

A Study on Risk – Return Analysis of Selected IT Companies Listed in NSE

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ABSTRACT

The risk-return relationship is a fundamental concept in not only financial analysis, but in every aspect of life. If decisions are to lead to consider the combined influence on expected (future) return or benefit as well as on risk/cost. Return express the amount which an investor actually earned on an investment during a certain period. Return includes the interest, divided and capital gains; while risk represents the uncertainty associated with a particular task. The risk and return trade off says that the potential return rises with an increase in risk. It is important for an investor to decide on a balance between the desire for the lowest possible risk and highest possible return. This study reported a statistically significant positive relationship between risk and returns, both at the individual security level and at the portfolio level, confirming the theoretical predictions and empirical findings on this issue in developed markets.

Keywords: Financial analysis, Dividend, Capitalgains, Portfolio.

INTRODUCTION:

The analysis of tradable financial instruments in the securities market is called security analysis .these are categorized into debt securities, equities or some hybrid of two. Investing on financial instruments involves probability of loss of investing amount and is more concerned returns on financial instruments. in this study the total probability of loss that is unsystematic or market risk is measured through standard deviation .the security analysis decision are to lead to benefit maximization, it is necessary for investor/individual/institution consider the combined phenomena of expected return/ benefit as well as risk /cost. The requirement that expected returns /benefit along with risk /cost is called risk -return trade off in finance.

REVIEW OF LITERATURE:

Dr .P. Subramanyam et.,al(2018), It is ascertained through the fundamental analysis of selected infra securities the monetary position and performance of the companies are in correlation with present market prices. in keeping with technical analysis, the historical knowledge taken is employed to look at the trends followed by the Scrip's. However, we cannot say that anyone methodology is enough to investigate and interpret the fluctuations however they assist the investor to outline the trends to some extent.

Dr. S Poornima and Swathiga. P.(2017), In their study measures that the relationship between risk and return analysis of selected automobile and IT companies listed in NSE, where the automobile companies has performed better and has increased growth in the market when compared to IT Sector has negative average returns.

Dinesh Tandon, Dr. Nidhi walia (2015), In their article, It Is observed that the companies/sectors are giving combine response on the two parameters of risk and return portrayed by intercept and slope. Few sectors are showing high performance and ar giving high returns at low level of risk. Glaxosmith, lupin, cipla are the best stocks in pharmaceutical company sector and therefore, undoubtedly the most effective performing sector. Sectors

like media, finance and metal have conjointly shown the higher performance compared to the market index. Santa - Clara, and R. Valkanov (2005), Focusing on the trade-off between conditional variance and conditional mean of the securities market return. In support of the ICAPM, we discover a positive and vital relation between risk and return. This relation is powerful in subsamples, doesn't amendment when the conditional variance is allowed to react asymmetrically to positive and negative returns, and isn't stricken by the inclusion of alternative prophetic variables.

Hayden, E., D. Porath, and N. von Westernhagen (2007), This study shows that there are not any giant performance benefits related to diversification since every sort of diversification tends to cut back the banks' returns. in addition, we discover that this influence even exists after correcting for risk, which suggests that there's no proof for banks to be risk-return efficient. Moreover, our results indicate that the impact of diversification powerfully depends on the banks' risk level. However, only for moderate risk levels and in the case of business diversification does diversification considerably improve the banks' returns.

RESEARCH AND METHODOLOGY:

The data used in this project is of secondary nature. The data is collected from secondary sources such as various websites, journals, newspapers, books, etc., the analysis used in this project has been done using selective technical tools. In equity market, risk is analyzed and trading decisions are taken on basis of technical analysis. It is collection of share prices of selected companies for a period of 45 days

This is the study of risk- return analysis for a period of 45 days.

TOOLS FOR ANALYSIS:

Standard Deviation

This is the most commonly used measure of risk in finance, its square also is widely used to find out the risk associated with a security.

- Computation of variance =
$$\frac{\sum_{i=1}^n (R_i - \bar{R})^2}{n-1}$$
 or d^2
- Standard deviation = $\sqrt{d^2}$
- Rate of Return =
$$\frac{\text{Share price in the closing} - \text{Share price in the opening}}{\text{Share price in the opening}}$$

NEED FOR THE STUDY:

In the finance field, it is a common knowledge that money or finance is scarce and that investors try to maximize the returns. But when the return is higher, the risk is also higher

Return and risk go together and they have a tradeoff. The art of investment is to see that return is maximized with minimum risk

In the above discussion we concentrated on word "investment" an to invest we need to analyze securities. Combination of securities with different risk- return characteristics will constitute the portfolio of the investor.

SCOPE OF THE STUDY:

The study covers all the information related to the investor risk-return relationship of securities. It is confined to the 45 days data of TATA CONSULTANCY SERVICES LTD, HCL TECHNOLOGIES, TECH MAHINDRA, WIPRO, and INFOSYS IT companies. It also includes the calculation of individual standard deviations which helps in allocating the funds available for investment based on risky portfolios.

OBJECTIVES OF THE STUDY :

1. To study the fluctuations in share prices of selected IT companies.
2. To evaluate the risk involved in the securities of selected companies
3. To make comparative study of risk and return of TATA CONSULTANCY SERVICES LTD, HCL TECHNOLOGIES, WIPRO, TECH MAHINDRA, and INFOSYS.
4. To offer some suggestions to the investors.

LIMITATIONS:

- The study has been conducted purely to understand the performance of share and of the securities risk-return.
- The study is restricted to only selected companies of IT industries.
- Due to time constraint the analysis was limited to only risk and return.

INTERPRETATION AND ANALYSIS:

Tata Consultancy Services Pvt. Ltd.:

Analysis of Return $= -3.12555572/30$
 $= -0.1041$

Analysis of Risk:

Variance $= 1/n-1 (\sum d^2)$
 $= 1/30-1 (52.5391)$
 $= 1.8116$
Standard deviation $= \sqrt{\text{variance}}$
 $= \sqrt{1.8116}$
 $= 1.3459.$

Interpretation: The average return of TCS is -0.1041 and the risk associated to TCS is 1.3459.

Wipro:

Analysis of Return $= -15.5503/30$
 $= -0.507$

Analysis of Risk:

Variance $= 1/n-1 (\sum d^2)$
 $= 1/30-1(20.3800)$
 $= 0.7027$
Standard deviation $= \sqrt{\text{variance}}$
 $= \sqrt{0.7027}$
 $= 0.8382$

Interpretation: The average return of WIPRO is -0.5073 and the risk associated to WIPRO is 0.8382.

HCL Technologies:

Analysis of Return $= -8.7119/30$
 $= -0.2903$

Analysis of Risk:

Variance $= 1/n-1 (\sum d^2)$
 $= 1/30-1 (56.3592)$
 $= 1.9434$
Standard deviation $= \sqrt{\text{variance}}$
 $= \sqrt{1.9434}$
 $= 1.3940.$

Interpretation: The average return of HCL technologies are -0.2903 and the risk associated to HCL is 1.3940.

Infosys:

Analysis of return $= 4.0526/30$
 $= 0.1350$

Analysis of Risk:

Variance $= 1/n-1 (\sum d^2)$
 $= 1/30-1 (30.1593)$
 $= 1.0399$
Standard deviation $= \sqrt{\text{variance}}$
 $= \sqrt{1.0399}$
 $= 1.0197.$

Interpretaation: The average return of INFOSYS is 0.1350 and the risk associated to the INFOSYS is 1.0197.

Tech Mahindra:

Analysis of return $= 7.1705/30$
 $= 0.2390$

Analysis of Risk:

Variance $= 1/n-1 (\sum d^2)$
 $= 1/30-1 (123.0976)$
 $= 4.2447$
Standard deviation $= \sqrt{\text{variance}}$
 $= \sqrt{4.2447}$
 $= 2.0602.$

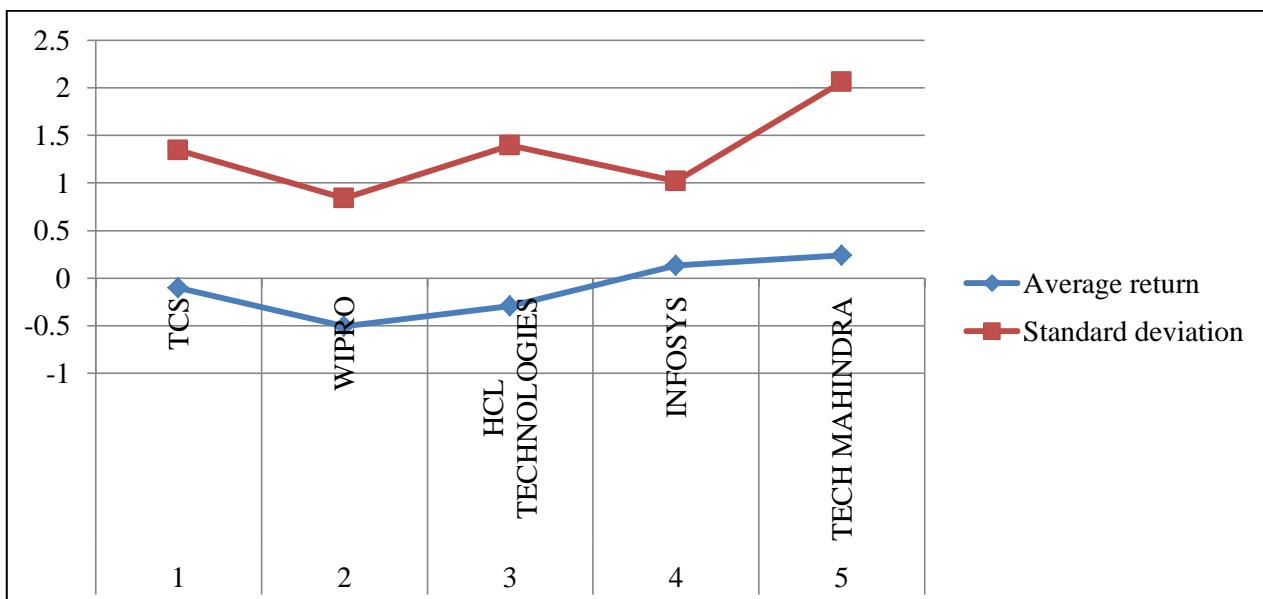
Interpretation: The average return of TECH MAHINDRA is 0.2390 and the risk associated to the TECH MAHINDRA is 2.0602.

COMPARATIVE ANALYSIS OF RISK & RETURN:

Table: 3.6.1

S. No	Company	Average Return	Standard Deviation
1	TCS	-0.1041	1.3459
2	Wipro	-0.5073	0.8382
3	HCL Technologies	-0.2903	1.3940
4	Infosys	0.1350	1.0197
5	TECH Mahindra	0.2390	2.0602

GRAPH: 3.6



INTERPRETATION:

While comparing all the five companies the Infosys has the maximum returns and maximum risk. The best company for the investor to invest the investment is the Infosys. According to the risk and return analysis the maximum return consists with the maximum risk.

CONCLUSION:

According to risk and return analysis we consider that we get the maximum returns and minimize the risk. But when returns are maximized the risk is also maximized. The risk and return analysis consists that the comparisons of all the selected five IT companies TCS, WIPRO, HCL TECHNOLOGIES, INFOSYS and TECH MAHINDRA. The INFOSYS contains the high average return 0.1350 and high risk 1.0197 than the remaining companies. The INFOSYS has high returns and high risk.

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Tata Consultancy Services PVT. LTD.:

Table.1.1: Analysis of Return.

Date	openings(p0)	closings(p1)	(p1-p0)	(p1-p0)/p0*100
3/9/2018	3,005.00	3,034.10	29.10	0.968386023
3/8/2018	3,054.90	3,003.95	-50.95	-1.667812367
3/7/2018	3,070.00	3,027.45	-42.55	-1.385993485
3/6/2018	3,122.00	3,042.80	-79.20	-2.536835362
3/5/2018	3,049.00	3,105.85	56.85	1.864545753
3/1/2018	3,049.00	3,037.70	-11.30	-0.370613316
2/28/2018	3,035.00	3,035.05	0.05	0.001647446
2/27/2018	3,041.00	3,042.35	1.35	0.044393292
2/26/2018	3,075.00	3,031.70	-43.30	-1.408130081
2/23/2018	3,050.00	3,075.80	25.80	0.845901639
2/22/2018	3,052.00	3,050.20	-1.80	-0.05897772
2/21/2018	2,974.00	3,042.30	68.30	2.296570276
2/20/2018	2,928.00	2,944.75	16.75	0.572062842
2/19/2018	2,945.00	2,923.60	-21.40	-0.726655348
2/16/2018	2,923.00	2,933.05	10.05	0.343824837
2/15/2018	2,931.95	2,925.85	-6.10	-0.208052661
2/14/2018	2,970.00	2,911.80	-58.20	-1.95959596
2/12/2018	2,978.30	2,967.30	-11.00	-0.369338213
2/9/2018	2,950.00	2,971.70	21.70	0.73559322
2/8/2018	2,979.75	2,974.20	-5.55	-0.186257236
2/7/2018	3,027.00	2,955.05	-71.95	-2.376940866
2/6/2018	3,010.00	2,997.25	-12.75	-0.42358804
2/5/2018	3,110.00	3,103.20	-6.80	-0.218649518
2/2/2018	3,120.00	3,153.65	33.65	1.078525641
2/1/2018	3,124.00	3,138.60	14.60	0.467349552
1/31/2018	3,137.00	3,112.35	-24.65	-0.785782595
1/30/2018	3,180.00	3,152.85	-27.15	-0.853773585
1/29/2018	3,131.40	3,198.85	67.45	2.153988631
1/25/2018	3,175.00	3,121.05	-53.95	-1.699212598
1/24/2018	3,090.00	3,174.60	84.60	2.737864078
Total return				-3.12555572

Source: secondary data.

Table 1.2: Analysis of Risk:

Date	Return (R _i)	Average return(R)	Deviations(R _i -R)	(R _i -R) square
3/9/2018	0.968386023	-0.1041	1.072486023	1.15022627
3/8/2018	-1.667812367	-0.1041	-1.563712367	2.445196367
3/7/2018	-1.385993485	-0.1041	-1.281893485	1.643250908
3/6/2018	-2.536835362	-0.1041	-2.432735362	5.918201341
3/5/2018	1.864545753	-0.1041	1.968645753	3.8755661
3/1/2018	-0.370613316	-0.1041	-0.266513316	0.071029348
2/28/2018	0.001647446	-0.1041	0.105747446	0.011182522
2/27/2018	0.044393292	-0.1041	0.148493292	0.022050258
2/26/2018	-1.408130081	-0.1041	-1.304030081	1.700494453
2/23/2018	0.845901639	-0.1041	0.950001639	0.902503115
2/22/2018	-0.05897772	-0.1041	0.04512228	0.00203602
2/21/2018	2.296570276	-0.1041	2.400670276	5.763217773
2/20/2018	0.572062842	-0.1041	0.676162842	0.457196188
2/19/2018	-0.726655348	-0.1041	-0.622555348	0.387575161
2/16/2018	0.343824837	-0.1041	0.447924837	0.20063666
2/15/2018	-0.208052661	-0.1041	-0.103952661	0.010806156
2/14/2018	-1.95959596	-0.1041	-1.85549596	3.442865256
2/12/2018	-0.369338213	-0.1041	-0.265238213	0.07035131
2/9/2018	0.73559322	-0.1041	0.83969322	0.705084704
2/8/2018	-0.186257236	-0.1041	-0.082157236	0.006749811
2/7/2018	-2.376940866	-0.1041	-2.272840866	5.1658056
2/6/2018	-0.42358804	-0.1041	-0.31948804	0.102072608
2/5/2018	-0.218649518	-0.1041	-0.114549518	0.013121592
2/2/2018	1.078525641	-0.1041	1.182625641	1.398603407
2/1/2018	0.467349552	-0.1041	0.571449552	0.32655459
1/31/2018	-0.785782595	-0.1041	-0.681682595	0.46469116
1/30/2018	-0.853773585	-0.1041	-0.749673585	0.562010484
1/29/2018	2.153988631	-0.1041	2.258088631	5.098964267
1/25/2018	-1.699212598	-0.1041	-1.595112598	2.544384202
1/24/2018	2.737864078	-0.1041	2.841964078	8.076759819
Total	-3.12555572			52.53918745

Source: secondary data.

Wipro:

Table 2.1. Analysis of Return.

Date	Open Price (P ₀)	Close Price(P ₁)	(P ₁ -P ₀)	R _i (P ₁ -P ₀)/P ₀ *100
3/9/2018	285	285.05	0.05	0.01754386
3/8/2018	286.45	285.2	-1.25	-0.436376331
3/7/2018	288.45	285.35	-3.1	-1.074709655
3/6/2018	291.25	286.95	-4.3	-1.47639485
3/5/2018	293.6	290.95	-2.65	-0.902588556
3/1/2018	292.8	292.5	-0.3	-0.102459016
2/28/2018	293	292.8	-0.2	-0.068259386
2/27/2018	292.45	291.75	-0.7	-0.239357155
2/26/2018	294.8	291.6	-3.2	-1.085481682
2/23/2018	295.5	295	-0.5	-0.169204738
2/22/2018	292.9	292.65	-0.25	-0.085353363
2/21/2018	294	292.2	-1.8	-0.612244898
2/20/2018	290	291.45	1.45	0.5
2/19/2018	293	289.95	-3.05	-1.040955631
2/16/2018	292.95	291	-1.95	-0.665642601

Date	Open Price (P0)	Close Price(P1)	(P1-P0)	Ri(P1-P0)/P0*100
2/15/2018	295.6	292.5	-3.1	-1.048714479
2/14/2018	290	293.45	3.45	1.189655172
2/12/2018	287.9	288.95	1.05	0.364709969
2/9/2018	289	285	-4	-1.384083045
2/8/2018	290.1	289.8	-0.3	-0.103412616
2/7/2018	298.2	289.35	-8.85	-2.967806841
2/6/2018	291.7	294.65	2.95	1.011312993
2/5/2018	298	298.75	0.75	0.251677852
2/2/2018	299.3	300.6	1.3	0.434346809
2/1/2018	305.05	300.75	-4.3	-1.409604983
1/31/2018	306.1	304.7	-1.4	-0.457366874
1/30/2018	309.55	307.3	-2.25	-0.726861573
1/29/2018	314.1	311.15	-2.95	-0.93919134
1/25/2018	315.7	311.95	-3.75	-1.187836554
1/24/2018	316.5	313.95	-2.55	-0.805687204
Totalreturn				-15.22034672

Source: secondary data.

Table: 2.2. Analysis of Risk

Date	Return (Ri)	Average return (R)	(Ri-R)	(Ri-R)square
3/9/2018	0.01754386	-0.5073	0.524844	0.275461077
3/8/2018	-0.436376331	-0.5073	0.070924	0.005030167
3/7/2018	-1.074709655	-0.5073	-0.56741	0.321953717
3/6/2018	-1.47639485	-0.5073	-0.96909	0.939144828
3/5/2018	-0.902588556	-0.5073	-0.39529	0.156253042
3/1/2018	-0.102459016	-0.5073	0.404841	0.163896222
2/28/2018	-0.068259386	-0.5073	0.439041	0.192756661
2/27/2018	-0.239357155	-0.5073	0.267943	0.071793368
2/26/2018	-1.085481682	-0.5073	-0.57818	0.334294058
2/23/2018	-0.169204738	-0.5073	0.338095	0.114308406
2/22/2018	-0.085353363	-0.5073	0.421947	0.178038965
2/21/2018	-0.612244898	-0.5073	-0.10494	0.011013432
2/20/2018	0.5	-0.5073	1.0073	1.01465329
2/19/2018	-1.040955631	-0.5073	-0.53366	0.284788333
2/16/2018	-0.665642601	-0.5073	-0.15834	0.025072379
2/15/2018	-1.048714479	-0.5073	-0.54141	0.293129638
2/14/2018	1.189655172	-0.5073	1.696955	2.879656857
2/12/2018	0.364709969	-0.5073	0.87201	0.760401386
2/9/2018	-1.384083045	-0.5073	-0.87678	0.768748508
2/8/2018	-0.103412616	-0.5073	0.403887	0.163125019
2/7/2018	-2.967806841	-0.5073	-2.46051	6.054093915
2/6/2018	1.011312993	-0.5073	1.518613	2.306185422
2/5/2018	0.251677852	-0.5073	0.758978	0.57604738
2/2/2018	0.434346809	-0.5073	0.941647	0.886698713
2/1/2018	-1.409604983	-0.5073	-0.9023	0.814154282
1/31/2018	-0.457366874	-0.5073	0.049933	0.002493317
1/30/2018	-0.726861573	-0.5073	-0.21956	0.048207284
1/29/2018	-0.93919134	-0.5073	-0.43189	0.18653013
1/25/2018	-1.187836554	-0.5073	-0.68054	0.463130001
1/24/2018	-0.805687204	-0.5073	-0.29839	0.089034923
Total	-15.22034672			20.38009472

Source: Secondary Data.

HCL Technologies:

Table: 3.1.Analysis of Return

Date	Open Price(P0)	Close Price(P1)	(P1-P0)	Ri(P1-P0)/P0*100
9-Mar-18	950	943	-7	-0.736842105
8-Mar-18	953	950.65	-2.35	-0.246589717
7-Mar-18	938	949.55	11.55	1.231343284
6-Mar-18	938	932.8	-5.2	-0.554371002
5-Mar-18	942.8	932.1	-10.7	-1.134917268
1-Mar-18	943.8	942.8	-1	-0.105954651
28-Feb-18	954.9	940.3	-14.6	-1.528955912
27-Feb-18	953	949.9	-3.1	-0.325288562
26-Feb-18	955.9	946.05	-9.85	-1.030442515
23-Feb-18	948.9	955.6	6.7	0.706080725
22-Feb-18	943	941	-2	-0.212089077
21-Feb-18	918	942.9	24.9	2.712418301
20-Feb-18	916	907.45	-8.55	-0.933406114
19-Feb-18	937.85	914.2	-23.65	-2.521725223
16-Feb-18	945	937.1	-7.9	-0.835978836
15-Feb-18	944	939.7	-4.3	-0.455508475
14-Feb-18	939.8	937.8	-2	-0.212811236
12-Feb-18	965.5	939.15	-26.35	-2.729155878
9-Feb-18	935	964	29	3.101604278
8-Feb-18	945.75	944.35	-1.4	-0.148030663
7-Feb-18	958.2	938.55	-19.65	-2.0507201
6-Feb-18	964.95	953.85	-11.1	-1.150318669
5-Feb-18	990	993.15	3.15	0.318181818
2-Feb-18	980	990.9	10.9	1.112244898
1-Feb-18	982.1	984.9	2.8	0.28510335
31-Jan-18	999.95	986.55	-13.4	-1.340067003
30-Jan-18	1017.5	1000.4	-17.1	-1.680589681
29-Jan-18	1010	1012.05	2.05	0.202970297
25-Jan-18	1018.8	1009.55	-9.25	-0.907930899
24-Jan-18	994	1018.45	24.45	2.459758551
Tota Return				-8.711988085

Source: secondary data.

Table: 3.2.Analysis of Risk

Date	Return (Ri)	Average return (R)	(Ri-R)	(Ri-R) Square
9-Mar-18	-0.736842105	-0.2903	-0.44654	0.19939985
8-Mar-18	-0.246589717	-0.2903	0.04371	0.00191059
7-Mar-18	1.231343284	-0.2903	1.521643	2.31539828
6-Mar-18	-0.554371002	-0.2903	-0.26407	0.06973349
5-Mar-18	-1.134917268	-0.2903	-0.84462	0.71337833
1-Mar-18	-0.105954651	-0.2903	0.184345	0.03398321
28-Feb-18	-1.528955912	-0.2903	-1.23866	1.53426847
27-Feb-18	-0.325288562	-0.2903	-0.03499	0.0012242
26-Feb-18	-1.030442515	-0.2903	-0.74014	0.54781094
23-Feb-18	0.706080725	-0.2903	0.996381	0.99277455
22-Feb-18	-0.212089077	-0.2903	0.078211	0.00611695
21-Feb-18	2.712418301	-0.2903	3.002718	9.01631719
20-Feb-18	-0.933406114	-0.2903	-0.64311	0.41358547
19-Feb-18	-2.521725223	-0.2903	-2.23143	4.97925852
16-Feb-18	-0.835978836	-0.2903	-0.54568	0.29776539

Date	Return (R _i)	Average return (R)	(R _i -R)	(R _i -R) Square
15-Feb-18	-0.455508475	-0.2903	-0.16521	0.02729384
14-Feb-18	-0.212811236	-0.2903	0.077489	0.00600451
12-Feb-18	-2.729155878	-0.2903	-2.43886	5.94801799
9-Feb-18	3.101604278	-0.2903	3.391904	11.5050146
8-Feb-18	-0.148030663	-0.2903	0.142269	0.02024056
7-Feb-18	-2.0507201	-0.2903	-1.76042	3.09907893
6-Feb-18	-1.150318669	-0.2903	-0.86002	0.73963211
5-Feb-18	0.318181818	-0.2903	0.608482	0.37025012
2-Feb-18	1.112244898	-2903	1.402545	1.96713219
1-Feb-18	0.28510335	-0.2903	0.575403	0.33108902
31-Jan-18	-1.340067003	0.2903	-1.04977	1.10201076
30-Jan-18	-1.680589681	-0.2903	-1.39029	1.9329054
29-Jan-18	0.202970297	-0.2903	0.49327	0.24331559
25-Jan-18	-0.907930899	-0.2903	-0.61763	0.38146793
24-Jan-18	2.459758551	-0.2903	2.750059	7.56282204
Total	-8.711988085			56.3592011

Source: secondary data.

Infosys:

Table: 4.1.Analysis of Return.

Date	Open Price(P ₀)	Close Price(P ₁)	(P ₁ -P ₀)	R _i (P ₀ -P ₁)/P ₀ *100
9-Mar-18	1162.35	1163.4	1.05	0.090334237
8-Mar-18	1149	1156.65	7.65	0.665796345
7-Mar-18	1155	1144.1	-10.9	-0.943722944
6-Mar-18	1162.55	1151.35	-11.2	-0.963399424
5-Mar-18	1160.75	1155.9	-4.85	-0.417833297
1-Mar-18	1169.6	1160.75	-8.85	-0.756668947
28-Feb-18	1147.6	1172.6	25	2.178459394
27-Feb-18	1144.95	1150.2	5.25	0.458535307
26-Feb-18	1151	1138.6	-12.4	-1.077324066
23-Feb-18	1163.5	1155.65	-7.85	-0.67468844
22-Feb-18	1145.55	1160.75	15.2	1.326873554
21-Feb-18	1147.5	1147.4	-0.1	-0.008714597
20-Feb-18	1103.75	1136.95	33.2	3.00792752
19-Feb-18	1128.4	1131.75	3.35	0.296880539
16-Feb-18	1125	1128.05	3.05	0.271111111
15-Feb-18	1103	1114.45	11.45	1.038077969
14-Feb-18	1106	1097.75	-8.25	-0.745931284
12-Feb-18	1114.8	1102.8	-12	-1.076426265
9-Feb-18	1118	1109.15	-8.85	-0.791592129
8-Feb-18	1122.8	1134.25	11.45	1.019771999
7-Feb-18	1116	1109.05	-6.95	-0.622759857
6-Feb-18	1099.95	1107.75	7.8	0.709123142
5-Feb-18	1140	1138.2	-1.8	-0.157894737
2-Feb-18	1135.25	1143.25	8	0.704690597
1-Feb-18	1142.2	1144.6	2.4	0.210120819
31-Jan-18	1159.15	1150.25	-8.9	-0.767803994
30-Jan-18	1178.9	1170.65	-8.25	-0.699804903
29-Jan-18	1166.55	1182.9	16.35	1.401568728
25-Jan-18	1182	1175.4	-6.6	-0.558375635
24-Jan-18	1174.8	1185.8	11	0.936329588
Total Return				4.052660331

Source: secondary data.

Table: 4.2.Analysis of Risk

Date	Return (R_i)	Average return (R)	(R_i-R)	(R_i-R)²
9-Mar-18	0.090334237	0.135	-0.04467	0.00199503
8-Mar-18	0.665796345	0.135	0.530796	0.281744759
7-Mar-18	-0.943722944	0.135	-1.07872	1.163643189
6-Mar-18	-0.963399424	0.135	-1.0984	1.206481294
5-Mar-18	-0.417833297	0.135	-0.55283	0.305624655
1-Mar-18	-0.756668947	0.135	-0.89167	0.79507351
28-Feb-18	2.178459394	0.135	2.043459	4.175726293
27-Feb-18	0.458535307	0.135	0.323535	0.104675095
26-Feb-18	-1.077324066	0.135	-1.21232	1.469729641
23-Feb-18	-0.67468844	0.135	-0.80969	0.65559537
22-Feb-18	1.326873554	0.135	1.191874	1.420562569
21-Feb-18	-0.008714597	0.135	-0.14371	0.020653885
20-Feb-18	3.00792752	0.135	2.872928	8.253712534
19-Feb-18	0.296880539	0.135	0.161881	0.026205309
16-Feb-18	0.271111111	0.135	0.136111	0.018526235
15-Feb-18	1.038077969	0.135	0.903078	0.815549818
14-Feb-18	-0.745931284	0.135	-0.88093	0.776039927
12-Feb-18	-1.076426265	0.135	-1.21143	1.467553595
9-Feb-18	-0.791592129	0.135	-0.92659	0.858572973
8-Feb-18	1.019771999	0.135	0.884772	0.782821489
7-Feb-18	-0.622759857	0.135	-0.75776	0.5742
6-Feb-18	0.709123142	0.135	0.574123	0.329617382
5-Feb-18	-0.157894737	0.135	-0.29289	0.085787327
2-Feb-18	0.704690597	0.135	0.569691	0.324547376
1-Feb-18	0.210120819	0.135	0.075121	0.005643138
31-Jan-18	-0.767803994	0.135	-0.9028	0.815055052
30-Jan-18	-0.699804903	0.135	-0.8348	0.696899226
29-Jan-18	1.401568728	0.135	1.266569	1.604196344
25-Jan-18	-0.558375635	0.135	-0.69338	0.480769771
24-Jan-18	0.936329588	0.135	0.80133	0.642129109
Total	4.052660331			30.1593319

Source: secondary data.

Tech Mahindra:

Table: 5.1.Analysis of Return

Date	Open Price(P₀)	Close Price(P₁)	(P₁-P₀)	R_i(P₁-P₀)/P₀*100
9-Mar-18	609.7	619.2	9.5	1.558143349
8-Mar-18	615	607.2	-7.8	-1.268292683
7-Mar-18	619.8	609.05	-10.75	-1.734430461
6-Mar-18	631.9	617.25	-14.65	-2.318404811
5-Mar-18	608.5	630.85	22.35	3.672966311
1-Mar-18	612.05	611.9	-0.15	-0.024507802
28-Feb-18	610.2	612.65	2.45	0.401507702
27-Feb-18	618	610.55	-7.45	-1.205501618
26-Feb-18	622	612.45	-9.55	-1.535369775
23-Feb-18	607	621.45	14.45	2.380560132
22-Feb-18	592	602.6	10.6	1.790540541
21-Feb-18	581.05	595.2	14.15	2.435246536
20-Feb-18	575	574.2	-0.8	-0.139130435
19-Feb-18	588.75	572.45	-16.3	-2.768577495
16-Feb-18	610	584.35	-25.65	-4.204918033

15-Feb-18	615	605.65	-9.35	-1.520325203
14-Feb-18	588.5	611.5	23	3.908241291
12-Feb-18	598	590.35	-7.65	-1.279264214
9-Feb-18	601	595.25	-5.75	-0.956738769
8-Feb-18	610	608.25	-1.75	-0.286885246
7-Feb-18	611.8	603.1	-8.7	-1.422033344
6-Feb-18	601	606.7	5.7	0.948419301
5-Feb-18	609.9	629.05	19.15	3.139858993
2-Feb-18	604.3	619.45	15.15	2.507032931
1-Feb-18	612.55	611.05	-1.5	-0.244877969
31-Jan-18	602.8	612.65	9.85	1.634041141
30-Jan-18	600	602.95	2.95	0.491666667
29-Jan-18	599.05	604.8	5.75	0.959853101
25-Jan-18	604.5	598.45	-6.05	-1.00082713
24-Jan-18	584.15	603.15	19	3.252589232
Total Return				7.170582241

Source: secondary data.

Table: 5.2.Analysis of Risk

Date	Return (R _i)	Average return (R)	R _i -R	(R _i -R) Square
9-Mar-18	1.558143349	0.2390	1.319143	1.740139176
8-Mar-18	-1.268292683	0.2390	-1.50729	2.271931232
7-Mar-18	-1.734430461	0.2390	-1.97343	3.894427786
6-Mar-18	-2.318404811	0.2390	-2.5574	6.540319367
5-Mar-18	3.672966311	0.2390	3.433966	11.79212462
1-Mar-18	-0.024507802	0.2390	-0.26351	0.069436362
28-Feb-18	0.401507702	0.2390	0.162508	0.026408753
27-Feb-18	-1.205501618	0.2390	-1.4445	2.086584925
26-Feb-18	-1.535369775	0.2390	-1.77437	3.148388098
23-Feb-18	2.380560132	0.2390	2.14156	4.586279798
22-Feb-18	1.790540541	0.2390	1.551541	2.407278049
21-Feb-18	2.435246536	0.2390	2.196247	4.823498849
20-Feb-18	-0.139130435	0.2390	-0.37813	0.142982626
19-Feb-18	-2.768577495	0.2390	-3.00758	9.045522387
16-Feb-18	-4.204918033	0.2390	-4.44392	19.74840748
15-Feb-18	-1.520325203	0.2390	-1.75933	3.095225171
14-Feb-18	3.908241291	0.2390	3.669241	13.46333165
12-Feb-18	-1.279264214	0.2390	-1.51826	2.305126224
9-Feb-18	-0.956738769	0.2390	-1.19574	1.429791203
8-Feb-18	-0.286885246	0.2390	-0.52589	0.276555292
7-Feb-18	-1.422033344	0.2390	-1.66103	2.759031771
6-Feb-18	0.948419301	0.2390	0.709419	0.503275745
5-Feb-18	3.139858993	0.2390	2.900859	8.414982899
2-Feb-18	2.507032931	0.2390	2.268033	5.143973375
1-Feb-18	-0.244877969	0.2390	-0.48388	0.234137889
31-Jan-18	1.634041141	0.2390	1.395041	1.946139786
30-Jan-18	0.491666667	0.2390	0.252667	0.063840444
29-Jan-18	0.959853101	0.2390	0.720853	0.519629193
25-Jan-18	-1.00082713	0.2390	-1.23983	1.537171312
24-Jan-18	3.252589232	0.2390	3.013589	9.081720061
Total	7.170582241			123.0976615

Source: secondary data.
