MODEL FOR IDENTIFYING VOLATILITY IN FINANCIAL MARKETS WITH THE HELP OF NSE LISTED STOCKS WITH SPECIAL REFERENCE TO AXIS BANK LIMITED, BAJAJ FIN SERVE LIMITED AND BAJAJ AUTO LIMITED DURING POST COVID-19 IN INDIA- AN EXPLORATORY STUDY

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ABSTRACT

This study covers the whole gamut of volatility in terms of Share price increase or decrease. The centre of coverage over here in this study is COVID-19. We all have to strongly admit that COVID has created much more crucified impacts on all businesses including stock market trading. 100 Trading Days Cash Market data and 90 trading days Future Price data were taken in to account. Volatility is being computed with the help of Excel application and it is found that those stocks experienced low upswings are said to be high risky stocks and these stocks are not fit enough to buy. These share prices are further backed up by Cash flows, Book Value Per share, Earnings Per share. These financial variables' quarterly growth history from the start of Lock down is checked out and if the growth is negative, the concerned stock is classified as risk and it is not fit to buy.

Key words: Volatility, Upswing, Downswing, Fit to Buy for Investment and Trading

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1. INTRODUCTION

It is a rate at which the price of a security increases or decreases for a given set of returns. Volatility is measured by calculating the standard deviation of the annualized returns over a given period of time. It shows the range to which the price of a security may increase or decrease. Volatility measures the risk of a security. It is used in option pricing formula to gauge the fluctuations in the returns of the underlying assets. Volatility indicates the pricing behavior of the security and helps estimate the fluctuations that may happen in a short period of time. If the prices of a security fluctuate rapidly in a short time span, it is termed to have high volatility. If the prices of a security fluctuate slowly in a longer time span, it is termed to have low volatility.

1.1. Statement of Problem

In Equity Market, detecting the real stocks which are yielding returns is found to be difficult on account of very high volatility in the Market. Hence there is the strong and reliable analysis are required based on certain criteria.

1.2. Objectives of the Study

To describe the model to find out Highly Volatile and Less Volatile Stocks

1.3. Need for the Study

- To inform novice investors about the whole landscape of stock market fluctuations
- To tell them how to make money out of stock market investments

1.4. Scope of Study

This study explains the methodology of finding stock market volatility with the evidence of Apollo Tyres Limited, Asian Paints Limited and Ashok Leyland Limited. 101 trading days in Cash Market and 90 Trading Days in Derivative Market were taken to prove the volatility impacts.

1.5. Limitations

This study derives its findings and conclusions only by means of analyzing Financial Data. All drawbacks using financial data will be reflected in this study also.

2. FINANCIAL RATIOS

2.1. Return on Capital Employed (ROCE)

ROCE is a profitability ratio which measures how efficiently a company can generate profits from the capital employed. The return on capital employed shows how much operating income is generated for each rupee of capital invested. A high and stable ROCE can be a sign of a very good company, as it shows that a firm is making consistently good use of its resources.

However, a higher ROCE is more favorable always, as it indicates that more profits are generated for each rupee of capital employed.

The formula is given by,

$$ROCE = \frac{EBIT}{\text{Capital Employed}}$$

where Capital Employed = Total Assets – Current Liabilities (2)

Table 1 Total Assets (in crores)

Company	2019	2018	2017	2016
Axis Bank	8,009,965,316	6,913,295,799	6,014,676,703	5,254,676,181
Bajaj Finserv Ltd.	2,08,548.71	1,59,126.14	1,28,617.27	1,03,445.03
Bajaj Auto Ltd.	28,834.41	25,141.00	21,637.62	16,426.63

Table 2 Current Liabilities (in crores)

Company	2019	2018	2017	2016
Axis Bank	330,731,159	262,454,534	262,954,713	151,087,716
Bajaj Finserv Ltd.	61,263.28	56,738.85	50,389.78	38,102.93
Bajaj Auto Ltd.	4,873.78	4,111.40	3,212.84	2,953.09

Table 3 Capital Employed (in crores)

Company	2019	2018	2017	2016
Axis Bank	7,679,234,157	6,650,841,265	5,751,721,990	5,103,588,465
Bajaj Finserv Ltd.	147,285	102,387	78,227	65,342
Bajaj Auto Ltd.	23,961	21,030	18,425	13,474

Table 4 EBIT (in crores)

Company	2019	2018	2017	2016
Axis Bank	69,740,881	1,215,715	54,675,647	126,820,480
Bajaj Finserv Ltd.	8,154.74	6,310.17	4,924.53	3,804.05
Bajaj Auto Ltd.	6,955.58	5,933.41	5,587.55	5,295.31

Table 5 Return on Capital Employed (ROCE)

Company	2019	2018	2017	2016
Axis Bank	0.91	0.02	0.95	2.48
Bajaj Finserv Ltd.	5.54	6.16	6.30	5.82
Bajaj Auto Ltd.	29.03	28.21	30.33	39.30

ROCE of Axis Bank and Bajaj Auto has a steady decline between 2016 and 2018. Whereas, in 2019 it has increased. Bajaj Finserv's ROCE has a rise and fall between 2016 and 2018.

2.2. Cash Flow from Operations (CFO)

It represents the amount of cash a company generates (or consumes) from carrying out its operating activities over a period of time.

Operating cash flow is calculated by starting with net income. The income statement includes expenses that may not have actually been paid for yet. Thus, net income has to be adjusted by adding back all non-cash expenses like depreciation, stock-based compensation, and others.

The following table shows the cash flow from operating activities (in crores) taken from the financial statements of respective companies.

Table 6 Cash Flow from Operations (in crores)

Company	2019	2018	2017	2016
Axis Bank	37,125.25	-38,390.30	34,192.28	-31,076.68
Bajaj Finserve Ltd.	-27,102.22	-2,037.69	-1,218.88	-583.96
Bajaj Auto Ltd.	2,486.86	4,327.84	3,267.36	3,678.45

Bajaj Auto has positive cash flow, whereas Bajaj Finserve has negative cash flow. Axis bank's CFO is fluctuating.

2.3. Book Value Per Share (BVPS)

It is the per share value of a company based on its equity available to common shareholders. The book value is a company's assets minus its liabilities. It may also be called as shareholder's equity.

$$BVPS = \frac{\text{Shareholder's Equity}}{\text{Outstanding Shares}} \quad (3)$$

Book value per share is highly useful for investors to get a real-world view of a company's equity value. It may be used by some investors to determine the equity in a company relative to the market value of the company, which is the price of its stock.

Table 7 Book Value Per Share (Rs.)

Company	2019	2018	2017	2016
Axis Bank	263.65	250.17	235.41	224.77
Bajaj Finserve Ltd.	2,296.58	1,964.14	1,466.58	1,223.38
Bajaj Auto Ltd.	802.91	705.85	617.09	484.51

All the three companies have consistent growth of BVPS between the years 2016 and 2019.

2.4. Earnings Per Share (EPS)

Earnings per share (EPS) is a company's net profit divided by the number of common shares it has outstanding. EPS indicates how much money a company makes for each share of its stock and is a widely used metric for corporate profits.

It is one of the many indicators used by investors in picking up stocks. Investors generally compare EPS with the share price of the stock to determine the value of earnings.

$$EPS = \frac{\text{Net Income}}{\text{Weighted Average Outstanding Shares}} \quad (4)$$

Table 8 Earnings Per Share (Rs.)

Company	2019	2018	2017	2016
Axis Bank	19.61	1.86	16.54	35.12
Bajaj Finserve Ltd.	202.30	166.50	142.10	117.10
Bajaj Auto Ltd.	170.30	145.80	141.00	140.30

The values mentioned above are taken from the annual reports of the three companies between the years 2016 and 2019. There is a consistent growth of EPS for Bajaj Finserv Limited and Bajaj Auto Limited. Whereas, the EPS of Axis Bank Limited has an oscillation between the years 2016 and 2019. This gives a positive sign for an investor to invest in Bajaj Finserv and Bajaj Auto.

3. STOCK PRICE ANALYSIS IN CASH MARKET

The daily closing stock prices of companies - Axis Bank, Bajaj Finserv and Bajaj Auto, listed at National Stock Exchange (NSE) were sourced for a period of 100 days (see Appendix A), i.e., from 4th May, 2020 to 13th August, 2020, and they are tabulated with price swings. For evaluating the volatility of the stocks, the coefficient of variation is found in each case to decide which stock is more volatile based on the 100-day data

Table 9 Showing Stock Prices and Price Swings of Axis Bank Limited (Rs.)

Date	Stock Price	Price Swing
04-05-2020	402.8	-
05-05-2020	389	-13.8
06-05-2020	388.85	-0.15
07-05-2020	397.35	8.5
08-05-2020	382.05	-15.3
11-05-2020	379.55	-2.5
12-05-2020	386.85	7.3
13-05-2020	414	27.15
14-05-2020	401.95	-12.05
15-05-2020	388.55	-13.4
18-05-2020	358.8	-29.75
19-05-2020	354.5	-4.3
20-05-2020	362.5	8
21-05-2020	357.2	-5.3
22-05-2020	336.95	-20.25
26-05-2020	341.3	4.35
27-05-2020	387	45.7
28-05-2020	390.95	3.95
29-05-2020	384.95	-6
01-06-2020	396.95	12
02-06-2020	410.1	13.15
03-06-2020	409.55	-0.55
04-06-2020	394.35	-15.2
05-06-2020	405.3	10.95
08-06-2020	430.25	24.95
09-06-2020	420.05	-10.2
10-06-2020	427.45	7.4
11-06-2020	413.45	-14
12-06-2020	408	-5.45
15-06-2020	389.6	-18.4
16-06-2020	381.55	-8.05
17-06-2020	389.6	8.05
18-06-2020	405.4	15.8
19-06-2020	417.05	11.65
22-06-2020	430.15	13.1
23-06-2020	443.65	13.5
24-06-2020	424.65	-19

Date	Stock Price	Price Swing
25-06-2020	421.7	-2.95
26-06-2020	424.85	3.15
29-06-2020	404.8	-20.05
30-06-2020	406.65	1.85
01-07-2020	433.25	26.6
02-07-2020	423.2	-10.05
03-07-2020	428.45	5.25
06-07-2020	434	5.55
07-07-2020	447.35	13.35
08-07-2020	444.15	-3.2
09-07-2020	453.75	9.6
10-07-2020	439.6	-14.15
13-07-2020	440.05	0.45
14-07-2020	417.7	-22.35
15-07-2020	426.65	8.95
16-07-2020	434	7.35
17-07-2020	433.1	-0.9
20-07-2020	434	0.9
21-07-2020	446.2	12.2
22-07-2020	478.95	32.75
23-07-2020	460.85	-18.1
24-07-2020	445.6	-15.25
27-07-2020	431.55	-14.05
28-07-2020	437.05	5.5
29-07-2020	440.9	3.85
30-07-2020	425.85	-15.05
31-07-2020	431.65	5.8
03-08-2020	417.35	-14.3
04-08-2020	429.15	11.8
05-08-2020	434.95	5.8
06-08-2020	433	-1.95
07-08-2020	433.3	0.3
10-08-2020	431.1	-2.2
11-08-2020	448	16.9
12-08-2020	451.1	3.1
13-08-2020	448.1	-3

Table 10 Showing Stock Prices and Price Swings of Bajaj Finserve Limited (Rs.)

Date	Stock Price	Price Swing
04-05-2020	4,762.35	-
05-05-2020	4,629.20	-133.15
06-05-2020	4,692.90	63.70
07-05-2020	4,673.40	-19.50
08-05-2020	4,601.00	-72.40
11-05-2020	4,558.00	-43.00
12-05-2020	4,668.20	110.20
13-05-2020	4,816.40	148.20
14-05-2020	4,790.25	-26.15
15-05-2020	4,723.25	-67.00
18-05-2020	4,465.45	-257.80
19-05-2020	4,535.45	70.00
20-05-2020	4,702.05	166.60
21-05-2020	4,539.20	-162.85
22-05-2020	4,315.55	-223.65
26-05-2020	4,097.25	-218.30
27-05-2020	4,258.05	160.80
28-05-2020	4,285.95	27.90
29-05-2020	4,404.90	118.95
01-06-2020	4,763.20	358.30
02-06-2020	5,184.70	421.50
03-06-2020	5,286.05	101.35
04-06-2020	5,136.80	-149.25
05-06-2020	5,236.40	99.60
08-06-2020	5,440.95	204.55
09-06-2020	5,310.80	-130.15
10-06-2020	5,223.00	-87.80
11-06-2020	5,158.00	-65.00
12-06-2020	5,285.95	127.95
15-06-2020	5,103.60	-182.35
16-06-2020	5,128.30	24.70
17-06-2020	5,036.95	-91.35
18-06-2020	5,427.55	390.60
19-06-2020	5,899.80	472.25
22-06-2020	6,183.55	283.75
23-06-2020	6,319.65	136.10
24-06-2020	6,046.05	-273.60

Date	Stock Price	Price Swing
25-06-2020	6,021.15	-24.90
26-06-2020	5,946.30	-74.85
29-06-2020	5,890.20	-56.10
30-06-2020	5,845.15	-45.05
01-07-2020	6,169.35	324.20
02-07-2020	6,188.80	19.45
03-07-2020	6,149.40	-39.40
06-07-2020	6,285.00	135.60
07-07-2020	6,589.60	304.60
08-07-2020	6,405.40	-184.20
09-07-2020	6,569.20	163.80
10-07-2020	6,483.80	-85.40
13-07-2020	6,461.45	-22.35
14-07-2020	6,243.45	-218.00
15-07-2020	6,168.45	-75.00
16-07-2020	6,264.90	96.45
17-07-2020	6,361.60	96.70
20-07-2020	6,620.15	258.55
21-07-2020	6,384.35	-235.80
22-07-2020	6,347.40	-36.95
23-07-2020	6,381.35	33.95
24-07-2020	6,270.30	-111.05
27-07-2020	6,173.20	-97.10
28-07-2020	6,342.80	169.60
29-07-2020	6,328.60	-14.20
30-07-2020	6,177.60	-151.00
31-07-2020	6,205.90	28.30
03-08-2020	6,103.15	-102.75
04-08-2020	6,162.00	58.85
05-08-2020	6,242.05	80.05
06-08-2020	6,295.70	53.65
07-08-2020	6,467.15	171.45
10-08-2020	6,402.80	-64.35
11-08-2020	6,440.35	37.55
12-08-2020	6,357.20	-83.15
13-08-2020	6,350.00	-7.20

Table 11 Stock Prices and Price Swings of Bajaj Auto Limited (Rs.)

Date	Stock Price	Price Swing	Date	Stock Price	Price Swing
04-05-2020	2,442.15		25-06-2020	2,820.45	3.20
05-05-2020	2,422.80	-19.35	26-06-2020	2,867.60	47.15
06-05-2020	2,471.85	49.05	29-06-2020	2,859.50	-8.10
07-05-2020	2,406.55	-65.30	30-06-2020	2,826.05	-33.45
08-05-2020	2,419.05	12.50	01-07-2020	2,842.05	16.00
11-05-2020	2,566.30	147.25	02-07-2020	2,879.35	37.30
12-05-2020	2,628.85	62.55	03-07-2020	2,932.40	53.05
13-05-2020	2,696.00	67.15	06-07-2020	2,897.10	-35.30
14-05-2020	2,702.65	6.65	07-07-2020	2,847.15	-49.95
15-05-2020	2,663.60	-39.05	08-07-2020	2,852.45	5.30
18-05-2020	2,477.45	-186.15	09-07-2020	2,882.00	29.55
19-05-2020	2,509.30	31.85	10-07-2020	2,894.70	12.70
20-05-2020	2,557.75	48.45	13-07-2020	2,900.00	5.30
21-05-2020	2,640.35	82.60	14-07-2020	2,899.50	-0.50
22-05-2020	2,553.75	-86.60	15-07-2020	2,942.05	42.55
26-05-2020	2,564.85	11.10	16-07-2020	2,942.30	0.25
27-05-2020	2,580.55	15.70	17-07-2020	2,995.00	52.70
28-05-2020	2,600.00	19.45	20-07-2020	3,002.55	7.55
29-05-2020	2,710.50	110.50	21-07-2020	3,004.30	1.75
01-06-2020	2,758.30	47.80	22-07-2020	2,985.40	-18.90
02-06-2020	2,796.10	37.80	23-07-2020	3,032.10	46.70
03-06-2020	2,783.40	-12.70	24-07-2020	2,985.50	-46.60
04-06-2020	2,817.25	33.85	27-07-2020	3,020.50	35.00
05-06-2020	2,776.30	-40.95	28-07-2020	3,119.35	98.85
08-06-2020	2,801.05	24.75	29-07-2020	3,099.30	-20.05
09-06-2020	2,791.15	-9.90	30-07-2020	3,048.95	-50.35
10-06-2020	2,717.20	-73.95	31-07-2020	3,004.95	-44.00
11-06-2020	2,718.55	1.35	03-08-2020	2,917.45	-87.50
12-06-2020	2,782.15	63.60	04-08-2020	2,969.95	52.50
15-06-2020	2,728.55	-53.60	05-08-2020	3,009.00	39.05
16-06-2020	2,718.45	-10.10	06-08-2020	2,991.80	-17.20
17-06-2020	2,689.45	-29.00	07-08-2020	3,001.70	9.90
18-06-2020	2,678.35	-11.10	10-08-2020	2,993.80	-7.90
19-06-2020	2,674.35	-4.00	11-08-2020	3,007.45	13.65
22-06-2020	2,855.75	181.40	12-08-2020	3,023.00	15.55
23-06-2020	2,862.15	6.40	13-08-2020	3,017.95	-5.05
24-06-2020	2,817.25	-44.90			

Table 12

Price Swing (100days)	Axis Bank Ltd.	Bajaj Finserv Ltd.	Bajaj Auto Ltd.
No. of Upswings	38	35	43
No. of Downswings	34	37	29

Table 13

Axis Bank Limited	
Average Price (Rs.)	414.71
Standard Deviation	28.76
Coefficient of Variation (CV)	6.93

Table 14

Bajaj Finserv Limited	
Average Price (Rs.)	5,613.50
Standard Deviation	774.30
Coefficient of Variation (CV)	13.79

Table 15

Bajaj Auto Limited	
Average Price (Rs.)	2,804.04
Standard Deviation	183.24
Coefficient of Variation (CV)	6.53

- In case of Axis Bank and Bajaj Auto, the number of upswings exceed the number of down- swings, which is a positive sign. Whereas, for Bajaj Finserve, the number of upswings fall behind the number of downswings by 2.
- The CV of Bajaj Finserve stock prices is 13.79, which is more than the CV of Axis bank and Bajaj Auto stock prices. It clearly depicts that Bajaj Finserve stock is more volatile than that of Axis Bank and Bajaj Auto.

4. FUTURE PRICE ANALYSIS IN DERIVATIVE MARKET

The daily closing Future prices of Axis Bank, Bajaj Finserve and Bajaj Auto, listed at National Stock Exchange (NSE) were sourced for a period of last 90 days (see Appendix B). The price swings are determined and tabulated. For evaluating the volatility of the futures, the coefficient of variation is found in each case to decide which future is more volatile based on the 90-day data.

Table 16 Future Prices and Price Swings of Axis Bank Limited (Rs.)

Date	Future Price	Price Swing	Date	Future Price	Price Swing
26-Jun-2020	426.65	-	05-Aug-2020	437.2	6.05
29-Jun-2020	405.25	-21.4	06-Aug-2020	434.5	-2.7
30-Jun-2020	404.2	-1.05	07-Aug-2020	435.8	1.3
01-Jul-2020	436.8	32.6	10-Aug-2020	434.65	-1.15
02-Jul-2020	424	-12.8	11-Aug-2020	451.55	16.9
03-Jul-2020	429.6	5.6	12-Aug-2020	453.3	1.75
06-Jul-2020	436.3	6.7	13-Aug-2020	450.45	-2.85
07-Jul-2020	449.9	13.6	14-Aug-2020	438.15	-12.3
08-Jul-2020	445.65	-4.25	17-Aug-2020	440	1.85
09-Jul-2020	455.65	10	18-Aug-2020	448.15	8.15
10-Jul-2020	444	-11.65	19-Aug-2020	446.7	-1.45
13-Jul-2020	444.3	0.3	20-Aug-2020	436.75	-9.95
14-Jul-2020	421.4	-22.9	21-Aug-2020	442.65	5.9
15-Jul-2020	429.2	7.8	24-Aug-2020	448.35	5.7
16-Jul-2020	437	7.8	25-Aug-2020	453.75	5.4
17-Jul-2020	436.9	-0.1	26-Aug-2020	465.2	11.45
20-Jul-2020	435.2	-1.7	27-Aug-2020	474.75	9.55
21-Jul-2020	450	14.8	28-Aug-2020	511.4	36.65
22-Jul-2020	481.95	31.95	31-Aug-2020	497.75	-13.65
23-Jul-2020	464.6	-17.35	01-Sep-2020	488.8	-8.95
24-Jul-2020	448.85	-15.75	02-Sep-2020	486.1	-2.7
27-Jul-2020	434.7	-14.15	03-Sep-2020	476.05	-10.05
28-Jul-2020	440.45	5.75	04-Sep-2020	457.25	-18.8
29-Jul-2020	443.55	3.1	07-Sep-2020	460.55	3.3
30-Jul-2020	427.9	-15.65	08-Sep-2020	445.65	-14.9
31-Jul-2020	434.9	7	09-Sep-2020	433.3	-12.35
03-Aug-2020	420.3	-14.6	10-Sep-2020	447.3	14
04-Aug-2020	431.15	10.85	11-Sep-2020	448.5	1.2

Table 17 Future Prices and Price Swings of Bajaj Finserv Limited (Rs.)

Date	Future Price	Price Swing
26-Jun-2020	6091.85	
29-Jun-2020	5950	-141.85
30-Jun-2020	5900	-50
01-Jul-2020	6089	189
02-Jul-2020	6089	0
03-Jul-2020	6089	0
06-Jul-2020	6089	0
07-Jul-2020	6610.95	521.95
08-Jul-2020	6425.3	-185.65
09-Jul-2020	6600	174.7
10-Jul-2020	6572.95	-27.05
13-Jul-2020	6523	-49.95
14-Jul-2020	6320.05	-202.95
15-Jul-2020	6388.05	68
16-Jul-2020	6388.05	0
17-Jul-2020	6384.7	-3.35
20-Jul-2020	6474.9	90.2
21-Jul-2020	6421.85	-53.05
22-Jul-2020	6300	-121.85
23-Jul-2020	6395	95
24-Jul-2020	6280	-115
27-Jul-2020	6196.35	-83.65
28-Jul-2020	6395	198.65
29-Jul-2020	6369.55	-25.45
30-Jul-2020	6213.1	-156.45
31-Jul-2020	6245.4	32.3
03-Aug-2020	6145.25	-100.15
04-Aug-2020	6211	65.75

Date	Future Price	Price Swing
05-Aug-2020	6292.9	81.9
06-Aug-2020	6341.55	48.65
07-Aug-2020	6522.8	181.25
10-Aug-2020	6444.5	-78.3
11-Aug-2020	6490.45	45.95
12-Aug-2020	6402.5	-87.95
13-Aug-2020	6401.3	-1.2
14-Aug-2020	6281.35	-119.95
17-Aug-2020	6317.7	36.35
18-Aug-2020	6381.75	64.05
19-Aug-2020	6334.6	-47.15
20-Aug-2020	6315.9	-18.7
21-Aug-2020	6312.05	-3.85
24-Aug-2020	6438.25	126.2
25-Aug-2020	6540.7	102.45
26-Aug-2020	6598.2	57.5
27-Aug-2020	6548.45	-49.75
28-Aug-2020	6575.4	26.95
31-Aug-2020	6208.75	-366.65
01-Sep-2020	6387.45	178.7
02-Sep-2020	6388.25	0.8
03-Sep-2020	6386.65	-1.6
04-Sep-2020	6296.3	-90.35
07-Sep-2020	6271.15	-25.15
08-Sep-2020	6235.3	-35.85
09-Sep-2020	6058.5	-176.8
10-Sep-2020	6155.05	96.55
11-Sep-2020	6153.35	-1.7

Table 18 Showing Future Prices and Price Swings of Bajaj Auto Limited (Rs.)

Date	Future Price	Price Swing
26-Jun-2020	2853.55	
29-Jun-2020	2853.55	0
30-Jun-2020	2853.55	0
01-Jul-2020	2853.55	0
02-Jul-2020	2853.55	0
03-Jul-2020	2853.55	0
06-Jul-2020	2853.55	0
07-Jul-2020	2853.55	0
08-Jul-2020	2850	-3.55
09-Jul-2020	2878.45	28.45
10-Jul-2020	2907.95	29.5
13-Jul-2020	2907.95	0
14-Jul-2020	2909.75	1.8
15-Jul-2020	2909.75	0
16-Jul-2020	2909.75	0
17-Jul-2020	2909.75	0
20-Jul-2020	2909.75	0
21-Jul-2020	2909.75	0
22-Jul-2020	2956	46.25
23-Jul-2020	2956	0
24-Jul-2020	2956	0
27-Jul-2020	3003.65	47.65
28-Jul-2020	3132.5	128.85
29-Jul-2020	3113.5	-19
30-Jul-2020	3063.95	-49.55
31-Jul-2020	3020.15	-43.8
03-Aug-2020	2941.7	-78.45
04-Aug-2020	2989.5	47.8

Date	Future Price	Price Swing
05-Aug-20	3023.4	33.9
06-Aug-20	3011.2	-12.2
07-Aug-20	3023.7	12.5
10-Aug-20	3015.7	-8
11-Aug-20	3032.5	16.8
12-Aug-20	3035.1	2.6
13-Aug-20	3035.55	0.45
14-Aug-20	3000	-35.55
17-Aug-20	3129.25	129.25
18-Aug-20	3119.2	-10.05
19-Aug-20	3077.55	-41.65
20-Aug-20	3054.1	-23.45
21-Aug-20	3070.4	16.3
24-Aug-20	3053.35	-17.05
25-Aug-20	3023.45	-29.9
26-Aug-20	3097.5	74.05
27-Aug-20	3051.35	-46.15
28-Aug-20	3023.95	-27.4
31-Aug-20	2980.9	-43.05
01-Sep-20	2974.95	-5.95
02-Sep-20	2899.1	-75.85
03-Sep-20	2908.95	9.85
04-Sep-20	2898.8	-10.15
07-Sep-20	2909.25	10.45
08-Sep-20	2911.15	1.9
09-Sep-20	2923.65	12.5
10-Sep-20	2925.25	1.6
11-Sep-20	2924.25	-1

Table 19

Price Swing (100days)	Axis Bank Ltd.	Bajaj Finserve Ltd.	Bajaj Auto Ltd.
No. of Upswings	29	22	20
No. of Downswings	26	29	20

Table 20

Axis Bank Limited	
Average Price (Rs.)	446.16
Standard Deviation	20.43
Coefficient of Variation (CV)	4.58

Table 21

Bajaj Finserve Limited	
Average Price (Rs.)	6325.70
Standard Deviation	166.10
Coefficient of Variation (CV)	2.63

Table 22

Bajaj Auto Limited	
Average Price (Rs.)	2966.03
Standard Deviation	83.48
Coefficient of Variation (CV)	2.81

- In case of Axis Bank and Bajaj Auto, the number of upswings exceed the number of down- swings, which is a positive sign. Whereas, for Bajaj Finserve, the number of upswings fall behind the number of downswings by 2.
- The CV of Bajaj Finserve and Bajaj Auto Future prices are 2.63 and 2.81 respectively , which is better than the CV of Axis bank which stands at 4.58. From this, it can be concluded that Axis Bank Futures are more volatile than Bajaj Finserve and Bajaj Auto. Investing in the former would be more riskier than the latter.

5. CONCLUSION

Based on the analysis done from the collected data, in the equity segment, it would be better to invest in stocks of Axis Bank and Bajaj Auto instead of Bajaj Finserve. The stocks of Bajaj Finserve possesses double the risk of the other two. The EPS, BVPS and CFO show a positive sign towards investing in Bajaj Auto.

In the derivative segment, though Axis Bank has less number of downswings, it is more volatile than Bajaj Finserve and Bajaj Auto. So, It would be better to invest in the Bajaj group. The EPS, BVPS and CFO again show a positive sign towards investing in Bajaj Auto.

Also, while considering both the financial ratio analysis and the market price data of stocks and futures, it would be fine for an investor to invest his money in Bajaj Auto stocks or futures and gain less riskier returns when compared with Axis Bank and Bajaj Finserve.

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