



## **A Study on the Factors Determining Share Price of a Company.**

*Mohammed Faiz<sup>1</sup>, Prof Deepika Das<sup>2</sup>*

<sup>1</sup>PG Student, <sup>2</sup>Guide  
PES University

---

### **ABSTRACT**

This research paper analyses the financial ratios which affects the share price of a company. The main objective is to understand the factors affecting the share price, help both investors and institutions in their investment decisions. By using secondary data for this research, ie the data of Tata motors Ltd, we develop a regression model and analyse the factors affecting the share price of Tata motors Ltd. The results of the analysis were, both ROA and Basic EPS had inverse effect on the share price ie, when ROA and Basic EPS increases, The share price would decrease and vice versa. Whereas, Price/Book value and ROE had Direct effect on the Share price ie, When, Price/Book value and ROE increases, The Share price would also increase and vice versa. Net profit margin would have no effect on share price.

---

### **Introduction**

The stock market is a main example of today's capitalism due to it's complex processes and uncertainty. An individual or an institution who wants to invest are constantly working to understand the underlying factors that drives the changes in share prices. Making decisions which will result in a beneficial return is the main goal of every investor. So, to get the beneficial return, the question they would ask is, What factors affects the share price?

This study goes on a quest to unravel the complicated web of factors that would have an effect on the share price. Numerous variables like financial performance of a company, trends in the market, economic indicators and more affect the value of the company which is the share price. For investors, grasping the functions and effects of these variables is of the utmost importance as it helps in identifying and predicting the trends of share price, formulating investment strategies and improving market efficiency.

The perceived value, potential for growth, and general performance of a company are reflected in the stock market. The Share price of a firm is greatly affected by financial factors. To comprehend the importance of each factor and how they together affect share prices, requires an in-depth analysis.

This study aims to improve our understanding of share price drivers by identifying their fundamental causes. By doing this, we hope to provide individuals, institutions or anyone who wants to invest with beneficial knowledge, ultimately encouraging an environment where the financial market is more knowledgeable and effective.

---

### **Literature review**

In the research paper of (Kumar Goyal & Gupta, n.d.), it was observed PE ratio and EPS had direct effect on the share price. which means when PE ratio and EPS increases, The Share price would also increase and vice versa. ROA and NPM had an inverse effect on the share price. which means when ROA and NPM increases, The share price would decrease and vice versa. ROE and Dividend payout ratio had zero effect to the share price.

In the research paper of (Sharif et al., 2015), it was observed that PE, Book value, ROE, DPS and firm size had direct effect on share price. which means when PE, Book value, ROE, DPS and firm size increases, The Share price would also increase and vice versa. However, Dividend yield and market price had an inverse effect on the share price. which means when Dividend yield and market price increases, The share price would decrease and vice versa.

In the research paper of (Pradhan & Dahal, n.d.), it was observed that PE ratio, EPS, ROA, and Book value had a little effect on the share price. which means when PE ratio, EPS, ROA, and Book value increases, the share price would increase by a small margin and vice versa.

In the research paper of (Al-Tamimi et al., 2011), it was observed that share price was affected more by EPS. GDP and money supply had direct effect on the share price. which means when GDP and money supply increases, The Share price would also increase and vice versa. Inflation and CPI had inverse effect on the share price. Which means when inflation and CPI increases, the share price would decrease and vice versa.

In the research paper of (Wang et al., 2021), with the application of difference in difference analysis, it was observed that the organisations were needed to report CSR had improved market reactions to earnings news during the pre and post mandate periods, Which was observed by a decrease in PEAD and an increase in ERC. The results suggested that CSR obligation reduces information gap between companies and their investors which in turn boosts

market effectiveness. Through further analysis, it was observed that this effect was particularly evident among organisations which had high information in balance, i.e., organizations that have low quality of financial reporting, organisations in sectors that are susceptible to activities which are related to CSR and yes SOEs. It was also observed that the effects differ based on the level of transparency of CSR and CSR performance of organizations.

In the research paper of (Bissoondeal, 2021), an examination was done to check whether there was any statistical connections between UK house prices and the share prices. To the authors knowledge, in the UK come on, this was the first study to examine this problem. It was also examined, whether cost of housing in London affected cost of housing elsewhere in the UK and vice versa. By doing short run analysis with the application of Granger casualty and impulse response functions, a significant amount of bidirectional Granger casualty between share prices and house prices at the regional and national levels in the long and short run were found. It was also found that when compared to other places, a great deal of macroeconomic factors had little to no short term impact on home prices in London. Instead, the house prices in other areas had an impact on house prices in London.

In the research paper of (Jeroh, 2020), the main goal wants to examine the internal causes of changes in the share price, by taking into account diversity of genders in boardroom as a potential causes of changes in share price among listed Nigerian organization. It was observed that there was a substantial association between movements and changes in the share price off companies and the blau and shannon indices, which were used as indicators of gender diversity in boardrooms. It also indicated that the existence of women in boardrooms plays a role in assessing share price changes among listed companies in Nigeria and perhaps the SSA region.

In the research paper of (Kaizoji & Miyano, 2019), it was observed how share prices compare to corporate fundamentals. The findings imply that whereas when there was financial boom, share prices were generally overstated, they were dramatically understated when the stock market crashed in 2008 due to global financial crisis. It was observed that there was too much instability.

## Research methodology

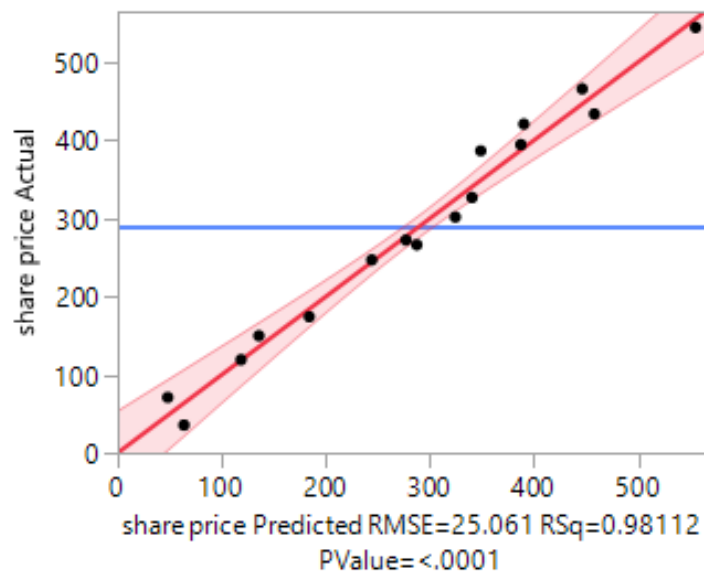
In this research, with the help of secondary data , We check for the variables which effects the share price. The data contains the share price of tata motors from 2008 to 2023. The variables in the data are Basic EPS, NPM, Book value/price, ROA, ROE and Share price.

The data is as follows

year	share price	basic eps	net profit margin	roe	roa	price/bv
Mar-23	420.8	7.11	4.14	12.14	4.41	7.17
Mar-22	433.75	-3.63	-2.94	-6.97	-2.17	8.33
Mar-21	301.8	-6.59	-7.93	-12.57	-3.68	6.07
Mar-20	71.05	-21.06	-16.59	-39.64	-11.64	1.39
Mar-19	174.25	5.94	2.91	9.11	3.31	2.67
Mar-18	326.85	-3.05	-1.75	-5.13	-1.74	5.51
Mar-17	465.85	-7.15	-5.48	-11.48	-4.12	7.48
Mar-16	386.6	-0.18	-0.14	-0.026	-0.1	5.64
Mar-15	544.36	-14.72	-13.05	-31.93	-9.48	11.93
Mar-14	394.42	1.03	0.97	1.74	0.67	6.69
Mar-13	266.29	0.93	0.67	1.57	0.57	4.5
Mar-12	272.33	3.9	2.28	6.33	2.27	4.46
Mar-11	247.02	6.06	3.84	9.06	3.34	3.98
Mar-10	149.93	39.26	6.33	15.15	4.38	2.92
Mar-09	35.68	19.78	3.96	8.21	2.64	0.75
Mar-08	119.3	52.63	7.05	25.96	7.75	3.08

For the above data, we are going to fit a regression model with the dependent variable as share price and other variables as independent variables.

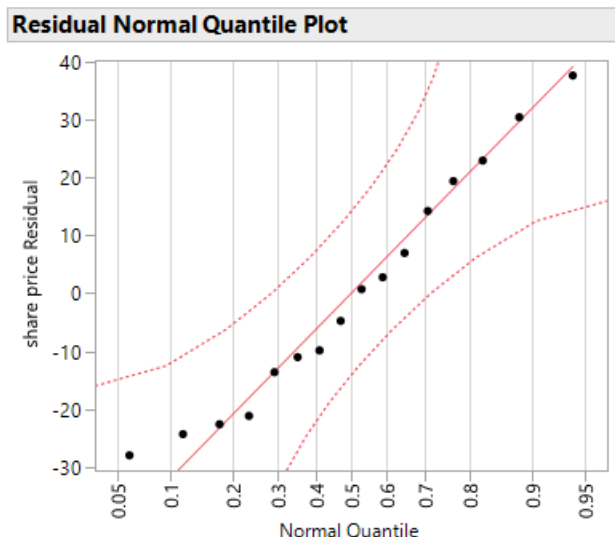
## Results and findings



### Summary of Fit

RSquare	0.981115
RSquare Adj	0.971673
Root Mean Square Error	25.06083
Mean of Response	288.1425
Observations (or Sum Wgts)	16

Term	Estimate	Std Error	t Ratio	Prob>  t
Intercept	80.944622	17.76113	4.56	0.0010*
basic eps	-3.919601	0.775523	-5.05	0.0005*
net profit margin	2.6053192	6.289765	0.41	0.6875
roe	20.473229	7.314113	2.80	0.0188*
roa	-57.96336	20.72867	-2.80	0.0189*
price/bv	46.517014	2.671473	17.41	<.0001*



- From the first diagram, we can see that the regression model is linear.
- The independent variables Basic EPS, NPM, Book value/price, ROA, ROE explain 98.1% of variations in the dependent variable Share price.
- RMSE is the average deviation between the actual value of share price and the predicted value of share price. RMSE value is 25.05 which indicates that there is an average difference of 25.05 between the actual and predicted value of share price.
- From the third diagram, we can see that the probability value for all the variables is less than 5% with the exception of NPM. It means that we have to reject the null hypothesis which is “the independent variable does not have a significant effect on the dependent variable” and the alternate hypothesis being “the independent variable has a significant effect on the dependent variable”. From this, we can interpret that the variables Basic EPS, Book value/price, ROA, ROE have a significant effect on the share price. as the probability value of NPM is greater than 5%, we accept the null hypothesis, which means it has no significant effect on share price.
- From the fourth diagram, as all the residuals are within the range, they are normally distributed. Residuals means the difference of the actual and predicted value of share price.
- In order to predict the share price when the values of independent variables Basic EPS, Book value/price, ROA, ROE are known, we can use the formula

Share price of tata motors =  $80.94 (+) 20.47 \times \text{ROE} (+) 46.57 \times \text{Book value/price} (-) \text{Basic EPS} \times 3.919 (-) \text{ROA} \times 57.96$ .

- From the equation, we can see that ROE and Book value/price has a direct effect on the share price. which means that when ROE and Book value/price increases by 1 unit, the share price would increase by 20.47 and 46.57 units respectively and vice versa.
- ROA and Basic EPS had inverse effect on the share price. which means that when ROA and Basic EPS increases by 1 unit, The share price decreases by 3.919 and 57.96 units respectively and vice versa.

## Conclusion

The main objective is to understand the factors affecting the share price, help both investors and institutions in their investment decisions. The results of the analysis were, both ROA and Basic EPS had inverse effect on the share price, Whereas, Price/Book value and ROE had Direct effect on the Share price. Net profit margin would have no effect on share price. We cannot conclude that by knowing these variables we can know the share price with certainty. There may be other external factors which may affect the share price like Economic conditions, government policies and regulations etc. From this paper, an investor may know if the share price would increase or decrease, whether to invest or not invest, buy or sell.

## References

- Al-Tamimi, H. A. H., Alwan, A. A., & Rahman, A. A. A. (2011). Factors affecting stock prices in the UAE financial markets. *Journal of Transnational Management*, 16(1), 3–19. <https://doi.org/10.1080/15475778.2011.549441>
- Bissoondeal, R. K. (2021). The links between regional house prices and share prices in the UK. *Regional Studies*, 55(2), 256–268. <https://doi.org/10.1080/00343404.2020.1795108>

- Jeroh. (2020). *Internal Determinants of Share Price Movements among Listed Companies in Nigeria: Does Gender Diversity in Boardroom Matter? (Penentu Dalaman Pergerakan Harga Saham dalam Kalangan Syarikat Tersenarai di Nigeria: Adakah Kepelbagaian Jantina Dalam Bilik Mesyuarat Penting?)*.
- Kaizoji, T., & Miyano, M. (2019). Stock market crash of 2008: an empirical study of the deviation of share prices from company fundamentals. *Applied Economics Letters*, 26(5), 362–369. <https://doi.org/10.1080/13504851.2018.1486004>
- Kumar Goyal, A., & Gupta, A. (n.d.). FINANCIAL DETERMINANTS OF STOCK PRICES: A STUDY OF BOMBAY STOCK EXCHANGE (BSE) Testing of Efficient Market Hypothesis: A Study on Stock Market Reaction to Dividend Announcements View project FINANCIAL DETERMINANTS OF STOCK PRICES: A STUDY OF BOMBAY STOCK EXCHANGE (BSE). In *International Journal of Advance and Innovative Research* (Vol. 6, Issue 2). <https://www.researchgate.net/publication/334416815>
- Pradhan, R. S., & Dahal, S. (n.d.). *FACTORS AFFECTING THE SHARE PRICE: EVIDENCE FROM NEPALESE COMMERCIAL BANKS*. <https://doi.org/10.13140/RG.2.1.2141.1440>
- Sharif, T., Purohit, H., & Pillai, R. (2015). Analysis of Factors Affecting Share Prices: The Case of Bahrain Stock Exchange. *International Journal of Economics and Finance*, 7(3). <https://doi.org/10.5539/ijef.v7n3p207>
- Tata Motors Key Financial Ratios, Tata Motors Financial Statement & Accounts*. (n.d.). Retrieved June 11, 2023, from <https://www.moneycontrol.com/financials/tatamotors/ratiosVI/TM03>
- Tata Motors Ltd (TAMO) Historical Prices - Investing.com India*. (n.d.). Retrieved June 11, 2023, from [https://in.investing.com/equities/tata-motors-ltd-historical-data?end\\_date=1686483596&interval\\_sec=monthly&st\\_date=1204309800](https://in.investing.com/equities/tata-motors-ltd-historical-data?end_date=1686483596&interval_sec=monthly&st_date=1204309800)
- Wang, P., Huang, H., Lee, E., & Petaibanlue, J. (2021). Does mandatory corporate social responsibility disclosure affect share price responses to earnings announcements? Evidence from China. *Journal of International Accounting Research*, 20(3), 137–164. <https://doi.org/10.2308/JIAR-2021-075>