

Steel Industry Prices and Index Movement - Correlation Analysis

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Abstract: Steel industry in India play a vital role in construction of infrastructural facilities created by the both state government and / or the central government for its offices, public utilities, canals, dams, roads, etc., and the private also requires steel for its establishments includes houses, offices, facilities, etc.. The researcher made an attempt to identify the relationship associated between / among the select steel companies share prices with the NSE Index Viz., Nifty using correlation analysis and the suitable suggestions were made based on the findings of the study.

Keywords: Steel industry, Construction, Infrastructure, Correlation, Share

Introduction:

Steel industry has a strong potential in India and it posters a good progress in terms of profit earnings and distribution of profits in terms of dividend and more to its industry. At this juncture, the researcher made an attempt to identify top three companies under steel (large) industry based on its net profit earned during the last financial year 2016-2017 and the pertained data were collected from the official website of the NSE for the three months period from 16.08.2017 to 15.11.2017.

Objectives of the Study:

The researcher identified the following objectives of the study, are;

1. To identify the steel companies based on net profit earned during the last financial year (2016-17).
2. To study the movements of select steel companies share prices, and Nifty 50 during the study period viz., 16.08.2017 to 15.11.2017 (Three months period).
3. To analyse the level of relationship associated between select steel (large) companies share prices with Nifty Index.
4. To offer better suggestions to the investors based on the findings of the study.

Methodology:

Systematic data collection method and analysis of collected data provides research validity. Select steel companies share price data was collected from the official website of NSE India. The details of the steel companies and its net profit details are given below:

TABLE NO. – I
TOP THREE STEEL COMPANIES (LARGE)
(On the basis of Net Profit)

S. No.	Name of the Steel Company	Net Profit (INR in Cr.)	Rank
1	JSW Steels	3,576.54	I
2	Tata Steels	3,444.55	II
3	Jindal (Hisar)	218.02	III

Source: Money Control.com

Data Analysis:

In this recent study, the researcher used partial correlation analysis to analysis the data collected for the purpose of the study. Partial correlation is used to estimate the relationship associated between selected variables of the study. In this study, the researcher used the following variables viz., closing price data of the select steel companies listed in the NSE of India and closing of Nifty 50 during the study period.

TABLE NO. – II
CORRELATION (r) BETWEEN
SELECT STEEL COMPANIES (LARGE) AND NIFTY 50

S. No.	Name of the Steel Company	Calculated r Value	Remarks
1	JSW Steels	0.744	Positive r
2	Tata Steels	0.879	Positive r
3	Jindal (Hisar)	0.901	Positive r

Source: Primary Data

Results and Discussions:

While analysing the relationship associated between Select steel companies share prices Nifty 50, it is identified from the analysis that, Jindal (Hisar) has the highest (90.10%) relationship with the changes in Nifty 50 and it is followed by Tata steels (87.90%) and JSW steels (74.40%) respectively.

Conclusion:

It is concluded that, all the select steel companies has the highest positive correlation with Nifty 50. It indicates that, Index of NSE of India - Nifty 50 increases equity share price of the select steel companies viz., JSW Steels, Tata Steels, and Jindal (Hisar) increases and vice-versa. Hence it is advised to the investors that, the investors may take their decisions towards investments according to the changes happening between the selected variables.

References:

Book References:

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- [2]. Boot, John C.G., and Cox, Edwin B. “Statistical Analysis for Managerial Decisions”, McGraw-Hill Publishing Co. Ltd., (International Student Edition), New Delhi, 2nd Edition, 1979.

Web References:

- [1]. www.nseindia.com
- [2]. www.moneycontrol.com

ANNEXURE
SELECT STEEL COMPANIES EQUITY PRICE AND NIFTY 50
(Period from 16.08.2017 to 15.11.2017)

Date	JSW	Tata Steels	Jindal (Hisar)	Nifty 50
16-Aug-17	237.75	631.2	138.4	9897.3
17-Aug-17	234.6	625.4	139.85	9904.15
18-Aug-17	237.05	625.65	136.3	9837.4
21-Aug-17	233.7	621.55	131.7	9754.35
22-Aug-17	231.95	619.6	129	9765.55
23-Aug-17	239.75	634.6	133.1	9852.5
24-Aug-17	246.05	639	135.15	9857.05
28-Aug-17	244.5	635.85	135.85	9912.8
29-Aug-17	246.9	630.2	131.4	9796.05
30-Aug-17	259.05	638.65	137.15	9884.4
31-Aug-17	254.4	638.05	137.1	9917.9
01-Sep-17	256.65	651.2	142.7	9974.4
04-Sep-17	254.8	646.55	139.75	9912.85
05-Sep-17	256.25	652.1	140.3	9952.2
06-Sep-17	263.1	653	141.5	9916.2

07-Sep-17	264.1	652.8	141.75	9929.9
08-Sep-17	263.45	655.4	141.95	9934.8
11-Sep-17	265.9	662.6	143.15	10006.05
12-Sep-17	269.7	682.9	145.8	10093.05
13-Sep-17	264.15	679.65	141.95	10079.3
14-Sep-17	265.7	677.7	147.55	10086.6
15-Sep-17	267.55	678.95	149.15	10085.4
18-Sep-17	262.55	672.9	150.7	10153.1
19-Sep-17	261.65	676.4	151.9	10147.55
20-Sep-17	259.15	687.65	152.85	10141.15
21-Sep-17	254.5	687.1	151.85	10121.9
22-Sep-17	246.95	654	139.65	9964.4
25-Sep-17	236.85	639.75	134.15	9872.6
26-Sep-17	242.35	654.1	138.2	9871.5
27-Sep-17	236.65	649.35	133.3	9735.75
28-Sep-17	238.9	649.7	134.8	9768.95
29-Sep-17	248.45	652.55	134.65	9788.6
03-Oct-17	249.95	660.8	144.2	9859.5
04-Oct-17	248.25	659	145	9914.9
05-Oct-17	249.05	661	147.85	9888.7
06-Oct-17	257.7	691.45	152.75	9979.7
09-Oct-17	257.4	697.25	158.05	9988.75
10-Oct-17	259.95	690.8	156.5	10016.95
11-Oct-17	256.45	682.3	151.5	9984.8
12-Oct-17	256.15	691.6	161.7	10096.4
13-Oct-17	254.05	710.85	162.65	10167.45
16-Oct-17	260.4	714.95	164.6	10230.85
17-Oct-17	260.25	712.5	161.75	10234.45
18-Oct-17	258.75	709.6	161.2	10210.85
19-Oct-17	253.7	705.5	159.95	10146.55
23-Oct-17	260.4	712	157.8	10184.85
24-Oct-17	259.45	719.3	161.9	10207.7
25-Oct-17	259.65	717.6	165.4	10295.35
26-Oct-17	259.95	729.2	168.15	10343.8
27-Oct-17	265.3	726.8	166.45	10323.05
30-Oct-17	263.85	718.25	165.55	10363.65
31-Oct-17	258.45	703.8	163.1	10335.3
01-Nov-17	264.75	707.3	164.2	10440.5
02-Nov-17	266.2	706.1	163.1	10423.8
03-Nov-17	266.6	708.9	165.3	10452.5
06-Nov-17	268	706.8	162.5	10451.8
07-Nov-17	264.05	693.2	160.35	10350.15
08-Nov-17	262.45	693.15	157.85	10303.15

09-Nov-17	264	703.4	164.3	10308.95
10-Nov-17	270.8	702.25	165.5	10321.75
13-Nov-17	263.85	691.05	171.7	10224.95
14-Nov-17	266.55	685.5	170.4	10186.6
15-Nov-17	255.45	677.75	161.1	10118.05