STOCK VOLATILITY AND RETURN ANALYSIS: A COMPARATIVE STUDY OF SELECT AUTOMOBİLE COMPANIES IN INDIA FOR INVESTMENT DECISION MAKING

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ABSTRACT
This study is about the comparative analysis of vitality and return of stock prices of selected automotive companies. Due to impact of Pandemic 19, many automobile companies are still facing challenges related to production, supply chain, marketing & financing, many investors are preferring stocks of Pharma, health care and IT sector. The growth of these companies is not up to the mark as of now. To attract the investors towards automobile companies it is important to know the stability and return analysis of the stock prices of these companies. Here three companies are selected to conduct comparative analysis of vitality of stock of automobile companies. This analysis resulted to find the less volatile stock and steady return analysis for investment purpose. Various statistical tools such as standard deviation, average return, daily return and variance are used to analyze the data.
Keywords: Volatility, stock, standard deviation.

1. Introduction:

Valuation of equity share guides to the manager to run their companies in an increasingly competitive world. Managers can learn to make decisions that improve their firms and generate genuine value by fusing accounting and performance metrics with strategic thinking and day-to-day operations. Investors today give non-financial issues a lot of consideration when they attempt to determine the worth of firms. If the economic environment of particular country is unstable, then there is much risk in investment, because it effects on market value of company and investor may suffer loss in future. There are many different ways to measure volatility of stocks, including standard deviations beta coefficients, option pricing etc.

Meaning of Volatility

It is a rate of gain or fall in a security's price for a specific set of returns. The standard deviation of the annualized returns over a specific time period is used to calculate volatility. It displays the potential range in which a security's price may rise or fall.

Importance of study

A stock's volatility has negative implications, and many purchasers and investors look for stocks with higher volatility in order to maximize their returns. A stock with a static price has low volatility but also little chance of making capital gains. Although a stock with a very high level of volatility carries a significant danger of loss, it also has huge potential for profit. Standard deviation, or how far prices deviate from their mean, is a measure of volatility. Standard deviation and volatility go hand in hand. The estimated daily standard deviation is multiplied by an animalization factor based on the time chosen because historical volatility is an annualized figure. The square roots of nevertheless are the animalization factor.

Tools available to check the volatility of equity shares

1. **Standard Deviation**

It is a phrase used in statistics to describe how much variation or dispersion there is around an average. Volatility can also be measured using standard deviation. The discrepancy between the actual value and the average value is known as the dispersion. The standard deviation increases as dispersion or variability increases. The standard deviation decreases with decreasing variability. The standard deviation is a tool used by business analysts to assess projected risk and assess the importance of specific pricing changes. From a financial perspective, the standard deviation can assist investors in determining the minimum required return on the investment and quantifying how hazardous an investment is. The investor might think about include some small-cap stocks or high-yield bonds if he enjoys taking risks, is at ease investing in products with higher risks and higher returns, and can bear a higher standard deviation. Standard deviation of return is used as a risk indicator for investment purposes. The volatility of return for a given asset increases with value, and vice versa.

2. **Annualizing volatility**

Analysts divide the daily standard deviation of the corporation by 252 to get this volatility's annualized form. This presupposes that a given year has 252 trading days. Excel's square root formula is =SQRT ().
By dividing the daily volatility by the square root of 21, we might determine the monthly volatility instead of the annualized volatility. Since there were 21 trade days in a month, we utilize 21.

3. **Beta coefficient**

The beta of a particular stock contributes to its overall market-related instability. A beta is a measure of how volatile a security's profits are overall when compared to relevant benchmark profits (typically the S&P 500 is utilized).

Characteristics of Standard Deviation

A dataset's scattering with regard to its mean, which is calculated as the square root of the change, is estimated by the standard deviation. By determining the variation between each datum's direct correlation to the mean, it is established as the square base of difference.

The bigger the standard deviation, the further away from the mean the information focuses are, and the higher the variation within the informational index.

Standard deviation is a true estimate that, when compared to the annual rate of return of a speculation, provides information about the venture's verifiable instability.

The difference between each price and the mean is more pronounced and indicates a larger value range the higher the security's standard deviation. For instance, the requirement deviation of an unstable stock is higher than that of a stable blue-chip stock, which typically has a lower requirement deviation.
Formula of Standard Deviation:

Where
Ri – The return observed in one period (one observation in the data set)
Ravg – The arithmetic mean of the returns observed
n –Number of observations in the dataset

Interpretation

1.The less volatile and dangerous an investment is, the lower its standard deviation will be.
2. The investment is riskier since returns are more randomly distributed the higher the standard deviation.

Review of Literature

A Study on Stock Market Volatility Pattern of BSE and NSE in India, the authors say that when we analyze the stock market, investors, decision-makers, and researchers pay close attention to the risk assessment. The degree to which the econometric model accurately predicts the behavior of the underlying asset is a key factor in the quality of risk measures. The study looks at volatility clustering, leverage effect, and volatility persistence for the Indian stock markets, National Stock Exchange (NSE) and Bombay Stock Exchange (BSE), for the time span from 1990 to 2016. This study paper's major objective is to investigate the type of volatility present in the Indian stock markets. In this study, the ARCH and GARCH models were used to analyze the volatility of the stock market Tanty, G., & Patjoshi, P. K. (2016).

“Stock Market Volatility-A Study of Indian Stock Exchange” in this article they used four key indices of the Indian stock market, including the SENSEX, and Bombay Stock Exchange's BSE100 and NIFTY and the National Stock Exchange's CNX500. The four indices' daily closing prices are used to calculate the study's time frame. To see the interdependence of Indian stock market with international, Brazil, Russia, India and China are selected as emerging economies and seven developed economies named as USA, UK, Australia, Japan, Germany, Hongkong stock market and Singapore are taken to understand their behavior. The data for Indian stock market is collected from the official websites of National Stock Exchange and Bombay Stock Exchange Sudarsana, D., Rajashekar, & Narayana, R. (2018).

Stock Market Volatility and Return Analysis: A systematic literature review, the four primary areas of inquiry covered in this paper are as follows: first, the monthly return standard deviation, distribution skewness, and other fundamental indicators are examined, highlighting the significance of technical indicators in studying stock price volatility. The appearance of social disturbance events is then discovered to have a favorable effect on stock return volatility. Finally, it is determined that global factors (oil price volatility and the financialization of commodities)

and macroeconomic factors (GDP and industrial productivity) positively correlate with equity price volatility. Bhowmik, R., & Wang, S. (2020).

Dynamics of Stock Market Return Volatility: Evidence from The Daily Data of India and Japan, the authors examined the dynamics of stock market return volatility in India and Japan. The TGARCH-M model is put into practice. Both positive and bad news have an unbalanced effect on these markets. Both nations continue to experience return volatility. The degree of this link varies among nations, but stock returns and volatility do have a substantial positive relationship. The source of stock market volatility is the daily information shocks as well as the variations in investor attitudes and expectations. Market efficiency and liquidity are negatively impacted by a considerable increase in stock market volatility brought on by positive and negative information shocks Mishra, B., & Rahman, M. (2010).

3. Research Gap

Due to a lack of defined norms for estimating procedures, business analysts continue to face estimation issues. A more precise and appropriate tool is required to reduce investment risk.

Research Methodology

Research Type:

This research comes under analytical research type, because it is an analysis of historical value of stock prices of the targeted companies.

Objectives of the study

1. To evaluate volatility of the stock prices of selective companies.
2. To study performance of target company by average returns.
3. To find the relationship between quarterly revenue and stock prices of selected companies.

Hypothesis of the Study

HA_0: There is no significant relationship between average returns and standard deviation of selected companies.
HA_1: There is a significant relationship between average returns and standard deviation of selected companies.
HB_0: There is no significant relationship between quarterly Total revenue and stock prices of selected companies.
HB_1: There is a significant relationship between quarterly Total revenue and stock prices of selected companies.

Sampling Technique

This research comes under Non-Probability sampling type where researcher has used convenience sampling method for selecting a sample.

Determination of Sample Size

Out of the listed automotive companies, here researcher has selected Three companies for the study purpose. i.e. Bajaj Auto Ltd., Tata Motors Ltd. & Maruti Suzuki Ltd.

Data Collection:

Equity closing prices of Bajaj Auto Ltd., Tata Motors Ltd. and Maruti Suzuki India Ltd. are taken from period 1st April 2022 to 16th October 2022 from Bombay Stock Exchange website for calculating Average return, standard deviation and variances of the stocks.

5. Data Analysis

Selected Companies for Study:

1. Bajaj Auto Ltd.,
2. Tata Motors Ltd.
3. Maruti Suzuki India Ltd.

Stock prices performance & Daily Return chart.

	Bajaj Auto Ltd.		Tata Motors Ltd.		Maruti Suzuki India Ltd.	
Date	Close	Daily Return	Close	Daily Return	Close	Daily Return
01-04-2022	3739.900	…….	441.150	…….	7691.85	…….
04-04-2022	3763.650	0.0064	446.750	0.0127	7775.35	0.0109
05-04-2022	3809.700	0.0122	458.050	0.0253	7760.5	-0.0019
06-04-2022	3801.800	-0.0021	456.150	-0.0041	7744.55	-0.0021

07-04-2022	3802.250	0.0001	449.500	-0.0146	7637.35	-0.0138
08-04-2022	3810.350	0.0021	452.050	0.0057	7557.7	-0.0104
11-04-2022	3787.150	-0.0061	452.050	0.0000	7564.6	0.0009
12-04-2022	3712.050	-0.0198	438.300	-0.0304	7613.55	0.0065
13-04-2022	3697.300	-0.0040	431.050	-0.0165	7471.85	-0.0186
18-04-2022	3714.600	0.0047	433.800	0.0064	7574.55	0.0137
19-04-2022	3657.150	-0.0155	424.950	-0.0204	7438	-0.0180
20-04-2022	3720.750	0.0174	440.550	0.0367	7668.65	0.0310
21-04-2022	3702.350	-0.0049	448.050	0.0170	7875.85	0.0270
22-04-2022	3642.500	-0.0162	438.850	-0.0205	7903.25	0.0035
25-04-2022	3682.950	0.0111	425.150	-0.0312	7910.75	0.0009
26-04-2022	3892.100	0.0568	434.900	0.0229	7901.3	-0.0012
27-04-2022	3905.650	0.0035	430.250	-0.0107	7787.9	-0.0144
28-04-2022	3834.400	-0.0182	436.050	0.0135	7887.95	0.0128
29-04-2022	3729.550	-0.0273	437.600	0.0036	7732.75	-0.0197
02-05-2022	3623.450	-0.0284	432.850	-0.0109	7641.55	-0.0118
04-05-2022	3496.900	-0.0349	423.500	-0.0216	7399.6	-0.0317
05-05-2022	3523.900	0.0077	426.300	0.0066	7405.45	0.0008
06-05-2022	3499.750	-0.0069	408.550	-0.0416	7277.45	-0.0173
09-05-2022	3568.750	0.0197	403.950	-0.0113	7359.5	0.0113
10-05-2022	3593.050	0.0068	391.750	-0.0302	7516.95	0.0214
11-05-2022	3612.850	0.0055	388.150	-0.0092	7389.35	-0.0170
12-05-2022	3585.000	-0.0077	372.300	-0.0408	7252.25	-0.0186
13-05-2022	3642.100	0.0159	404.300	0.0860	7101.8	-0.0207
16-05-2022	3715.850	0.0202	405.350	0.0026	7253.9	0.0214
17-05-2022	3742.900	0.0073	424.150	0.0464	7533.45	0.0385
18-05-2022	3791.200	0.0129	415.150	-0.0212	7565.9	0.0043
19-05-2022	3698.550	-0.0244	398.650	-0.0397	7409.05	-0.0207
20-05-2022	3787.800	0.0241	418.000	0.0485	7587.2	0.0240
23-05-2022	3786.150	-0.0004	421.450	0.0083	7896.2	0.0407
24-05-2022	3783.300	-0.0008	425.750	0.0102	7799.7	-0.0122
25-05-2022	3791.800	0.0022	417.000	-0.0206	7785.8	-0.0018
26-05-2022	3857.350	0.0173	420.650	0.0088	7806.4	0.0026
27-05-2022	3833.050	-0.0063	429.600	0.0213	7941.6	0.0173
30-05-2022	3856.700	0.0062	442.400	0.0298	8013.6	0.0091
31-05-2022	3864.100	0.0019	443.550	0.0026	7970.25	-0.0054
01-06-2022	3720.100	-0.0373	444.600	0.0024	7937.6	-0.0041
02-06-2022	3688.700	-0.0084	439.150	-0.0123	7924.75	-0.0016
03-06-2022	3672.700	-0.0043	431.900	-0.0165	7707.05	-0.0275
06-06-2022	3817.000	0.0393	432.350	0.0010	7710.65	0.0005
07-06-2022	3834.100	0.0045	435.850	0.0081	7808.65	0.0127
08-06-2022	3794.150	-0.0104	435.650	-0.0005	7893.1	0.0108
09-06-2022	3878.650	0.0223	428.500	-0.0164	7925.55	0.0041
10-06-2022	3881.000	0.0006	428.050	-0.0011	7934.8	0.0012
13-06-2022	3881.250	0.0001	406.700	-0.0499	7896.25	-0.0049
14-06-2022	3681.750	-0.0514	405.150	-0.0038	7810.75	-0.0108
15-06-2022	3698.100	0.0044	414.100	0.0221	7852.75	0.0054
16-06-2022	3658.200	-0.0108	392.950	-0.0511	7833.15	-0.0025
17-06-2022	3628.950	-0.0080	388.950	-0.0102	7690.95	-0.0182
20-06-2022	3615.950	-0.0036	382.700	-0.0161	7659.85	-0.0040
21-06-2022	3645.250	0.0081	397.600	0.0389	7780.85	0.0158
22-06-2022	3635.650	-0.0026	393.100	-0.0113	7782	0.0001

23-06-2022	3784.800	0.0410	407.200	0.0359	8274.6	0.0633
24-06-2022	3813.350	0.0075	409.300	0.0052	8355.2	0.0097
27-06-2022	3861.200	0.0125	414.500	0.0127	8443.85	0.0106
28-06-2022	3889.000	0.0072	417.100	0.0063	8487.9	0.0052
29-06-2022	3867.550	-0.0055	416.950	-0.0004	8507.5	0.0023
30-06-2022	3706.600	-0.0416	411.800	-0.0124	8470.2	-0.0044
01-07-2022	3624.600	-0.0221	412.700	0.0022	8396.6	-0.0087
04-07-2022	3679.750	0.0152	408.450	-0.0103	8440.25	0.0052
05-07-2022	3682.750	0.0008	412.000	0.0087	8344.8	-0.0113
06-07-2022	3773.050	0.0245	416.350	0.0106	8634.9	0.0348
07-07-2022	3795.500	0.0060	430.850	0.0348	8598.65	-0.0042
08-07-2022	3825.000	0.0078	441.550	0.0248	8475.45	-0.0143
11-07-2022	3848.550	0.0062	437.050	-0.0102	8504.55	0.0034
12-07-2022	3847.850	-0.0002	430.550	-0.0149	8422.1	-0.0097
13-07-2022	3860.750	0.0034	427.100	-0.0080	8440.25	0.0022
14-07-2022	3863.200	0.0006	428.050	0.0022	8562.25	0.0145
15-07-2022	3913.350	0.0130	440.200	0.0284	8780.75	0.0255
18-07-2022	3984.050	0.0181	450.900	0.0243	8707.05	-0.0084
19-07-2022	4002.000	0.0045	449.050	-0.0041	8714.6	0.0009
20-07-2022	4002.050	0.0000	453.450	0.0098	8745.4	0.0035
21-07-2022	4057.050	0.0137	454.850	0.0031	8801.2	0.0064
22-07-2022	4054.500	-0.0006	454.900	0.0001	8826.05	0.0028
25-07-2022	4021.150	-0.0082	449.550	-0.0118	8613.3	-0.0241
26-07-2022	3925.600	-0.0238	441.150	-0.0187	8522.05	-0.0106
27-07-2022	3883.850	-0.0106	444.050	0.0066	8660.05	0.0162
28-07-2022	3858.250	-0.0066	442.250	-0.0041	8720.3	0.0070
29-07-2022	3914.450	0.0146	449.600	0.0166	8772.45	0.0060
01-08-2022	3973.300	0.0150	479.200	0.0658	9004	0.0264
02-08-2022	3996.200	0.0058	476.250	-0.0062	9167	0.0181
03-08-2022	4003.450	0.0018	467.800	-0.0177	8956.7	-0.0229
04-08-2022	4011.700	0.0021	468.900	0.0024	8970.95	0.0016
05-08-2022	4013.100	0.0003	465.250	-0.0078	8836.05	-0.0150
08-08-2022	4022.650	0.0024	468.250	0.0064	8923.55	0.0099
10-08-2022	4034.850	0.0030	475.550	0.0156	8879.45	-0.0049
11-08-2022	4033.500	-0.0003	476.650	0.0023	8818	-0.0069
12-08-2022	4038.000	0.0011	477.550	0.0019	8699.15	-0.0135
16-08-2022	4091.150	0.0132	489.850	0.0258	8999.45	0.0345
17-08-2022	4067.900	-0.0057	485.400	-0.0091	8947.4	-0.0058
18-08-2022	4060.650	-0.0018	484.800	-0.0012	8939.3	-0.0009
19-08-2022	4074.550	0.0034	471.000	-0.0285	8777.5	-0.0181
22-08-2022	4041.600	-0.0081	454.600	-0.0348	8623.5	-0.0175
23-08-2022	4064.450	0.0057	460.450	0.0129	8721.8	0.0114
24-08-2022	4065.750	0.0003	463.200	0.0060	8691.8	-0.0034
25-08-2022	4062.950	-0.0007	459.200	-0.0086	8732.2	0.0046
26-08-2022	4054.400	-0.0021	465.050	0.0127	8719.2	-0.0015
29-08-2022	4030.050	-0.0060	453.350	-0.0252	8832.75	0.0130
30-08-2022	4084.850	0.0136	471.100	0.0392	9091.9	0.0293
01-09-2022	4076.300	-0.0021	466.900	-0.0089	9027.95	-0.0070
02-09-2022	4030.900	-0.0111	461.750	-0.0110	8920.1	-0.0119
05-09-2022	3956.650	-0.0184	459.000	-0.0060	8938.9	0.0021
06-09-2022	3929.400	-0.0069	457.750	-0.0027	8883.9	-0.0062
07-09-2022	3845.650	-0.0213	445.850	-0.0260	8782.1	-0.0115

08-09-2022	3846.600	0.0002	442.200	-0.0082	8787.65	0.0006
09-09-2022	3848.600	0.0005	445.900	0.0084	8945.7	0.0180
12-09-2022	3870.300	0.0056	451.000	0.0114	8928	-0.0020
13-09-2022	3866.500	-0.0010	456.800	0.0129	8926.2	-0.0002
14-09-2022	3850.250	-0.0042	450.200	-0.0144	8956	0.0033
15-09-2022	3768.000	-0.0214	447.250	-0.0066	9245.2	0.0323
16-09-2022	3689.550	-0.0208	432.500	-0.0330	9225.6	-0.0021
19-09-2022	3708.250	0.0051	425.450	-0.0163	9283.35	0.0063
20-09-2022	3768.600	0.0163	434.250	0.0207	9296.9	0.0015
21-09-2022	3730.600	-0.0101	427.650	-0.0152	9248.7	-0.0052
22-09-2022	3728.900	-0.0005	432.200	0.0106	9403.85	0.0168
23-09-2022	3698.900	-0.0080	423.100	-0.0211	9343.9	-0.0064
26-09-2022	3574.500	-0.0336	397.500	-0.0605	8830.6	-0.0549
27-09-2022	3541.900	-0.0091	398.800	0.0033	8772.65	-0.0066
28-09-2022	3545.900	0.0011	399.100	0.0008	8716.2	-0.0064
29-09-2022	3476.700	-0.0195	402.250	0.0079	8620.95	-0.0109
30-09-2022	3527.750	0.0147	404.600	0.0058	8823.55	0.0235
03-10-2022	3515.350	-0.0035	397.650	-0.0172	8544.4	-0.0316
04-10-2022	3579.600	0.0183	407.900	0.0258	8687.45	0.0167
06-10-2022	3594.650	0.0042	414.100	0.0152	8702.25	0.0017
07-10-2022	3603.550	0.0025	412.150	-0.0047	8782.95	0.0093
10-10-2022	3616.950	0.0037	395.950	-0.0393	8865.55	0.0094
11-10-2022	3528.750	-0.0244	393.350	-0.0066	8681.95	-0.0207
12-10-2022	3624.500	0.0271	396.550	0.0081	8685.85	0.0004
13-10-2022	3604.800	-0.0054	399.000	0.0062	8645	-0.0047
14-10-2022	3570.500	-0.0095	396.250	-0.0069	8617.3	-0.0032
	Average Return	-0.0026	Average Return	-0.0058	Average Return	-0.0034
	Standard Deviation	0.0147	Standard Deviation	0.0199	Standard Deviation	0.0180
	Variance	0.0002	Variance	0.0004	Variance	0.0003

Table 1: Average return, daily return, standard deviation and variance analysis.

Interpretation

A security is considered to have high volatility if its prices change significantly over a short period of time. A security is said to have low volatility if its price changes gradually over time.

Above table represents that, Standard deviation in stock prices of Bajaj Auto Ltd. is 0.00147 which is less than the standard deviation of Tata Motors Ltd. and Maruti Suzuki Ltd. It shows that Stock prices of all companies are more stable. Out of the three companies stock, stock of Bajaj Auto Ltd. is more stable that rest of the two companies, so investor should prefer to purchase a stock of Bajaj Auto Ltd. due to low volatility. The proportion in which standard deviation increases, it increases the variances of stock, due to low vitality variance is low, it shows stability of share prices. Variance of Baja Auto Ltd. is low as compared to rest of the companies so investor should put first preference to invest in it.

Average daily return is showing negative sign on the data of six months, it shows overall economic inflation affected of stock prices, now investors are preferring stocks of Information technology & health and hospitality industries. Average daily returns of previous six months of selected companies show negative sign it, indicates the sign of inflation of market.

Quarter wise Revenue, Gross Profit ratio, Net Profit Ratio, and Closing stock prices of the companies

Table 2: Quarter wise Revenue, Gross Profit ratio, Net Profit Ratio, and Closing stock prices

	Bajaj Auto Ltd. (Amt. in Thousand)			Tata Motors Ltd. (Amt. in Crores)			Maruti Suzuki India Ltd. (Amt. in Thousand)		
Particular	30-Dec-21	30-Mar-22	29-Jun-22	30-Dec-21	30-Mar-22	29-Jun-22	30-Dec-21	30-Mar-22	29-Jun-22
Total Revenue	88,055,000	78,269,400	77,688,900	6,576.61	17,338.27	14,874.44	221,862,000	268,822,000	222,889,000
Gross Profit	20,664,400	14,188,800	19,962,800	-915.73	312.54	-138.25	47,093,000	37,160,000	55,471,000
Net Profit for Equities	14,296,800	15,261,600	11,633,300	-941.42	413.35	-181.03	10,418,000	18,758,000	10,362,000
Gross profit ratio	23.47	18.13	25.70	-13.92	1.80	-0.93	21.23	13.82	24.89
Net profit ratio	16.24	19.50	14.97	-14.31	2.38	-1.22	4.70	6.98	4.65
Stock Price at every Quarter	3200.8	3676.1	3867.55	476.0	433.7	416.95	7344.6	7437.9	7207.5

Interpretation

1. The above table shows that Total revenue of Bajaj Auto Ltd. was decreased in the second and third quarter, but the gross profit ratio of the company was 23.47% in first quarter, it decreased to 18.13% in second quarter and again increased to 25.70% in third quarter. In third quarter though there is decrease in revenue but gross profit ratio is increased, it shows that company has controlled the factory expenses. The closing stock prices of every quarter is shows increasing trend, it shows purchasing the shares of Bajaj auto ltd may give good returns to the investors.
2. Total revenue of Tata Motors Ltd. was increased in the second quarter, but again decreased in third quarter but the gross profit ratio of the company was negative in first quarter, it became positive in second quarter and again became negative in third quarter. Due to decrease in net profit, gross profit and net profit, company's quarterly stock price shows decreasing trend.
3. Total revenue of Maruti Suzuki India Ltd. was increased in the second quarter, but again decreased in third quarter, the gross profit ratio of the company was decreased in second quarter, it again increased in third quarter. Stock price of the second quarter is increased in second and third quarter.
   After the careful analysis of quarter wise revenue and stock price of selected companies, it proves that there is positive relationship between quarter wise revenue and stock price of respective companies which accepts alternative hypothesis HB_1.

6. Findings

1. Equity share price performance of Baja Auto Ltd. is very good, there is no risk in investment in this company.
2. Due to less volatility of share prices, daily returns are also less volatile because of lowest growth rate.
3. Since post COVID 19 this sector growing slowly, it will take another half year to boost. Investors may hold these stocks long term purpose.
4. There is a positive relationship between quarter wise revenue and stock price of respective companies. So while investing in the companies, investor should check revenue and quarterly stock prices.

7. Limitations of Study:

Here researcher has taken a data of six months and calculated standard deviation, variance and average returns to check the volatility of company's stock. Investors/ analyst can calculate standard deviation for 252 stock working days, which will show a clearer picture of the company before investment.

Volatility does not reflect how prices move in relation to one another. This is so that both positive and negative differences are merged into one quantity when standard deviation (or variance) is calculated.

8. Conclusion

In trading and investment methods, the standard deviation is a particularly helpful tool since it can be used to gauge stock volatility and forecast performance trends. Volatility gauges a security's risk. It provides information on the security's pricing pattern and aids in estimating potential short-term swings.

Increase in revenue increases the stock price of the companies, those companies whose revenue, net profit and gross profit and stock price shows increasing trend such company is good for investment.

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