

Effects of Brexit on Indian Stock Market

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Abstract: Britain exit from the EU has shown shock through the global economy to India. After the announcement of historic referendum results, stock market points fell to its lowest. This present study aims to measure the extent of influence of BREXIT on Indian stock market. Furthermore, this study measures the long-term impact of BREXIT on shareholders wealth. In order to measure the impact of BREXIT on Indian stock market, this study considers ten Sensex stock price data. Event study methodology has been implemented to measure the shareholders wealth. This study finds that BREXIT has negatively influenced the share prices of companies listed in BSE Sensex. The shareholders have lost their money immediately after the announcement of results. This study also reveals that there is no impact of BREXIT on the shareholders wealth in the long run.

Keywords: BREXIT, UK, BSE Sensex, shareholders wealth, India.

INTRODUCTION

The European Union (EU) is distinctive union of 28 European member countries. EU is chiefly located in Europe. It was created after the Second World War in order to foster economic cooperation. European countries with EU are independent. The origin of EU traces from The European Coal and Steel Community (ECSC) and European Economic Community (EEC) formed by the six countries such as Belgium, Netherlands, Italy, Luxembourg, Germany and France in 1951 and 1958 respectively. Since then these communities have grown-up, the EU was established in 1993.

In a historic referendum, Britain people have voted for British Exit (BREXIT) from the EU on 23rd June, 2016. After the results of historic referendum, the pound hit low. The London Stock Market and other countries stock markets have suffered sudden losses. BREXIT has influenced nearly 23 Sensex stocks including Tata Steel Limited, Larsen & Toubro Limited, State Bank of India, Adani Ports & Special Economic Zone Ltd, Reliance Industries Limited, Tata Motors Limited, Axis Bank Ltd, ICICI Bank Ltd, Oil & Natural Gas Corporation Limited and Tata Consultancy Services Limited. This present study tries to find out the post-impact of BREXIT on Indian stock market.

OBJECTIVES

- To analyze cumulative average abnormal return and market adjusted cumulative average abnormal return after BREXIT announcement
- To study the influence of investors sentiment on bidder abnormal returns
- To check the impact of BREXIT announcement on Indian stock market

REVIEW OF LITERATURE

Glick, R., & Rose, A.K. (2016) estimated the influence of currency union on the trade and exports by using empirical gravity models. European Economic and Monetary Union (EMU) enhanced the exports by fifty percent. Moreno, B., & Pereira da Silva, P. (2016) have studied the influence of European Union Allowance (EUA) prices on stock market returns. This study has applied panel data approach and multifactor market model. This study finds that the influence is not constant in Phase II and III periods.

Blevins, et al. (2016) tried to find how other aspects affect entry mode decision. Findings of this study reveal that changes with the EU influences entry decisions. Michael Bergman, et al. (2016) constructed the new indices for EU-27 countries during the period between 1990 and 2012. This study has assessed whether the fiscal rules and good governance are institutional substitutes. Danbolt, et al. (2015) measured influence of investors sentiment on bidder abnormal returns. Status updates in Facebook

across 17 international markets are used as proxy. This study finds that bidder abnormal returns are influenced by the sentiments.

Jain.A., & Robbani. M. G. (2014) analysed cumulative average abnormal return and market adjusted cumulative average abnormal return around announcement of stock split during financial crisis (2008-11) and pre-financial crisis (2004-07). There is a positive influence of stock split announcement on shareholders wealth. Shah, P., & Arora, P. (2014) analysed the effects of M&A announcements during May – Sept 2013 in Asia-Pacific region on stock prices of acquirer and target firms. Study finds that the share prices of target firm have increased after M&A announcements. Weisz, et al. (2006) investigated the various determinants of material usage among European Union (EU)-15 states. This study is based on extended data from 1970 to 2001. Composition and the level of material consumption compared in EU-15 states.

RESEARCH METHODOLOGY

This study is fully based on secondary data. Ten BSE Sensex listed companies such as Tata Steel Limited, Larsen & Toubro Limited, State Bank of India, Adani Ports & Special Economic Zone Ltd, Reliance Industries Limited, Tata Motors Limited, Axis Bank Ltd, ICICI Bank Ltd, Oil & Natural Gas Corporation Limited and Tata Consultancy Services Limited. have been taken as a sample. In order to measure the impact of BREXIT on shareholders wealth, event study methodology has been employed. The announcement of historic referendum result i.e., on 24th June, 2016 is considered as announcement date. Shareholders wealth is calculated using the measures followed by Brown and Warner (1985). The assessment period is 256 days.

The event window ranges between -9 and +9 days. Paired samples t test is applied to measure the impact of BREXIT on share prices.

IMPACT OF BREXIT ON SHARES OF BSE SENSEX

The impact of BREXIT on selected share prices has been measured using paired samples t test. Table includes values of pre share price, post share price, difference in share price and its significant value. Pre share price indicates average price of shares 9 days before announcement of BREXIT, post share price refers to average price of shares 9 days after announcement of BREXIT.

Table 1: Impact of BREXIT on shares of BSE Sensex

S. No.	Company Name	Pre Share Price (1)	Post Share Price (2)	Difference (2-1)	Sig.
1	Adani Ports & Special Economic Zone Ltd	206.3	207.5	1.2	0.422
2	Axis Bank Ltd	525.0	532.8	7.8	0.056
3	ICICI Bank Ltd	241.3	240.2	-1.1	0.008
4	Larsen & Toubro Limited	1488.2	1520.5	32.4	0.189
5	Oil & Natural Gas Corporation Limited	214.4	220.9	6.5	0.225
6	Reliance Industries Limited	980.5	974.7	-5.9	0.067
7	State Bank of India	212.7	219.3	6.6	0.23
8	Tata Motors Limited	465.5	455.9	-9.6	0.007
9	Tata Steel Limited	330.0	320.7	-9.3	0.084
10	Tata Consultancy Services Limited	2601.8	2482.4	-119.4	0.168
11	Overall (10 Companies - Avg.)	726.6	717.5	-9.1	0.025

Table displays the average price of shares 9 days before and after announcement of BREXIT. This section tries to find out the impact of BREXIT result announcement on shareholders wealth of 10 BSE listed companies. Significant value suggests that there is a significant increase in the share price in case of Axis Bank Ltd at five percent level while there is significant decrease in the share price of ICICI Bank Ltd and Tata Motors Limited at one percent level. Table also reveals that there is significant decrease in the overall share prices due to BREXIT. It is inferred that BREXIT exerted significant impact on shares of BSE Sensex.

EVENT WINDOW ANALYSIS

Shareholders wealth has been measured using Abnormal Returns (AR) which is the difference between daily returns and expected (average) returns. Event window has been categorized into 3 periods

such as -1 to +1 days, -4 to +4 days and -9 to +9 days. Time periods of event window referred as immediate, short-run and long-run. Day 0 refers to date of BREXIT results announcement.

Table 2: Event Window Analysis

S. No.	Company Name	Day 0	-1 to +1 days	-4 to +4 days	-9 to +9 days
1.	Adani Ports & Special Economic Zone Ltd	-2.44	-0.71	1.04	5.06
2.	Axis Bank Ltd	-3.06	-0.25	1.44	1.21
3.	ICICI Bank Ltd	-4.00	-2.20	1.46	-2.97
4.	Larsen & Toubro Limited	-4.22	-1.33	1.67	3.93
5.	Oil & Natural Gas Corporation Limited	-3.65	-3.38	4.00	5.36
6.	Reliance Industries Limited	-3.14	-2.61	-0.72	-0.30
7.	State Bank of India	-2.74	2.37	3.35	7.72
8.	Tata Motors Limited	-8.01	-4.86	-0.48	2.04
9.	Tata Steel Limited	-6.41	-6.66	-1.20	-5.30
10.	Tata Consultancy Services Limited	-2.78	-6.51	-1.89	-5.21
11.	Overall (10 Companies)	-3.70	-3.71	-0.05	-0.50

Table displays the value of cumulative abnormal returns. It is clear from the table that all the ten companies' shareholders have lost their invested money due to announcement of BREXIT. Tata Motors Limited derives majority of its revenue from Jaguar Land Rover (JLR) – UK subsidiary. After the announcement, share price of Tata Motors Limited has fallen down sharply in anticipation of valuation losses. Shareholders of Tata Motors Limited have lost 8.01 percent of abnormal returns. Majority of companies' CAR displays an increasing trend from day 0 to -9 to +9 days. It is inferred from the table that there is no impact of BREXIT on shareholders wealth in the long run.

CONCLUSION

In a stock market, fundamental factors such as Earning per Share (EPS) and Price-Earnings Ratio (P/E Ratio) primarily influence share prices. Economic factors such as interest rates, political and economic shocks, inflation and value of currencies also move stock prices. The psychology of investors influences share prices to certain extent. Furthermore, news related to company directly influences its share price in short-run. This present study aims to measure the extent of influence of BREXIT shock on Indian stock market. Ten companies share prices have been taken for the analysis. Study revealed that announcement of British Exit from the EU negatively influences Indian stock prices in the short-run. This study also finds that BREXIT has not exerted any impact on shareholders wealth in the long-run.

BIBLIOGRAPHY

- [1] Blevins, D.P., Moschieri, C., Pinkham, B.C., & Ragozzino, R. (2016). Institutional changes within the European Union: How global cities and regional integration affect MNE entry decisions. *Journal of World Business*, 51(2), 319–330.
- [2] Brown, S. J., & Warner, J. B. (1985). Using daily stock returns. *Journal of Financial Economics*, 14, 3-31.
- [3] Danbolt, J., Siganos, A., & Vagenas-Nanos, E. (2015). Investor sentiment and bidder announcement abnormal returns. *Journal of Corporate Finance*, 33, 164–179.
- [4] Glick, R., & Rose, A.K. (2016). Currency unions and trade: A post-EMU reassessment. *European Economic Review*, 89, 78–91.
- [5] Jain, A., & Robbani, M. G. (2014). The effect of stock split announcements on abnormal returns during a financial crisis. *Journal of Finance and Accountancy*, 15, 1-10.
- [6] Michael Bergman, U., Hutchison, M. M., & Hougaard Jensen, S. E. (2016). Promoting sustainable public finances in the European Union: The role of fiscal rules and government efficiency. *European Journal of Political Economy*, 44, 1–19.
- [7] Moreno, B., & Pereira da Silva, P. (2016). How do Spanish polluting sectors' stock market returns react to European Union allowances prices? A panel data approach. *Energy*, 103, 240–250.
- [8] Shah, P., & Arora, P. (2014). M&A Announcements and Their Effect on Return to Shareholders: An Event Study. *Accounting and Finance Research*, 3(2), 170-190.
- [9] Weisz, H., Krausmann, F., Amann, C., Eisenmenger, N., Erb, K-H., Hubacek, K., & Fischer-Kowalski, M. (2006). The physical economy of the European Union: Cross-country comparison and determinants of material consumption. *Ecological Economics*, 58(4), 676–698.