

INFLUENCE OF SELECTED FINANCIAL INDICATORS ON STOCK PRICE OF TATA MOTORS LTD

¹Anita & ²Pavitra Yadav

¹(Research Scholar)

Haryana School of Business, Guru Jambheshwar University of Science & Technology, Hisar-Haryana. India.

²(Research Scholar)

Haryana School of Business, Guru Jambheshwar University of Science & Technology, Hisar-Haryana. India. E-mail id:

ABSTRACT

The purpose of the present paper is to investigate the influence of book value per share, earning per share, market capitalization, price to book value and dividend yield on stock price of Tata motors Ltd. Correlation and Regression technique has been applied. The results discovered that stock price of Tata motors Ltd. is significantly and positively correlated with the indicators except yield. Regression results show that stock price is significantly affected by the book value per share, price to book value and dividend yield.

Keywords: Financial indicators, Tata motors Ltd., Correlation, Regression analysis.

1. INTRODUCTION

Primary issue market and the secondary market are the two main inter-reliant segments of the capital market. Primary market is the market in which firms issue shares to the public for the first time and assist the firms to meet their capital requirements whereas secondary market is the market where already issued shares are traded, it provides liquidity to the investors. Stock exchanges are the platform where the buyers and sellers can transact their securities. Bombay Stock Exchange (BSE) Limited and the National Stock Exchange of India Limited (NSE) are the two main stock exchanges of India. Before investing it is necessary for every investor to scrutinize the various securities available in the market so as to maximize their return. Technical analysis and fundamental analysis are the two main approaches of analyzing securities. Technical analysis is the approach in which securities are analyzed on the basis of past prices and volumes whereas fundamental approach analyzes the fundamental factors affecting the stock price. The objective of the present paper is to assess the influence of the selected indicators on stock price of Tata motors Ltd. which is the India's largest automobile company established in 1945. It is a part of Tata group. The headquarter of Tata motors is in Mumbai, Maharashtra. It also got international recognition and got listed in New York stock exchange in 2004. The rest of the paper is organized as follows: Section 2 provides a review of literature on the causal relationship between financial variables and stock prices. In section 3 Data and research methodology has been discussed. The Empirical results and Interpretation of the study are presented in section 4 and 5 respectively. Finally, the conclusion is given in section 6.

2. REVIEW OF LITERATURE

Dhatt and Kim (1999)

evaluates the factors influencing stock return in Korean stock exchange and found that among book to market, sales price and debt equity ratio; book to market ratio influence stock returns largely.

Kumar and Sehgal (2004)

studied the relationship between company characteristics i.e. size effect, value effect and stock classification effect and common stock returns and found that size effect is strong whereas value effect and stock classification effect is negative.

Tripathi (2008)

investigated the relationship between four company specific variables i.e. market capitalization, B/M value, P.E ratio, Debt-Equity ratio and equity returns in India applied methodology adopted by Fama and French (2000). The results found that no substantial improvement in explaining cross variations over three or four factors.

Uddin (2009)

has studied the influence of Net Asset Value, dividend percentage and earnings per share (E.P.S) on stock price by using sample of 62 financial firms (bank, leasing and insurance) listed on Dhaka stock exchange. Multiple regression analysis is used and the results found the relationship between market price of share and selected microeconomic variables.

Placido and Jr. (2009)

examined the impact of return on assets (ROA) and EPS on share price of 50 publicly listed firms in the Philippines using multiple regression and correlation. It was found that EPS has strong influence on share price whereas ROA has weak and negative correlation with stock price.

Kheradyar and Ibrahim (2011)

investigated the role of financial ratios i.e. dividend yield, Earning Yield and Book-Market Ratio (B/M ratio) as empirical predictors of stock return using panel data model and Generalized Least Square technique to estimate predictive regression. It was found that financial ratios are able to predict stock return and predictive power of B/M is more than the rest two ratios.

Mohammad Bayezid Ali (2011)

examined the relationship between DSE (Dhaka Stock Exchange) all share price index and four microeconomic indicators i.e. market dividend yield, market price earnings multiples, monthly average market capitalization and monthly average trading volume. It was observed that except market yield there was Granger causality found between stock prices and the other indicators.

Sanjeet Sharma (2011)

examined the relationship between equity share prices and explanatory variables such as book value per share, dividend per share (D.P.S), earning per share (E.P.S), P.E (Price Earning) ratio, dividend yield, dividend payout, size in terms of sales and net worth in India by doing multistage sampling and using correlation and linear multiple regression. It was found that E.P.S, D.P.S and book/market value has significant influence on share price.

Uwubamwun and Obayagbona (2012)

examined the influence of company fundamentals i.e. capital structure (LEV), size, Price earning (P.E) ratio and book/market value on equity returns in Nigerian stock exchange using panel data regression and observed that firm's book/market value plays a significant role in determining a firm's stock return. The impact of company internal variables i.e. return on equity, net profit margin, current ratio and total asset turnover on stock prices of 35 companies from different sectors, examined by

Syed et al. (2012)

using regression model. It was observed that except return on equity all variables had significant impact on stock prices.

Srinivasan (2012)

attempted to identify the determinants of equity share prices in 6 major sectors i.e. Heavy & Manufacturing, Pharmaceuticals, Energy, IT, and ITER, Infrastructure and Banking using panel data technique (fixed and random effects). The results found that performance of the fundamental ratios i.e. D.P.S, E.P.S, P.E ratio, size and BV significantly influenced stock prices.

3. DATA AND METHDOLOGY

Monthly data from Jan 2000 to March 2013 has been used. Closing price of month end has been used as proxy of stock price. Data of stock price, book value per share, earning per share, market capitalization, price to book value and dividend yield has been sourced from the prowws database of CMIE. Correlation and Regression technique has been applied to assess the relationship between stock price and the selected financial indicators.

Empirical results

Table 1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CLOSING PRICE	159	62.40	1308.35	4.5199E2	319.39121
BOOK VALUE	159	72.47	376.96	1.6516E2	87.07922
EARNING PER SHARE	159	-20.35	61.04	22.7401	22.88733
PRICE TO BOOK VALUE	159	.49	6.61	2.8121	1.49950
YIELD	159	.00	10.96	1.8725	1.86113
MARKET CAPITALISATION	159	15965.44	8.52E5	2.5663E5	2.24188E5
Valid N (list wise)	159				

Table 2: Correlation Results

	CLOSING PRICE	BOOK VALUE	EARNING PER SHARE	PRICE TO BOOK VALUE	YIELD	MARKET CAPITALISATION
CLOSING PRICE	1	0.662	0.832	0.639	-0.131	0.518
BOOK VALUE	0.662	1	0.581	-0.096	0.213	0.229
EARNING PER SHARE	0.832	0.581	1	0.578	0.112	0.311
PRICE TO BOOK VALUE	0.639	-0.096	0.578	1	-0.238	0.486
YIELD	-0.131	0.213	0.112	-0.238	1	-0.123
MARKET CAPITALISATION	0.518	0.229	0.311	0.486	-0.123	1

Table 3: Regression Results(Model Summary)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.976 ^a	.953	.951	70.37541

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-340.370	26.788		-12.706	.000
	BOOKVALUE	2.621	.118	.715	22.287	.000
	EARNING PER SHARE	.851	.534	.061	1.593	.113
	PRICE TO BOOK VALUE	135.387	7.717	.636	17.544	.000
	YIELD	-23.517	3.277	-.137	-7.176	.000
	MARKET CAPITALISATION	1.326E-5	.000	.009	.412	.681

A. Dependent Variable: CLOSING PRICE

Interpretation

Table 1 given above shows the descriptive statistics of the selected variables. Each variable has 159 observations. The maximum value of closing price is 1308.35 whereas minimum value is 62.40 and the standard deviation is 319.39 which show that stock price is highly volatile. The maximum value of book value is 376.96 whereas minimum value is 72.47 and the standard deviation is 87.079. The maximum value of EPS is 61.04 whereas minimum value is -20.35 and the standard deviation is 22.88733. The maximum value of Price to book value is 6.61 whereas minimum value is .49 and the standard deviation is 1.49950. The maximum value of market capitalization is 8.52E5 whereas minimum value is 15965.44 and the standard deviation is 2.24188E5. Table 2 elucidate the correlation relationship and shows that stock price is found significantly and positively correlated with all the variables except yield which is negatively and insignificantly correlated with the stock price. Table 3 explains the result of regression analysis. The result shows R² is 0.976 which is highly significant. The indicators namely book value per share, price to book value and yield are significant in explaining stock price.

4. CONCLUSION

The study concluded that book value per share, price to book value and yield are significant in explaining stock price of Tata motors Ltd. thus, it is necessary to focus on these indicators as they can impact the company. The limitation of the present paper is that it considered only Tata motors ltd. whereas more companies can be included and more ratios can be studied.

REFERENCES

- [1.] Dhatt, M. S., Kim, Y. H., & Mukherji, S. (1999). "Relations between Stock Returns and Fundamental Variables: Evidence from a Segmented Market". *Asia-Pacific Financial Markets* 6, 221-233.
- [2.] Khan, M. N., & Amanullah. (2012). "Determinants of share prices at Karachi Stock Exchange. *International Journal of Business and Management Studies*", 4(1), 111-120.
- [3.] Kheradyar, S., & Ibrahim, I. (2011). "Financial Ratios as empirical Predictors of Stock Return" paper presented at International Conference on Sociality and Economics Development IPEDR, Singapore.
- [4.] Kumar, M., & Sehgal, S. (2004). "Company characteristics and common stock returns: The Indian experience". *Investment Management and Financial Innovations*, 89-99.
- [5.] Menaje, P. M., & Jr. (2012). "Impact of selected financial variables on share price of publicly listed firms in the Philippines". *American International Journal of Contemporary Research*, 2(9), 98-104.
- [6.] Sharma, S. (2011). "Determinants of Equity Share Prices in India". *Researchers World Journal of Arts, Science and Commerce*, 4(4).
- [7.] Srinivasan, P. (2012). "Determinants of Equity Share Prices in India: A Panel Data Approach". *The Romanian Economic Journal*, XV (46), 205-228.
- [8.] Syed, Ali, A., Amir, & Razi. (2012). "Impact of Companies Internal Variables on Stock Prices: A Case Study of Major Industries of Pakistan" presented at International Conference on Education, Applied Sciences and Management (ICEASM'2012), Dubai (UAE).
- [9.] Tripathi, V. (2008). "Company Fundamentals and Equity Returns in India". [http: papers. ssrn.com/ sol 3/papers.cfm? abstract_id = 124771](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=124771). Retrieved on 12-04-2013.
- [10.] Uddin, M. B. (2009). "Determinants of market price of stock: A study on Bank Leasing and Insurance companies of Bangladesh". *Journal of Modern Accounting and Auditing*, 5(7), 1-6.
- [11.] Uwubanmwun, A. E., & Obayagbona, J. (2012). "Company Fundamentals and Returns in the Nigerian Stock Market". *JORIND* 10(2), 154-159.