



INDRAPRASTHA INSTITUTE *of*
INFORMATION TECHNOLOGY **DELHI**

Bajaj Auto Ltd

Foundation of Finance course Project

Financial Analysis

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Introduction

Bajaj Auto founded in 1945 by Jamnalal Bajaj and Rogen Frias as *M/s Bachraj Trading Corporation Private Limited* is an Indian multinational automotive manufacturing company based in Pune. It is a part of Bajaj Group. Initially it was importing two and three- wheelers for sale in India. In the 1960's it started manufacturing scooters in India.

It manufactures motorcycles, scooters and auto-rickshaws and cars. It is one of the leading manufacturers of motorcycles and three- wheelers in the world. It has multiple subsidiaries in India and abroad including Indonesia, Netherlands, Thailand and Spain.

Headquarters :	Pune, Maharashtra
Industry :	Automotive
Chairman :	Rajiv Bajaj
Nature of business :	Manufacturing and selling of two-wheelers and three-wheelers
Revenue :	37,609.02 (FY 2023)
Employee Strength:	Over 9,000

Timeline:

- 1945 : Founded as M/s Bachraj Trading Corporation Private Limited
- 1959 : Obtained License from GOI to manufacture two- wheelers and three- wheelers. Renamed as Bajaj Auto Private Ltd
- 1960 : Became Public limited company
- 1971 : Introduced three- wheeled goods carrier. Started independent production under the Bajaj brand.
- 1973 : Began exports of scooters and 3 -wheelers to Nigeria, Bangladesh, Australia, Sudan, Bahrain, Hong Kong and Yemen.
- 1986 : Launch of motorcycles, changed its branding from a scooter manufacturer to two- wheeler manufacturer.
- 1997 : Introduced the Kawasaki Bajaj Boxer and the RE diesel Auto rickshaw
- Early 2000's : Brought a major stake in "Tempo Firodia", renamed it to "Bajaj Tempo". Later renamed to "Force Motors".
- 2007 : Purchased stake in "KTM", Austrian motorcycle, bicycle and sports car manufactured.
- 2008 : Bajaj Auto Limited split into three corporate entities - Bajaj Finserv, Bajaj Auto Ltd, Bajaj Holdings and Investment Ltd.
- 2009 : Invested \$8 million in bicycle and electric scooter rental startup "Yulu".
- 2017 : Teamed up with "Triumph Motorcycles Ltd to build mid-capacity motorcycles.
- 2022 : "Chetak Technology Limited" , a subsidiary of Bajaj Auto inaugurated a newly built EV manufacturing plant in Pune.

Board of Directors:

As on 31 march 2023, the Board of directors consists of twelve directors.

3 Executive directors (including managing director)

6 Non Executive and independent directors

3 Non Executive and non- independent directors

No institutional nominee director

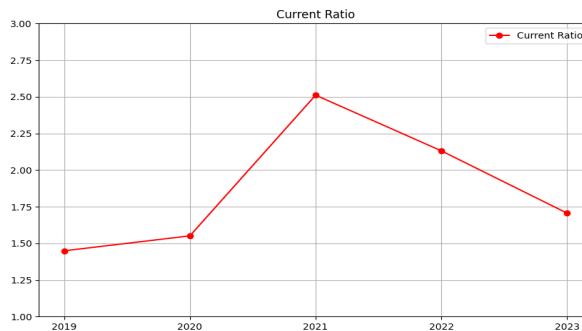
Name of director	Category	Name of director	Category
Niraj Bajaj	chairman, non-executive, non-independent	Madhur Bajaj	Vice Chairman, non-executive, non-independent
Rajiv Bajaj	Managing Director and CEO, executive	Sanjiv Bajaj	Non-executive, non-independent
D J Balaji Rao	Non-executive, independent	Pradeep Shrivastava	Executive Director
Dr. Naushad Forbes	Non-executive, independent	Anami N. Roy	Non-executive, independent
Rakesh Sharma	Executive Director	Ms. Lila Poonawalla	Non-executive, independent
Pradip Shah	Non-executive, independent	Abhinav Bindra	Non-executive, independent

Ratio Analysis

Liquidity Ratios

1. **Current Ratio** = Current assets/ Current liabilities

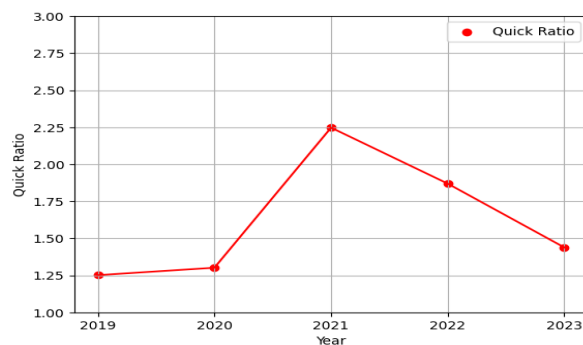
Year	2023	2022	2021	2020	2019
Current Ratio	1.706	2.131	2.511	1.551	1.449



Current ratio is a measure of a company's ability to cover the current liability, which is due within one year. Bajaj auto has maintained a current ratio of more than 1.5, which indicates that it has more flexibility to cover its current liabilities without much difficulty. Peak was achieved in 2021. The declining liquidity position of the company should be well introspected.

2. **Quick Ratio** = (Current assets - inventories)/Current liabilities

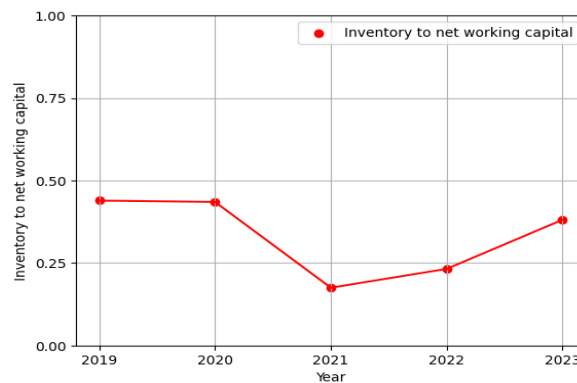
Year	2023	2022	2021	2020	2019
Quick Ratio	1.438	1.869	2.247	1.301	1.251



Quick ratio is a measure of a company's ability to pay its short-term obligations with most liquid assets. Company is maintaining a quick ratio of more than 1, which means that the company has enough liquid assets (that can be easily converted to cash) to cover its current liabilities..The declining liquidity position of the company should be well introspected by the company management.

3. Inventory to net working capital=Inventory /(Current assets - Current liabilities)

Year	2023	2022	2021	2020	2019
Inventory to net working capital	0.381	0.232	0.175	0.435	0.439



Inventory to net working capital measures the extent to which a company's net working capital is tied up in inventory. This ratio for Bajaj Auto was not stable for the last 3 years. A lower ratio indicates that the company is managing its inventory efficiently. A growth in ratio after 2021 tells that some improvement can be done in regards to inventory management.

Leverage Ratios

4. Debt-to-assets ratio = Total debt / Total assets

5. Debt-to-equity ratio = Total debt / Total Stockholders equity

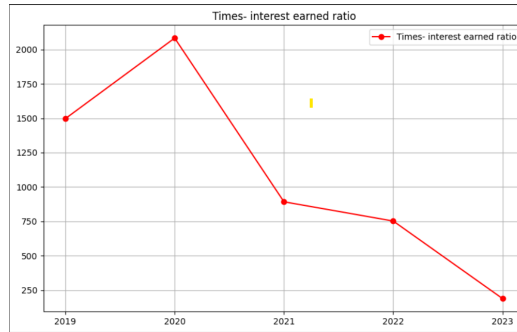
6. Long -term debt-to-equity ratio = Long-term debt / Total shareholders' equity

	Year	2023	2022	2021	2020	2019
4.	Debt-to-assets ratio	0	0	0	0	0
5.	Debt-to-equity ratio	0	0	0	0.01	0
6.	Long-term debt-to-equity ratio	0	0	0	0	0

The company has not shown any debt in its financial reports. Having a Debt-to asset ratio and Debt-to -equity ratio of 0 indicates that Bajaj Auto Ltd is in good financial condition. A low debt-to-equity ratio indicates that the company is using more equity to finance its operations. The company is in a safe position, as it means that the company is less dependent on debt and hence has very less leverage risk. The other leverage ratios convey the same, that the company is able to generate profits to cover up its obligations.

7. **Times- interest earned ratio (coverage ratio)** = EBIT / Interest expense

Year	2023	2022	2021	2020	2019
Coverage ratio	188.65	752.19	892.74	2083.34	1497.24



The TIE ratio measures the extent to which operating income can decline before the firm is unable to meet its annual interest costs. Company is covering its interest charges by a much higher margin of safety than the average firm in the industry. Bajaj would not face any difficulties if it attempted to borrow additional money. The decline in the ratio is something the management should discuss as the margin of safety is getting lower by the year.

Profitability ratios

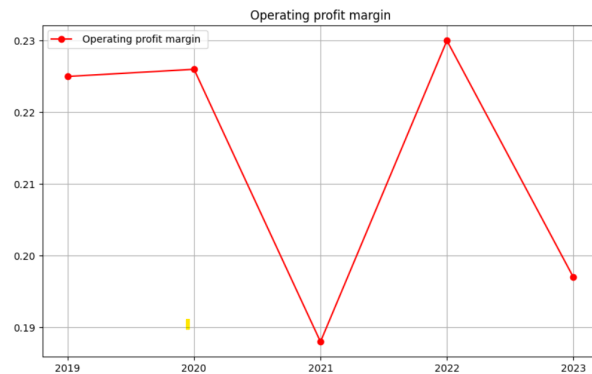
8. Gross profit margin = Gross Margin / Sales = (Sales - Cost of goods sold) / Sales

Year	2023	2022	2021	2020	2019
Gross profit margin	0.279	0.277	0.301	0.319	0.30

The gross profit margin is a measure of a company's profitability before taking into account its operating expenses. The gross profit margin of Bajaj Auto Ltd. is significantly higher than the industry standard, which is a positive sign. The company is becoming more efficient at generating profit from its sales.

9. Operating profit margin = Profits before taxes and interest / Sales

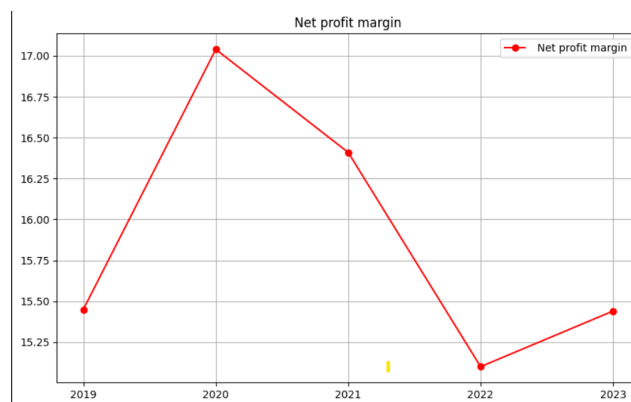
Year	2023	2022	2021	2020	2019
Operating profit margin	0.197	0.23	0.188	0.226	0.225



This ratio measures operating income. The operating profit margin is stable around 0.2 which means that the company's operations have remained low over the years.

10. Net profit margin = Profits after taxes / Sales

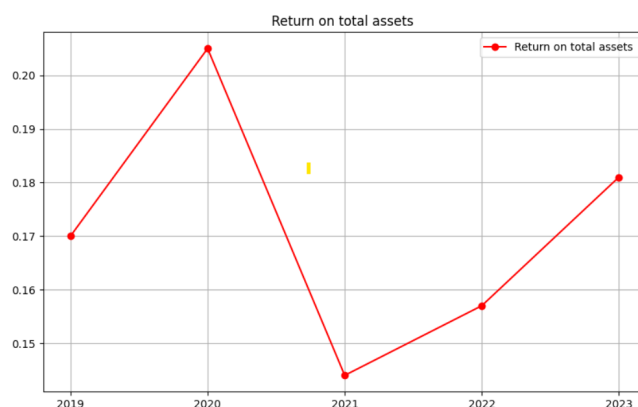
Year	2023	2022	2021	2020	2019
Net profit margin	15.44	15.1	16.41	17.04	15.45



The ratio measures net income per dollar of sales. The net profit margin of Bajaj Auto Ltd. is higher than the industry standard, which is a positive sign. This suggests that the company is very profitable. The company's net profit margin has also been stable.

11. Return on total assets = Profits after taxes / Total assets

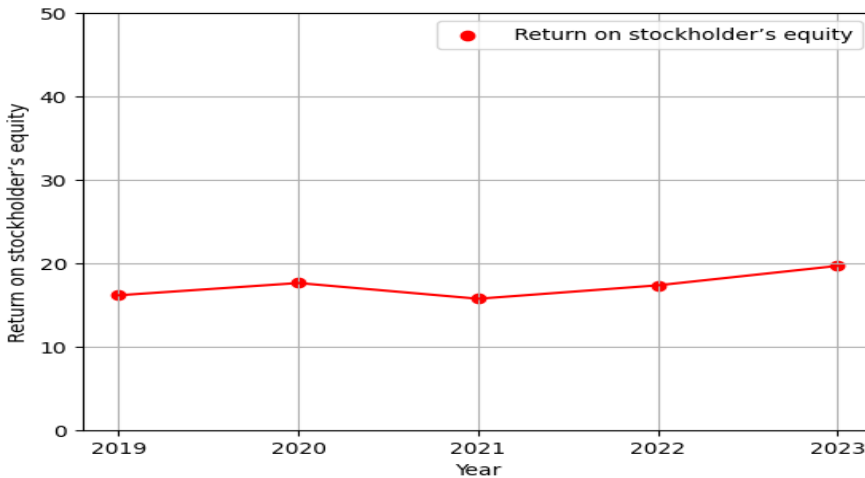
Year	2023	2022	2021	2020	2019
Return on assets ratio	0.181	0.157	0.144	0.205	0.170



The ROTA is a measure of a company's efficiency in using its assets to generate profits. A high ROTA indicates that the company is generating a lot of profit from its assets. A low ratio indicates that the company is not generating enough profit from its assets.

12. Return on stockholder's equity = Profits after taxes / Total stockholder's equity

Year	2023	2022	2021	2020	2019
Return on stockholder's equity	19.667	17.344	15.73	17.62	16.15



It measures the rate of return on stockholders' investment. The ratio is significantly higher than the industry standard, which is a positive sign. This suggests that the company is efficient at generating profit from its stockholders' equity.

13. Earning per share = (Profits after taxes - Preferred stock dividends) / Number of shares

of common stock outstanding

Year	2023	2022	2021	2020	2019
Earning per share	197.3	173.6	157.5	176.3	161.6

A high EPS indicates that the company is generating a lot of profit from each share of its stock. The positive trend of EPS gain is optimistic and may attract more investors.

Activity Ratios

14. Inventory turnover = Net Sales / Inventory of finished goods

Year	2023	2022	2021	2020	2019
Inventory turnover	25.41	26.11	18.16	27.37	30.75

It indicates how many times inventory is turned over during the year. It took a hit in 2021 but has been rising ever since which is very optimistic.

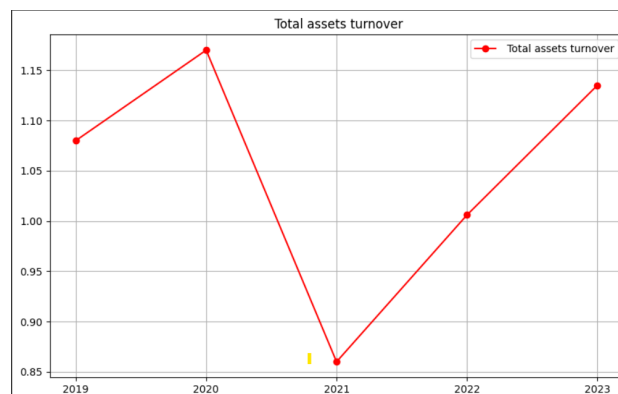
15. Fixed assets turnover = Net Sales / Fixed Assets

Year	2023	2022	2021	2020	2019
Fixed assets	1.58	1.35	1.56	1.60	1.62

It measures how effectively the firm uses its plant and equipment. The company seems to have about the right amount of fixed assets relative to its sales as it is par with the industry standards.

16. Total assets turnover = Net Sales / Total assets

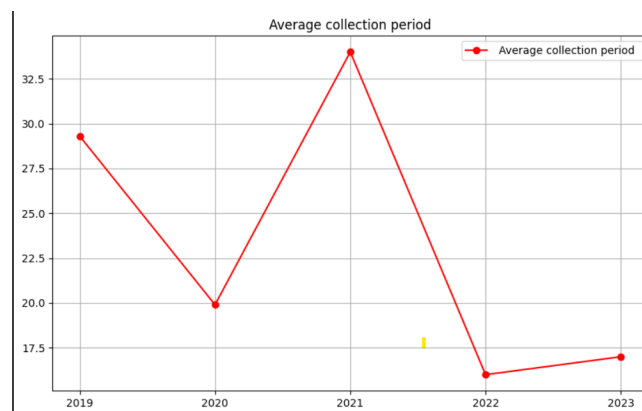
Year	2023	2022	2021	2020	2019
Total assets turnover	1.135	1.006	0.86	1.17	1.08



It measures how effectively the firm uses its total assets. The ratio is increasing uniformly after it got hit in 2021 badly. It means it is able to generate enough sales given its assets as long as it continues to grow.

17. Average collection period = Accounts receivable / (Revenue / 365)

Year	2023	2022	2021	2020	2019
Average collection period	17.2	16.1	34.4	19.9	29.3



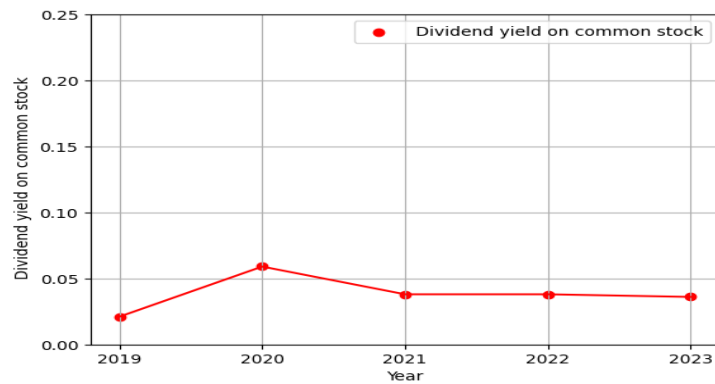
It represents the average length of time the firm must wait after making a sale before receiving cash. The days have reduced over the years reducing the possibility of getting customers who would default on payment.

Other ratios

18. Dividend yield on common stock = Annual dividends per share / Current market price per share

Year	2023	2022	2021	2020	2019
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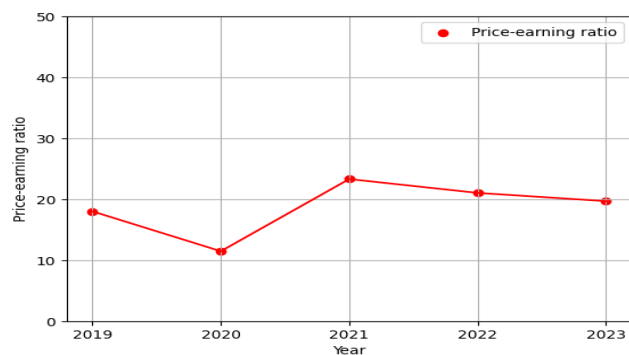
Dividend yield on common stock	0.036	0.038	0.038	0.059	0.021
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Dividend yield on common stock is stable for the company. That means its dividend yield is consistent except for 2020 (where there was a downfall in price of share) and above average value in the automobile industry. The company is in a strong financial position which may be the reason for higher dividends.

19. Price-earning ratio = Current market price per share / Earnings per share(EPS)

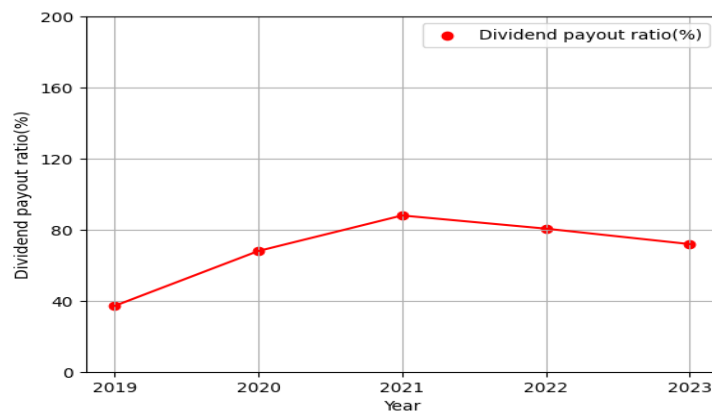
Year	2023	2022	2021	2020	2019
Price-earning ratio	19.69	21.04	23.31	11.47	18.01



PE ratio is also relatively stable for the company. There is a deviation in 2020 because the prices of shares were down in 2020 and dividends paid by the company were consistent.

20. Dividend payout ratio(%) = Dividends per share(DPS)*100 / Earnings per share(EPS)

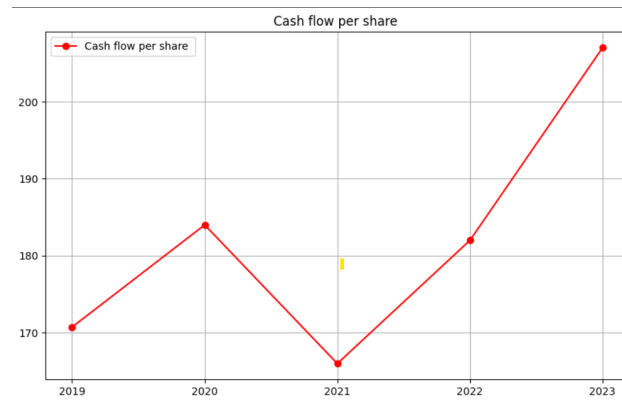
Year	2023	2022	2021	2020	2019
Dividend payout	71.9	80.6	88	68	37.1



It shows how much of a company's net income is paid to shareholders as dividends. For Bajaj Auto this ratio is high, it is paying a high portion of earnings as dividends. That means, the company may be in good financial conditions, has high profits and instead of reinvesting for the growth of business, it is paying more dividends.

21. Cash flow per share = (After tax profits + Depreciation) / (Number of common shares outstanding)

Year	2023	2022	2021	2020	2019
Cash flow per share I	207.21	182.88	166.35	184.76	170.74



It measures the cash flow generated by a company that is attributable to each outstanding common share. A high ratio indicates that the company is generating a lot of cash from its operations, which can be used to invest in growth, pay dividends to shareholders, and repay debt. The trend is optimistic.

Interpretation of the operations of the company based on ratio analysis

1. The company's current ratio is above 1.5 and quick ratio is above 1.25 over the last 5 years. That means, the company has a strong liquidity position and is in good condition to meet its short term obligations. Slight deviation in these ratios will not have any bad effect on the company.
2. The company has not shown any debt, which indicates its strong financial position and flexibility for growth opportunities and dividends to shareholders.
3. Total assets turnover and inventory turnover are fairly high, which indicates efficient use of assets by the company. Although inventory turnover ratio has decreased slightly throughout the years. So, there can be more efficient use of inventory
4. Average collection period for the company is consistently below 35 days, which indicates that the company is collecting its accounts receivable quickly, this may be possible because of efficient management of accounts receivables.
5. Profitability ratios for the company are consistent and significantly higher than the automobile industry average. Company is running profitably.
6. Company's return on total assets and return on stockholder's equity is fairly high. Also Company's cash flows per share is consistently above 150. This may be the reason, it is able to pay high dividends to its shareholders. The Dividend payout ratio in the last 5 years is consistently higher than 37%.
7. After analyzing the ratios, it can be concluded that Bajaj Auto is a financially strong company with a strong track record of profitability and investors are receiving high dividends. Company demonstrates effective use of its assets and capital.

Significant accounting policies:

1)Revenue from contracts with customers:

Revenue from contracts with customers is recognised when the performance obligation is satisfied.. The company applies the five-step revenue recognition model:

Identification of the contract, Identification of the performance obligations,determination of the transaction price,allocation of the transaction price to the performance obligations ,recognition of revenue

2)Investments in associates are accounted for using the equity method. Investments in other entities are accounted for at cost less any impairment losses.

3)Inventories are initially recognised at cost, including any costs directly attributable to bringing them to their present location and condition. Subsequent to initial recognition, inventories are measured at the lower of cost and net realizable value.

4)The company recognises the expense of employee benefits as the obligation arises. The company recognises a liability for any unpaid employee benefits.

5)Provisions are recognised for liabilities that are probable and measurable. Contingent liabilities are disclosed in the notes to the financial statements.

Significant news items about the company

1)Innovative 3-wheeler released whose advantages lies in its advanced technology, designed to provide commuters with an environmentally friendly and cost-effective mode of transportation

<https://www.dailyexcelsior.com/bajaj-auto-new-style-fabricators-jointly-launch-electric-3-wheeler/>

2)Bajaj Auto's First Overseas Facility To Start Production Within 12 Months

<https://www.bqprime.com/business/bajaj-autos-first-overseas-facility-to-start-production-within-12-months>

3) Bajaj Auto plans Rs 500 crore capex for EV business in FY24

<https://www.autocarpro.in/news/bajaj-auto-plans-rs-500-crore-capex-for-ev-business-in-fy24-114841>

4) <https://www.msn.com/en-in/autos/other/spotted-new-bajaj-ct150x-incoming/ar-AA1jT8Zp>

5) [Bajaj Auto October 2023 sales up 36% to 3,29,618 units](#)

6) [new triumph speed 400 launched in india at price of 2,23,000](#)

Management Commentary:

1. Highest ever figures for Sales and Profit were recorded this year. Surplus cash and cash equivalents as on 31 March 2023 were Rs 17,445 crore.

2. Sales for motorcycles steadily fell after 2019. In 2023 growth was achieved for the first time. Company achieved growth of 28.7 % in 2022- 2023.

3. The sale of three- wheelers started falling in 2020. Some growth was recorded from FY 2022 and now sales have again reached nearer to the pre- Covid levels.

4. Taken several initiatives for human resource development/ skilling and the company and employees won several awards.

Stock Question:

Company: Bajaj Auto Ltd

Investment Period: 5 years (November 2018 to November 2023)

Monthly Investment: Rs.10,000 along with dividends received being reinvested back for the next month

Assuming buying and selling occurs at the first trading day of each month as mentioned in question.

The calculations in Excel would make this very clear. First I found the number of shares the amount I am investing would get me. These number of shares when multiplied by price at any other day, would give the value of shares at that new point of time.

Upon calculation done in Excel:

Dividend received after 5 years: 960674.526

Invested amount(not including dividend): $60 \times 10000 = 600000$

Profit: 360674.526

The stock quotations were taken from:

<https://finance.yahoo.com/quote/BAJAJ-AUTO.NS/history?period1=1520985600&period2=1699920000&interval=1d&filter=history&frequency=1d&includeAdjustedClose=true>

The annexures for the common size statements,summary by chatgpt and the calculation of stock questions are attached.

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Annexure Part-1(Ratio Analysis Calculations):

No.	2023	2022	2021	2020	2019
1.	$8870.41/5198.04 = 1.706$	$9994.47/4689.44 = 2.131$	$14175.13/5643.21=2.511$	$6596.96/4253.21=1.551$	$7062.66/4873.68=1.449$
2.	$(8870.41 - 1397.90) / 5198.04 = 1.438$	$(9994.47- 1230.51) / 4689.44 = 1.869$	$(14175.13- 1493.89) / 5643.21 = 2.247$	$(6596.96-1063.50) / 4253.21 = 1.301$	$(7062.66-961.51) / 4873.68 = 1.251$
3.	$1397.90 / (8870.41- 5198.04) = 0.381$	$1230.51 / (9994.47- 4689.44) = 0.232$	$1493.89 / (14175.13 - 5643.21) = 0.175$	$1063.50 / (6596.96- 4253.21) = 0.435$	$961.51 / (7062.66- 4873.68) = 0.439$
4.	0	0	0	0	0
5.	0	0	0	$223/19925=0.01$	0
6.	0	0	0	0	0
7.	$(7,408.64+ 39.48)/ 39.48 =188.65$	$(6,505.33+8.66)/8.66 =752.19$	$(5939+6.66)/6.66 = 892.74$	$(6580.20+3.16)/3.16 =2083.34$	$(6,703.16+4.48)/4.48 =1497.24$
8.	$(36427.60- (24009.01+ 2143.85+ 98.11))/ 36427.60= 0.279$	$(33144.71-(22169.88+1971.88+ 187.96))/ 33144.71 = 0.277$	0.301	0.319	0.30
9.	$7408.64/ 37609.02 = 0.197$	$6505/ 28163.90= 0.23$	$5939/31530=0.188$	$6580/29111=0.226$	$6703/29567=0.225$

10.	$(5627.60 \times 100) / 36427.60 = 15.448\%$	$(5018.87 \times 100) / 33144.71 = 15.1\%$	$(4554.59 \times 100) / 27741 = 16.41\%$	$(5099.98 \times 100) / 29918.65 = 17.04\%$	$(4675.18 \times 100) / 30249.96 = 15.45\%$
11.	$5627.60 / 31127.69 = 0.181$	$5018.87 / 31921.94 = 0.157$	$4554.59 / 31530.20 = 0.144$	$5099.98 / 24773.30 = 0.205$	$4675.18 / 27380.39 = 0.170$
12.	$5627.60 / 286.15 = 19.667$	$5018.87 / 289.37 = 17.344$	$4554.59 / 289.37 = 15.73$	$5099.98 / 289.37 = 17.62$	$4675.18 / 289.37 = 16.15$
13.	197.3	173.6	157.5	176.3	161.6
14.	$35359 / 1397.9 = 25.41$	$32136 / 1230.51 = 26.11$	$27133 / 1493.89 = 18.16$	$29111 / 1063.5 = 27.37$	$29,567 / 961.51 = 30.75$
15.	$35359 / 22257.28 = 1.588$	1.35	$27133 / 17,355.07 = 1.56$	$29111 / 18,176.34 = 1.60$	1.62
16.	$35359 / 31,127.69 = 1.135$	$32136 / 31,921.94 = 1.006$	$27133 / 31,530.20 = 0.86$	$29111 / 24,773.30 = 1.17$	$29567 / 27,380.39 = 1.08$
17.	$(1776.12 \times 365) / 37609.02 = 17.2 \text{ days}$	$(1516.38 \times 365) / 34353.95 = 16.1 \text{ days}$	$(2,716.85 \times 365) / 29017.54 = 34.1 \text{ days}$	$(1725.10 \times 365) / 31652.21 = 19.9 \text{ days}$	$(2,559.69 \times 365) / 31899.27 = 29.3 \text{ days}$
18.	$140 / 3,884.75 = 0.036$	$140 / 3653 = 0.038$	$140 / 3670.60 = 0.038$	$120 / 2022.35 = 0.059$	$60 / 2911.10 = 0.021$
19.	$3884.75 / 197.3 = 19.69$	$3653 / 173.6 = 21.04$	$3670.60 / 157.5 = 23.31$	$2022.35 / 176.3 = 11.47$	$2911.10 / 161.6 = 18.01$
20.	$140 / 197.3 (\%) = 71.9$	$140 / 173.6 (\%) = 80.6$	$140 / 157.5 (\%) = 88$	$120 / 176.3 (\%) = 68$	$60 / 161.6 (\%) = 37.1$
21.	$(5,627.60 + 282.44) \text{ cr} / 285,206,634 = 207.21$	$(5,018.87 + 269.17) \text{ cr} / 289,145,562 = 182.88$	$(4,554.59 + 259.28) \text{ cr} / 289,367,020 = 166.35$	$(5,099.98 + 246.43) \text{ cr} / 289,367,020 = 184.76$	$(4,675.18 + 265.69) \text{ cr} / 289,367,020 = 170.74$