behaviour across different days of the week.
The limitation of the study lies on the dependency of the analysis solely on nifty 50 data and exclusion of sector specific effects. Also, structural break and macroeconomic variables have not been modelled, which can influence in observed weekday patterns. The study contributes the present literature by identifying a potential negative Thursday effect in the Indian stock market. Also, it enhances the existing literature by using VIX as a control variable for capturing time varying volatility.

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