Impact Of Implimentation Of Gst On Indian Stock Market: A Study With Reference To Companies Of Selected Industries

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Abstract: *Goods and Services Tax (GST) in India is proposed to be the maiden reform (and not an amendment) in the existing indirect taxation structure. The proposed reform through introduction of GST would bring about a seachangein the legal provisions for imposing duty/tax liability in stages ofmanufacture, sale (inter-state/intra-state) of goods, rendering of services and shall stand replaced with the place of supply, where the final consumption/enjoyment and use of goods/services were made. Goods and Services Tax (GST) is an indirect tax which was introduced in India on 1 July 2017 and was applicable throughout India which replaced multiple cascading taxes levied by the central and state governments. Every economic decisions of the GOI have an immediate impact on the price behavior of the stock market. Hence, in the current study an attempt to investigate the impact of implementation of the GST in India on 1July, 2017 on to the price behavior of Indian stock market.*
Keywords: *Abnormal returns, GST, stock market, tax.*

I.   Introduction

Taxes that the governments impose on its people and businesses would be the major source of revenue for any country around the world. India is not an exception to it. India too earns revenue from taxes, both direct and indirect taxes such as, Income Tax, VAT, Service Tax, customs and excise duty among others. Indian Economy is characterised by the presence of a distorted indirect tax structure leading to the biggest obstacle/hindrance to investors/ industries for doing business in India. Hence, it shall be hampering the growth of the industries and contradict the National Program of 'Make in India'. Efforts undertaken by the Government of India are aimed to increase the degree of trust-worthiness for investors on Indian socioeconomicscenario.In order to create an investor-friendly tax-environment, there is a need for tax reforms in India.Goods and Services Tax (GST) in India is proposed to be the maiden reform (and not an amendment) in the existing indirect taxation structure.

The proposed GST is a long pending and much awaited tax reform which India is hoped to iron out the wrinkles in the existing indirect taxation system. This comprehensive tax policy is expected to be one of the most important contributors to the India growth story. The proposed reform through introduction of GST would bring about a seachangein the legal provisions for imposing duty/tax liability in stages ofmanufacture, sale (inter-state/intra-state) of goods, rendering of services and shall stand replaced with the place of supply, where the final consumption/enjoyment and use of goods/services were made. Goods and Services Tax (GST) is an indirect tax which was introduced in India on 1 July 2017 and was applicable throughout India which replaced multiple cascading taxes levied by the central and state governments. It was introduced as The Constitution (One Hundred and First Amendment) following the passage of Constitution 122nd Amendment Act Bill. Every economic decisions of the GOI have an immediate impact on the price behavior of the stock market. Hence, in the current study an attempt to investigate the impact of implementation of the GST in India on 1July, 2017 on to the Indian stock market.

II.   Objectives Of The Study

The main objective of the study is to find out the impact of the implementation of GST on Indian stock market. In order to fulfill the main objective, the following specific objectives have been set:
- To study the reaction of Automobile companies for the GST implementation
- To investigate the behavior of FMCG companies for the implementation of GST
- To understand the reaction of IT companies for the introduction of GST
- To find out the behavior of NBFCs for introducing the GST
- To study the reaction of Cement companies for implementing GST

III. Hypothesis

H$_0$: There is no significant difference between the abnormal returns of stocks between pre and post implementation period of GST in India

H$_1$: There is a significant difference between the abnormal returns of stocks between pre and post implementation period of GST in India

IV. Scope Of The Study

It is an event study and the event under study is implementation of GST in India. the date of event (July 1, 2017) need to be taken as the date of the event. Since July 1st (Saturday) and July 2nd(Sunday), 2017 are the holidays for the stock market, July 3rd, 2017 is being considered as the date of the event. The event window is 61 days covering 30 working days before the event and 30 working days after the event date and the day of event. The estimation window is 250 working days before the event window. The industries covered in the study are Automobile Industry, FMCG Industry, IT Industry, NBFCs Industry and Cement Industry.

V. Research Methodology

The entire study is based on secondary data extracted from sources like books and websites. The stock prices of the companies and SENSEX values are collected from money control website. The sample size is FIVE companies from each industry selected randomly. There are FIVE industries under study. The sampling framework is presented in the following table:

AUTOMOBILE INDUSTRY	FMCG INDUSTRY	
1. Tata Motors Ltd.	1. Asian Paints Ltd	
2. Mahindra & Mahindra Ltd.	2. ITC	
3. Maruti Suzuki India Ltd.	3. Godrej Consumer Products	
4. Hero MotoCorp Ltd.	4. Dabur India Ltd.	
5. Bajaj Auto	5. Emami India	
IT INDUSTRY	NBFC INDUSTRY	
1. Tata Consultancy Services	1. Bajaj Finance	
2. Infosys	2. Mahindra & Mahindra Financial Services Limited	
3. Wipro		
4. HCL Technology	3. Tata Investment Corporation Limited	
5. Oracle Financial Services	4. Power Finance Corporation Limited	
	5. Sundaram Finance Limited	
CEMENT INDUSTRY		
1. ACC Limited	4. Birla Corporation Ltd	
2. Ultratech	5. Shree Cement Ltd	
3. Ambuja Cement Ltd		

Source: Author's Compilation

VI. Techniques Of Analysis

Daily Returns:

Daily returns for each company have been computed by using the following model:

$$R_i = Log\left(\frac{P_1}{P_0}\right)$$

Where, P$_1$ = Closing price of the stock and P$_0$ is the opening price of the stock

$$R_m = Log\left(\frac{MP_1}{MP_0}\right)$$

MP$_1$ = Closing price of the Sensex and MP$_0$ is the opening price of the Sensex

Average Daily Returns:

Average Daily returns have been computed as follows: $ADR = \frac{\sum_{t=1}^{N} DR}{N}$

Daily expected return

$$E\ (R_{it}) = \square + \square \times R_m + \square_t$$

In the Equation **E(R)** is the expected return of a particular sock on day t,

$\square$ and $\square$ are calculated as follows

$$\square = \frac{n \sum xy - \sum x \times \sum y}{n \sum x^2 - \sum (x^2)}$$

$$\alpha = \bar{y} - \beta \bar{x}$$

Abnormal returns

Daily Abnormal return on a particular day *t* is the excess of the average actual return on the day t over the expected return on that day.

$$AR = R_{it} - E(R_{it})$$

Where, **R_{it}** is the actual average daily return at time t, and **$E(R_{it})$** is theexpected return on the same day.

The study period used in this analysis is a 61working days. In this, the day of the announcement/ implementation of the event is designated as 0. Trading days prior to the implementation are numbered event days -1, -2 and so on. The event days following the implementation are numbered +1, +2 and so on. The maximum time involved in this study is 30 pre-announcement days to 30 post implementation days.

VII.   Data Analysis And Interpretation

Table 1 presents the daily abnormal return, its T value and P value for the days of event window of Automobile Industry. It is fact from table that there are 12 positive abnormal returns and 18 negative abnormal returns during the pre-implementation period of GST. Similarly there are 13 positive abnormal returns and 17 negative abnormal returns during the post-implementation period of GST. The abnormal return on the date of the event is positive. The T test is conducted at 5 percent level of significance to test the significance of abnormal return of each day. According to the test result, none of P value is lesser than the level of significance of 5 percent and hence none of the abnormal return is significant.

Daily abnormal return, its T value and P value for the days of event window of FMCG Industry is shown in Table 2. It can be observed in the table that there are 15 positive abnormal returns and 15 negative abnormal returns during the pre-implementation period of GST. Similarly there are 13 positive abnormal returns and 17 negative abnormal returns during the post-implementation period of GST. The abnormal return on the day of the event is positive. The T test is conducted at 5 percent level of significance to test the significance of abnormal return of each day. According to the test result, except of +15 and +21 day abnormal returns, none of the other abnormal returns are significant at 5 percent level of significance.

Table 1: Daily Abnormal Return, T value and P value for Automobile Industry

Day	Abnormal return	T Value	P Value	Day	Abnormal return	T Value	P Value
-30	-0.47774	-0.58037	0.562187	0	0.897818	1.090706	0.276457
-29	-0.79366	-0.96417	0.335896	1	-1.09044	-1.32471	0.186481
-28	0.021141	0.025684	0.97953	2	0.406648	0.494013	0.621733
-27	-0.73079	-0.88779	0.375511	3	0.329817	0.400675	0.689003
-26	1.274922	1.548827	0.122693	4	-0.14438	-0.1754	0.860906
-25	0.686766	0.834312	0.404905	5	0.370817	0.450484	0.652754
-24	0.825908	1.003347	0.316667	6	1.130509	1.373389	0.170867
-23	0.440402	0.535018	0.593115	7	-0.1109	-0.13473	0.892936
-22	0.522896	0.635236	0.525858	8	0.102031	0.123952	0.901454
-21	-0.26685	-0.32418	0.746074	9	-0.0453	-0.05503	0.956159
-20	0.404745	0.491701	0.623364	10	0.163146	0.198196	0.843053
-19	0.111103	0.134973	0.892743	11	0.487583	0.592336	0.554163
-18	-1.1845	-1.43898	0.151411	12	0.273233	0.331935	0.740218
-17	0.455061	0.552827	0.580878	13	-0.26956	-0.32747	0.743586
-16	-0.3747	-0.4552	0.64936	14	-0.05402	-0.06562	0.947731
-15	0.768298	0.93336	0.351538	15	0.253856	0.308395	0.75804
-14	-0.82667	-1.00427	0.316222	16	-0.39737	-0.48274	0.629703
-13	-0.57113	-0.69383	0.488437	17	0.505788	0.614452	0.539478
-12	0.056611	0.068774	0.945225	18	-0.82718	-1.0049	0.315923
-11	-0.6791	-0.825	0.410162	19	-0.4525	-0.54972	0.583004
-10	-0.24334	-0.29561	0.767771	20	0.092929	0.112894	0.910206
-9	-0.10723	-0.13027	0.896457	21	1.05233	1.278413	0.202294
-8	0.129697	0.157561	0.87493	22	-0.50428	-0.61262	0.540686
-7	-0.38842	-0.47187	0.637436	23	-0.25877	-0.31436	0.753511
-6	-0.02306	-0.02801	0.977677	24	0.98991	1.202584	0.23028
-5	-1.25188	-1.52084	0.129569	25	-0.25626	-0.31132	0.755821
-4	-0.53381	-0.6485	0.517259	26	-0.50908	-0.61846	0.53684
-3	-0.03364	-0.04087	0.967433	27	-1.23838	-1.50443	0.133738
-2	-0.34388	-0.41775	0.676486	28	-1.1252	-1.36694	0.172876
-1	-0.04912	-0.05968	0.95246	29	-0.81355	-0.98834	0.323947
0	0.897818	1.090706	0.276457	30	0.670416	0.814449	0.416166

Source: Compiled from Money Control website

Table 3 presents the daily abnormal return, its T value and P value for the days of event window of IT Industry. It shows the fact that there are 16 positive abnormal returns and 14 negative abnormal returns during the pre-implementation period of GST. Similarly there are 17 positive abnormal returns and 13 negative abnormal returns during the post-implementation period of GST. The abnormal return on the date of the event is positive. The T test is conducted at 5 percent level of significance to test the significance of abnormal return of each day. Accordingto the test result, except the p value of +5 day, none of the other p values are lesser than the level of significance of 5 percent and thus all these abnormal returns are insignificant.

Table 2: Daily Abnormal Return, T value and P value for companies of FMCG Industry

Day	Abnormal return	T Value	P Value	Day	Abnormal return	T Value	P Value
-30	0.362789	0.419824	0.674976	0	0.901744	1.04351	0.297724
-29	-0.09579	-0.11085	0.911828	1	-0.74438	-0.8614	0.389845
-28	-1.20442	-1.39377	0.164628	2	0.278394	0.322161	0.747601
-27	-0.6072	-0.70266	0.482923	3	-0.0308	-0.03564	0.971599
-26	0.691919	0.800697	0.42407	4	-0.90113	-1.0428	0.298052
-25	1.464014	1.694176	0.091482	5	0.48496	0.561202	0.575165
-24	1.497396	1.732805	0.084368	6	-0.25856	-0.29921	0.765033
-23	0.480893	0.556496	0.578372	7	-0.00333	-0.00386	0.996925
-22	-0.55257	-0.63944	0.523125	8	0.640317	0.740982	0.459402
-21	0.962063	1.113311	0.266649	9	-0.20353	-0.23553	0.813992
-20	0.405891	0.469702	0.638979	10	-0.77104	-0.89226	0.373117
-19	0.336203	0.389059	0.697565	11	-0.44101	-0.51034	0.610263
-18	-1.18959	-1.3766	0.169871	12	0.899196	1.040561	0.299089
-17	0.819528	0.948368	0.343862	13	-0.45606	-0.52775	0.59814
-16	-0.52361	-0.60592	0.545118	14	0.272149	0.314934	0.753075
-15	0.211308	0.244529	0.807023	15	2.117432*	2.450319	0.014962
-14	-0.27418	-0.31728	0.751295	16	-0.37389	-0.43267	0.665627
-13	0.396784	0.459163	0.646518	17	0.841073	0.973301	0.331348
-12	-0.71935	-0.83244	0.405959	18	0.923451	1.068629	0.286272
-11	-0.39059	-0.45199	0.651668	19	-0.97163	-1.12438	0.261933
-10	-0.09321	-0.10786	0.914194	20	-1.00868	-1.16726	0.244222
-9	0.660596	0.76445	0.445323	21	-2.54157*	-2.94113	0.003578
-8	-0.14504	-0.16784	0.866846	22	-0.81454	-0.9426	0.3468
-7	0.718345	0.831278	0.406613	23	1.541183	1.783476	0.075727
-6	-0.48581	-0.56219	0.574493	24	0.38521	0.44577	0.656151
-5	-0.65766	-0.76105	0.447346	25	0.300154	0.347341	0.728628
-4	-0.5074	-0.58717	0.557565	26	-1.33064	-1.53983	0.124872
-3	-1.18749	-1.37418	0.170622	27	-0.8281	-0.95828	0.338849
-2	0.648706	0.750691	0.453548	28	-1.25474	-1.452	0.147759
-1	1.576802	1.824695	0.069245	29	0.468329	0.541956	0.588333

Source: Compiled from Money Control website
Note: * significant at 95 percent confidence level

Table 3: Daily Abnormal Return, T value and P value for companies of IT Industry

Day	Abnormal return	T Value	P Value	Day	Abnormal return	T Value	P Value
-30	-0.82028	-0.89253	0.372969	0	-0.4202	-0.45721	0.647919
-29	0.049528	0.053891	0.957065	1	0.174795	0.190191	0.849314
-28	0.110322	0.12004	0.904549	2	-0.1508	-0.16409	0.869796
-27	-0.10191	-0.11089	0.911795	3	0.161737	0.175983	0.86045
-26	1.386673	1.508815	0.132614	4	-0.28969	-0.31521	0.752868
-25	0.27713	0.30154	0.763254	5	2.839628*	3.089751	0.002231
-24	-0.25131	-0.27345	0.784733	6	0.683038	0.743202	0.45806
-23	0.354522	0.38575	0.700011	7	-0.11507	-0.12521	0.900461
-22	0.082708	0.089993	0.928365	8	0.477082	0.519105	0.604149
-21	0.814363	0.886095	0.376421	9	-0.99745	-1.08531	0.278833
-20	0.639809	0.696165	0.486975	10	0.883723	0.961565	0.337201
-19	0.805894	0.876879	0.381397	11	0.647724	0.704777	0.481608
-18	1.205755	1.311962	0.190741	12	0.521192	0.5671	0.571157
-17	-1.70152	-1.85139	0.065297	13	-0.8637	-0.93978	0.348243
-16	-0.97103	-1.05656	0.291736	14	1.401583	1.525039	0.128518
-15	-0.20661	-0.22481	0.822314	15	0.638081	0.694285	0.488151
-14	0.100913	0.109802	0.912655	16	-0.04719	-0.05135	0.959091
-13	-0.59746	-0.65009	0.516234	17	-0.161	-0.17518	0.861081
-12	0.003689	0.004014	0.9968	18	-1.42283	-1.54815	0.122855
-11	-0.55929	-0.60856	0.543372	19	0.370757	0.403414	0.68699
-10	-0.59573	-0.6482	0.517451	20	0.766395	0.833901	0.405136
-9	-0.29818	-0.32444	0.745876	21	0.041261	0.044895	0.964227
-8	0.63789	0.694078	0.488281	22	-0.63406	-0.68991	0.490894
-7	0.003048	0.003317	0.997356	23	-0.45808	-0.49843	0.618623
-6	-0.12135	-0.13203	0.895064	24	0.592838	0.645057	0.519484
-5	-0.39179	-0.4263	0.670254	25	-1.07685	-1.1717	0.242437
-4	-1.40495	-1.5287	0.127607	26	-0.58162	-0.63286	0.527409
-3	0.510677	0.55566	0.578943	27	0.080648	0.087752	0.930144
-2	-0.12786	-0.13912	0.889467	28	0.166526	0.181194	0.856363
-1	0.715013	0.777993	0.437312	29	0.21337	0.232165	0.816601
0	-0.4202	-0.45721	0.647919	30	-0.10632	-0.11569	0.907994

Source: Compiled from Money Control website
Note: * significant at 95 percent confidence level

The daily abnormal return, its T value and P value for the days of event window of NBFC Industry is presented in Table 4. As per the table it is clear that there are 10 positive abnormal returns and 20 negative abnormal returns during the pre-implementation period of GST. Similarly there are 14 positive abnormal returns and 16 negative abnormal returns during the post-implementation period of GST. The abnormal return on the date of the event is positive. The T test is conducted at 5 percent level of significance to test the significance of abnormal return of each day. According to the test result, except the p value of day -29, -23, +25 and +28, none of the other p values are lesser than the level of significance of 5 percent and hence all these abnormal returns are insignificant.

Table 4: Daily Abnormal Return, T value and P value for companies of NBFCs

Day	Abnormal return	T Value	P Value	Day	Abnormal return	T Value	P Value
-30	-1.41482	-1.39118	0.165411	0	-0.30901	-0.30385	0.761497
-29	-2.4225*	-2.38203	0.017969	1	-0.31123	-0.30603	0.759837
-28	-0.37183	-0.36562	0.714961	2	0.681454	0.670068	0.503435
-27	-1.44678	-1.42261	0.156101	3	1.198916	1.178885	0.239569
-26	-0.89337	-0.87845	0.380547	4	-0.53395	-0.52502	0.600033
-25	1.740177	1.711103	0.088308	5	-0.76468	-0.7519	0.452821
-24	-0.93897	-0.92328	0.356755	6	-0.62082	-0.61044	0.542124
-23	2.363753*	2.324259	0.020917	7	1.016564	0.999579	0.318485
-22	1.737735	1.708701	0.088752	8	0.082326	0.080951	0.935546
-21	-0.17172	-0.16885	0.86605	9	-0.03974	-0.03907	0.968864
-20	1.215013	1.194713	0.233336	10	0.639594	0.628907	0.529986
-19	-0.71451	-0.70257	0.482981	11	-1.61506	-1.58808	0.113538
-18	-0.76582	-0.75303	0.452146	12	0.983025	0.966601	0.334682
-17	-0.45576	-0.44815	0.654436	13	1.180873	1.161143	0.246695
-16	-0.03105	-0.03054	0.975665	14	0.534529	0.525598	0.599635
-15	-0.16823	-0.16542	0.868751	15	-0.269	-0.26451	0.791607
-14	-0.64892	-0.63807	0.524011	16	1.518539	1.493167	0.136659
-13	0.140874	0.13852	0.889941	17	-0.19919	-0.19586	0.844876
-12	0.750919	0.738372	0.460984	18	-0.16446	-0.16171	0.871666
-11	0.873376	0.858784	0.391286	19	1.699326	1.670934	0.095991
-10	-0.2746	-0.27002	0.787372	20	-0.32706	-0.3216	0.748026
-9	-0.21184	-0.2083	0.835162	21	-0.63971	-0.62903	0.529909
-8	1.364663	1.341862	0.180863	22	-0.83417	-0.82023	0.412867
-7	-1.02811	-1.01093	0.313031	23	0.772269	0.759366	0.448352
-6	-0.66786	-0.6567	0.511977	24	1.84532	1.814488	0.070806
-5	-1.4939	-1.46894	0.14311	25	2.151738*	2.115787	0.035356
-4	-0.67097	-0.65976	0.510401	26	-0.10465	-0.1029	0.918123
-3	1.452581	1.428312	0.154455	27	-1.75964	-1.73024	0.084827
-2	-0.22467	-0.22092	0.825337	28	-3.46694*	-3.40901	0.00076
-1	1.706334	1.677825	0.094636	29	1.218586	1.198226	0.231968
0	-0.30901	-0.30385	0.761497	30	0.605424	0.595308	0.552178

Source: Compiled from Money Control website
Note: * significant at 95 percent confidence level

Table 5: Daily Abnormal Return, T value and P value for companies of Cement Industry

Day	Abnormal return	T Value	P Value	Day	Abnormal return	T Value	P Value
-30	-0.21258	-0.2112	0.832901	0	0.817538	0.812258	0.41742
-29	-2.49109*	-2.475	0.01399	1	-0.4812	-0.4781	0.633001
-28	-1.12519	-1.11792	0.264677	2	0.732894	0.72816	0.4672
-27	-1.61238	-1.60196	0.110432	3	-0.17143	-0.17033	0.864892
-26	0.20493	0.203606	0.838828	4	0.340738	0.338537	0.735244
-25	-0.59251	-0.58869	0.556605	5	0.211667	0.2103	0.833606
-24	-0.51621	-0.51288	0.608492	6	0.331394	0.329253	0.742241
-23	1.579867	1.569663	0.117763	7	0.749599	0.744758	0.457121
-22	0.544039	0.540525	0.589318	8	0.926362	0.920379	0.358266
-21	0.590824	0.587008	0.55773	9	0.25108	0.249458	0.803212
-20	-0.12825	-0.12742	0.898711	10	0.193309	0.19206	0.847852
-19	0.173665	0.172543	0.863151	11	-0.34995	-0.34769	0.728366
-18	-1.32394	-1.31539	0.18959	12	-1.77814	-1.76665	0.078512
-17	0.137873	0.136983	0.891155	13	-0.76527	-0.76033	0.447779
-16	-0.51095	-0.50765	0.612148	14	-0.19976	-0.19847	0.842842
-15	0.350092	0.347831	0.728261	15	-0.98928	-0.98289	0.326614
-14	-0.26583	-0.26411	0.791912	16	-0.88579	-0.88007	0.37967

-13	0.027247	0.027071	0.978425	17		-1.44111	-1.43181	0.153453
-12	-0.6879	-0.68345	0.494955	18		0.302606	0.300652	0.763931
-11	0.651766	0.647557	0.517868	19		-0.36726	-0.36489	0.715504
-10	0.584842	0.581065	0.561722	20		0.572651	0.568952	0.569902
-9	-1.3097	-1.30124	0.194379	21		-0.39151	-0.38898	0.697624
-8	0.209015	0.207665	0.83566	22		0.941886	0.935802	0.350282
-7	-0.67136	-0.66703	0.505373	23		1.372242	1.363378	0.173995
-6	-0.00714	-0.00709	0.994346	24		-0.02871	-0.02853	0.977263
-5	-0.67839	-0.67401	0.500929	25		-0.10712	-0.10643	0.91533
-4	-2.01425*	-2.00124	0.046452	26		0.449156	0.446255	0.655801
-3	1.150124	1.142695	0.254263	27		0.171334	0.170227	0.86497
-2	-0.05363	-0.05328	0.957549	28		-0.99309	-0.98667	0.32476
-1	-0.06154	-0.06114	0.951297	29		0.849148	0.843663	0.399667
0	0.817538	0.812258	0.41742	30		0.147133	0.146182	0.883896

Source: Compiled from Money Control website
Note: * significant at 95 percent confidence level

The daily abnormal return, its T value and P value for the days of event window of NBFC Industry is presented in Table 4. As per the table it is clear that there are 10 positive abnormal returns and 20 negative abnormal returns during the pre-implementation period of GST. Similarly there are 14 positive abnormal returns and 16 negative abnormal returns during the post-implementation period of GST. The abnormal return on the date of the event is positive. The T test is conducted at 5 percent level of significance to test the significance of abnormal return of each day. According to the test result, except the p value of day -23, +25 and +28, none of the other p values are lesser than the level of significance of 5 percent and hence all these abnormal returns are insignificant.

VIII. Testing Of Hypothesis

The hypothesis framed in the study is being tested here by using One Way ANOVA test. The result is shown in the following table.

H_0: There is no significant difference between the abnormal returns of stocks between pre and post implementation period of GST in India

H_1: There is a significant difference between the abnormal returns of stocks between pre and post implementation period of GST in India

Table 6: One Way ANOVA test result

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Automobile Industry						
Between Groups	0.061044	1	0.061044	0.161799	0.688984	4.006873
Within Groups	21.88228	58	0.377281			
FMCG Industry						
Between Groups	0.576287	1	0.576287	0.760096	0.386893	4.006873
Within Groups	43.97422	58	0.758176			
IT Industry						
Between Groups	0.294988	1	0.294988	0.506427	0.479542	4.006873
Within Groups	33.78429	58	0.582488			
NBFC Industry						
Between Groups	0.630173	1	0.630173	0.453381	0.503408	4.006873
Within Groups	80.61662	58	1.389942			
Cement Industry						
Between Groups	0.975915	1	0.975915	1.447412	0.233832	4.006873
Within Groups	39.10641	58	0.674248			

Source: Author's Compilation

One Way ANOVA test is conducted for the pre and post GST implementation abnormal returns of all the five industries are calculated and shown in Table 6. The test is conducted at 5 percent level of significance. The F statistic for Automobile industry is 0.161799, FMCG industry 0.760096, IT industry 0.506427, NBFC industry 0.453381 and for Cement industry it is 1.447412. The critical value for 5% level of significance is 4.006873. Since the calculated F values are lesser than the F critical, the hypothesis need to be accepted. Hence, there is no significant difference in the pre and post implementation abnormal returns.

IX. Findings And Conclusion

The study is conducted to find out the impact of implementation of GST on Indian stock market. It is found from the study that none of the abnormal returns under Automobile Industry are significant. It indicates that the GST implementation had no significant impact of the stock price movement of the Automobile Companies.

Under FMCG Industry, except for day +15 and +21, none of the other abnormal returns are significant at 95 percent confidence level. Here also it was found that the impact of the GST implementation is insignificant.

For IT industry, except the p value of +5 day, none of the other p values are lesser than 5 percent level of significance and hence it is concluded that the GST implementation had no significant impact on the stock price movement of the companies of IT industry.

Even under NBFC industry, except the p value of day -29, -23, +25 and +28, none of the other p values are lesser than the level of significance at 5 percent and hence all these abnormal returns are insignificant Under Cement Industry, the p value of day -23, +25 and +28 are significant and none of the other p values are lesser than the level of significance of 5 percent and hence all these abnormal returns are insignificant

The result of the hypothesis tested shows the fact that the Calculated F values for all the Industries under study are lesser than the critical value (4.006873) at 5 percent level of significance. Thus the hypothesis that there is no significant difference between the abnormal returns of stocks between pre and post implementation period of GST in India is accepted.

Finally it is concluded that even though GST is one of the major indirect tax reforms that has been implemented on 1st July, 2017, failed to have a significant impact on the Indian stock market for period under study. It would have an impact on the stock market in the long run but not in the short run.

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