

STOCK MARKET ANOMALIES: THE DAY OF THE WEEK EFFECT, EVIDENCE FROM BSE SENSEX INDEX

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ABSTRACT

This study examines the existence of a Day of the Week effect (DOWE) in BSE Sensex index in Indian Stock Market. The current study usages the daily returns data of the Bombay Stock Exchange (BSE) Sensex Index for the period 1st April 2006 to 31st March 2020. The outcomes confirm the presence of the DOWE Anomalies in BSE Sensex index stock yields in India. The results are also reliable with the DOWE Anomalies does exist in the stock market in India, Stock index is inefficient, and hence, investors can time their share investments to expand earnings.

Keywords: Anomalies, Day of the Week Effect, EMH, BSE.

INTRODUCTION

The normal assumption in financial theory is that the movement of standard returns is identical for entirely weekdays, though, the stock market does not function during Weekends. This breakdown offers the presence of the day-of-the-week effect in the stock market, i.e. some weekdays return is different from other weekdays in the stock market. If the DOWE occurs, some stockholders can take advantage of it to make arbitrage. Different models clarify the variation in the stock returns with the help of fundamental factors. But there still occurs a component of unsolved discrepancy that can be clarified by trends in the fundamental factors, cyclic factors, macroeconomic news, investor anticipation and feelings, etc. In this paper, the consequence of cyclic factors on routine returns in the form of DOWE is considered and found that the effect to be significant. The form triggered by macroeconomic news can only partly subsume the weekend effects of stock returns. There is a huge factor besides stockholder expectations and trade clearance cycle that can be linked to the seasonality in the equity market returns. For example, unfavourable news announcements on the weekend and overreaction of the result of hominoid psychology have an effect on stock price routine. In adding, the day of the week outline returns and volumes are empirically found to be more noticeable for securities in which institutional investors play a greater role.

REVIEW OF LITERATURE

Alexander Abrahamsson and Simon Creutz (2018) in their study verifies that nonexistence of the DOWE in Swedish stock market. Ece Oral (2012) in his study found that DOWE prevails during the worldwide financial calamity period in the Turkish Foreign Exchange Market. Goran Karanovic and Bisera Karanovic (2018) in their study proves that DOWE presence in the Balkan market, Hülya Cengiz, Omer Bilen et al. (2017) in their study prove that DOWE does exist in Turkey Stock market. Mardy Chiah, and Angel Zhong (2019) in their study found that DOWE prevails around the world. OlaOluwa S. Yaya and Ahamuefula E. Ogbonna (2019) in their study they found no evidence in the DOWE in both returns and volatility in Bitcoin Market. Savas Gayaker et al. (2019) in their study finds that DOWE does exist in Turkey stock market. Shlomo Zilca (2017) in her study proves that DOWE does not existing during the study period in US stock markets. Tariq Aziz and Valeed Ahmad Ansari (2015) in their study found that DOWE prevailing in Indian Stock Market. Indian Market remains unexplained. Yinying Duan, Peiling Zhao and Yuqing Xia1 (2019) in their study found that occurrence of the DOWE in China's stock market.

OBJECTIVE OF THE STUDY

❖ To find the Day of the Week effect in Sensex index.

RESEARCH METHODOLOGY

The study is analytical in nature.

Data

BSE Sensex data collected for the period 1st April 2006 to 31st March 2020.

Tools for Analysis

The collected data have been investigated by making use of Returns, Descriptive statistics, Shapiro-Wilk test and OLS Regression.

ANALYSIS

Table 1
Day of the Week Effect – Descriptive Statistics

Statistics					
	Monday	Tuesday	Wednesday	Thursday	Friday
N	692	696	695	691	680
Mean	-.0056	.0199	.0890	.0125	.0730
Std. Deviation	1.74751	1.27368	1.33291	1.32300	1.51620
Variance	3.054	1.622	1.777	1.750	2.299
Skewness	.391	.041	.087	-.369	-.170
Kurtosis	20.483	3.930	5.310	5.602	7.335
Range	30.49	12.68	14.23	15.07	19.18

High mean returns were perceived in the Wednesday (0.890) and low mean returns were found in the Monday (-0.0056). While comparing the variance, high level of volatility was observed in the Monday (3.054) and low level of volatility was perceived on the Tuesday (1.622). Outcome of the Skewness test discloses that negative value was observed in the Thursday (-0.369), and Friday (-0.170) returns, which infers that most of the Thursday and Friday returns were fewer than the average returns. The remaining days returns noticed positive Skewness, which implies that most of the Monday, Wednesday and Tuesday returns were more than the average returns. The Kurtosis results were found leptokurtic in all the days.

Table 2
Normality Tests

	Kolmogorov Smirnov			ShapiroWilk		
	Statistic	df	Sig	Statistic	df	Sig
Monday	.108	680	.000	.852	680	.000
Tuesday	.083	680	.000	.940	680	.000
Wednesday	.091	680	.000	.929	680	.000
Thursday	.071	680	.000	.944	680	.000
Friday	.086	680	.000	.920	680	.000

a. Lilliefors Significance Correction

The Calculated P value of the Kolmogorov Smirnov and ShapiroWilk test of Sensex index returns is less than 0.01, it is clearly exhibited that the data are not normally dispersed. Hence, anomaly arises BSE Sensex index returns.

Table 3
OLS, using observations Dependent variable: MONDAY

	Coefficient	S. Error	t ratio	p value
Constant	.0368804	.062943	.5859	.55812
Tuesday	-.0404258	.0498972	-.8102	.41812
Wednesday	.0902934	.0484354	1.8642	.04273*
Thursday	.0121948	.0491868	.2479	.80426
Friday	.0233536	.0414957	.5628	.57376
R squared	.6275	Adjusted R squared		.03870
P value (F)	.37252			

The result of OLS regression analyses disclose that the select independent variables collectively contribute to 62.75 per cent variation in Monday returns.

Wednesday

The regression coefficient indicates that Wednesday returns positively influence Monday returns. The value of the regression coefficient indicates that a unit of increase in Wednesday return shall increase Monday return by .090 units. Higher rate of return on Wednesday leads to a higher rate of return on Monday.

SUGGESTIONS

High returns are observed on Wednesday; Hence, investors may prefer to stocks buy on Monday and sell them on Wednesday. There are various other factors to be considered before investing. We also suggest that the same can

be applied in minimum number stocks and expand the same on blue-chips base on the risks and rewards. It is essential for the Indian investor to cautiously study the publicly available evidence, because it plays a vital part in the Market Effectiveness and changes in the market. The current study would be useful for native and foreign investors, traders and arbitragers who invent the gainful trading strategy in the stock market. Intraday trader to trade on Tuesday, Wednesday and Thursday low volatility has been noticed these days.

CONCLUSION

The results confirm the presence of Day of the Week effect in Sensex index. The study raises questions on the EMH which states that stock prices are random and those investors cannot get anomalous profits using historical prices. The Sensex index patterns in return and volatility can able investors to take benefit of comparatively regular market changes by manipulative and executing trading tactics, which reason for such expectable forms. The existent theories are inadequate in modelling stock market. The stock market is full of anomalies. If the market is not efficient, then investors can make profit by analysing the historic data. By digging in to vast data you can unearth much inefficiency which can be to make in to high returns. By finding these inefficiencies you can make the system more efficient.

All of these results raise the possibility that irregularities are more outward than real. But even if the anomalies happened in the sample period in which they remained first identified, the happenings of experts who implement tactics to take benefit of anomalous behaviour can cause the anomalies to disappear.

REFERENCES

1. Goran Karanovic, Bisera Karanovic (2018) “The Day-of-the-Week Effect: Evidence from Selected Balkan Markets” *Scientific Annals of Economics and Business*, Vol. 65, No.1, pp.1-11.
2. Hülya Cengiz, Ömer Bilen, Ali Hakan Büyüklü and Gülizar Damgacı (2017), “Stock Market Anomalies: The Day of the Week Effects, evidence from Borsa Istanbul”, *Journal of Global Entrepreneurship Research* (2017) Vol.7, pp. 1-11.
3. Tariq Aziz and Valeed Ahmad Ansari (2015), “The Day of the Week Effect: Evidence from India”, *Afro-Asian J. Finance and Accounting*, Vol. 5, No. 2, pp. 99-112.
4. Yinying Duan, Peiling Zhao and Yuqing Xia (2019), “The Day-of-the-Week Effect’ Asymmetry in Return and Volatility in China: An Empirical Study”, *IOP Conf. Series: Earth and Environmental Science*, pp. 1-10.
5. <https://ideas.repec.org/a/eee/ecolet/v182y2019icp90-92.html>
6. <https://mpra.ub.uni-muenchen.de/44116/>
7. <http://www.elsevier.com/journals/borsa-istanbul-review/2214-8450>
8. <https://www.researchgate.net/publication/330354052>
9. <http://www.elsevier.com/journals/borsa-istanbul-review/2214-8450>
10. <https://jfin-swufe.springeropen.com/articles/10.1186/s40854-017-0079-4>