

ANNUAL EFFECT IN NSE NIFTY AND SECTORAL INDICES

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Abstract

This study investigates the existence of an Annual Effect in NSE Nifty and Sectoral indices index in Indian Stock Market. The study uses the Annual return data of the NSE Nifty and Sectoral indices Index for the period ranging between January 2009 and December 2019. The outcomes confirm the presence of seasonality Annual Effect in NSE Nifty and Sectoral indices in India. The findings are also reliable with the Annual Effect does exist in the stock market in India, doesn't happen anomaly in the FMCG, sectors, and anomaly occurs on all other sectors.

Keywords: *Anomalies, Annual Effect, NSE, and Efficient Market Hypothesis.*

INTRODUCTION

The stock returns vary from year to year due to excessive liquidation of securities by the investors considering the bank interest rate, arrival of new information in market leads to disparity in stock returns, portfolio rebalancing by institutions leads to disparity in stock returns, investors so as to reduce their tax-burden sell their loss making shares and buy back the share in future leads to fluctuation in share returns etc., Annual effect in which, stocks have generally tended to outperform at the over the year. It is referring to the time in calendar year when the present years come to an end and marks the beginning of the New Year.

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REVIEW OF LITERATURE

Denis O. Boudreaux (1995) in his study observed that monthly effect was found in the Danish, German and Norwegian markets, and the monthly effect (negative effect) does not occur in the Pacific basin market of Singapore/Malaysia. **Mihir Dash, and etc(2011)** in their study find that the month-of-the-year effect does exists in Indian stock markets. **Sarbapriya (2012)** in her study verifies that the month of year effect is observed in Indian stock market, whereas a stockholder may arrange the shares in the month of March for availing income tax benefits. **Shyam Lal Dev Pandey (2012)** in his study evidences that low volatile stocks offer higher average rate of return than high price movement stocks, which evidences the presence of inadequacy in Indian Stock Market. **Jay Desai (2010)** in his study three key indices found day of the month and week of the month effect to be existing in Indian stock market. **Jaroslav Rosol (2016)** in his study the results for January and Monday effects prove to be inconclusive and disprove the possible existence of these seasonal anomalies on European stock markets.

OBJECTIVE OF THE STUDY

To identify the presence of the **Annual Effect in Indian Stock Market**

RESEARCH METHODOLOGY

The present study is analytical in nature. Historical data collected for the period ranging between 2009 and 2019.

FRAMEWORK OF ANALYSIS

The collected data have been analyzed by Returns, and Descriptive statistics

ANALYSIS AND INTERPRETATION

The following table tries to ascertain, Annual effect prevails in NSE Nifty and 12 sectoral indices.

Table 1
Annual Effect – NSE Nifty and Sectoral Indices

SECTOR	Mean	Std. Deviation	Variance	Skewness	Kurtosis	Shapiro-Wilk
Nifty	21.0445	35.33655	1248.671	-0.75	0.888	0.035
Auto	33.0728	63.91786	4085.493	1.565	4.036	0.002
Bank	26.5825	41.48963	1721.39	-0.675	-0.444	0.025
Energy	14.2105	39.52752	1562.425	0.672	1.081	0.001
Finance	28.5707	44.51141	1981.265	-0.566	-0.22	0.001
FMCG	22.8359	21.49991	462.246	-0.142	0.567	0.143
Media	23.6146	51.53544	2655.901	-0.663	-0.606	0.042
Metal	36.6325	87.17047	7598.691	1.11	1.085	0.002
Pharma	21.1032	24.49961	600.231	-0.573	0.035	0.000
Private banks	37.3595	55.13927	3040.339	-0.621	-0.833	0.029
PSU banks	20.8351	42.65545	1819.487	-0.384	-1.149	0.002
Realty	1.5916	59.27956	3514.066	0.017	-1.647	0.033

Source – Database collected from NSE web portal and computed.

High returns were noticed in the Private Banking sector (37.3595) and low returns were found in the Realty (1.5916). Relating the change, high volatility was noticed in the Metal sector (7598.691) and low volatility was seeming in the FMCG sector (462.246).

Result of the Skewness test discloses that negative value were noticed on the Sensex index (-.425), Banking sector (-.590), Consumer Durables sector (-.332), Consumer Goods sector (-0.084), Finance sector (-.353), Health Care (-.271) and Technology sector (-.668) returns, which implies that most of the Sensex index, banking sector, Consumer Durables sector, Consumer Goods, Finance, Health Care and Technology sector returns were fewer than the average yields. The other sector returns remained noticed positive Skewness, which implies that most of the other sectors returns were more than the average returns. The Kurtosis results of the NSE sector's annual returns were found leptokurtic on Auto sector (4.036), The other sector results were found platykurtic.

The calculated P value of the Shapiro-Wilk test is greater than 0.05 for, FMCG (.143), it is clearly proved that the data are normally scattered. Hence, there doesn't happen anomaly in the FMCG, sectors. The Calculated P value of the Shapiro-Wilk test of other sectors is less than 0.05, it is evidently showed that the data are not normally scattered. Hence, anomaly occurs on all other sectors.

SUGGESTIONS

- ❖ High returns are noticed at Private Banking, Metal and Auto sectors. Hence, investors may prefer to invest at Private Banking and Auto sector for longer period of time.
- ❖ NSE Nifty and 12 NSE sectoral indices. 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 publically 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.

CONCLUSION

The study raises queries on the EMH which states that stock prices are random and those investors cannot get anomalous profits using historical prices. The annual effect 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.

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