A study on the factors influencing stock price – A Comparative study of Automobile and Information Technology Industries stocks in India

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### KEYWORDS

- Stock market, Earnings per share, Book value, Price earnings

### A B S T R A C T

Stock market is an imperative part of the economy of a country. The stock market plays a essential role in the growth of the industry and commerce of the country that eventually affects the economy of the country to a unlimited extent. That is reason that the government, industry and even the central banks of the country keep a close watch on the happenings of the stock market. The stock market is important from both the industry’s point of view as well as the investor’s point of view. Even though many factors influencing, company specific variables such as earnings per share, firm’s book value, price earnings ratio have a substantial affirmative connotation with firm’s market price. A sample of four automobile and IT industries chosen as a sample (listed in BSE and NSE) for the period of five years. Hence this paper is an attempt to analyse the influencing factors which affects the movement of stock price either upward or down trend. Four company specific factors EPS, book value, P/E ratio and dividend yield have chosen to compare the performances of stock price movements in the market.

### Introduction

The stock market is primarily the place where these companies get listed to issue the shares and raise the fund. In case of an already listed public company, they issue more shares to the market for collecting more funds for business expansion. For the companies which are going public for the first time, they need to start with the Initial Public Offering or the IPO. In both the cases these companies have to go through the stock market. This is the primary function of the stock exchange and thus they play the most important role of supporting the growth of the industry and commerce in the country. That is the reason that a rising stock market is the sign of a developing industrial sector and a growing economy of the country. The secondary function of the stock
market is that the market plays the role of a common platform for the buyers and sellers of these stocks that are listed at the stock market.

**Research methodology**

This paper is basically analytical in nature using secondary data for the purpose of experiential evaluation of stock prices and related important variables. Financial analysis techniques like, Ratio analysis. The ratio analysis is performed by the mathematical formula a/b. Various Ratio Techniques like Earnings per share, Dividend per share, book value per share and price earnings ration has been used to study the empirical happenings in the data for five years.

**Sample Size**

For this purpose 4 sample companies in automobile and IT (which are listed both in NSE and BSE for minimum period of five years i.e from 2010-2014) have been selected. These companies include Hero honda, Maruthi, Tata motors and Mahindra & Mahindra from automobile sector and Infosys, TCS, WIPRO and Oracle financial services from IT industries have chosen for this study.

**Market Price (MP)**: It is the average price of the share derived from the financial year high and low has been considered as market price. It is the current price at which an asset or service can be bought or sold. Where, High Price = Highest market price during the financial year, Low Price = Lowest market price during the financial year. 

\[
\text{MP}= \frac{(\text{High Price of the share in a year} + \text{Low Price of the share in a year})}{2}
\]

**Book Value (BV)**: It is also known as net asset value per share because it measures the amount of assets, which the corporation has on behalf of each equity share. BV shows the net investment per share made in the business by the shareholder. It is the value at which an asset is carried on a balance sheet.

**Earning Per Share (EPS)**: It refers to the ratio of the profit after tax of the company for any financial year after payment of preference dividend. The equity shareholders are the sole claimants to the net earnings of the corporation after making payment of dividend to the preference shareholders. The significance of this ratio flows from the fact that higher the earnings per share the more is the scope for a higher rate of dividend and also of retained earnings, to build up the inner strength of the company.

**Dividend per share (DPS)**: Dividend is the portion of the profit after tax, which is distributed to the shareholders for their investment bearing risk in the company. It has a significant influence on the market price of the share. DPS shows how much the company has paid out as dividend. It refers to the actual amount of dividend (gross) declared per share. The net profit after taxes belong to shareholders but the income that they really receive is the amount of earnings distributed and paid as cash dividend.

**Price Earnings Ratio (P/E ratio)**: This ratio enables an investor to make appropriate calculation of the time required to cover the investment in a company’s stock. P/E ratio expresses the relationship between the market price of a company’s share and its earnings per share. It indicates the extent to which the earnings of each share are covered by its price.

**Hypothesis**

\( H_0 \): There is no significant relationship between MP (market price) and independent
variables such as BV (book value), EPS (earnings per share), DPS (dividend per share) and P/E (price earning) ratio.

**H1:** There is a significant relationship between MP (market price) and independent variables such as BV (book value), EPS (earning price per share), DPS (dividend per share), and P/E (price earning) ratio.

**Automobile Sector**

**Herohonda:**

<table>
<thead>
<tr>
<th>Year</th>
<th>Book Value</th>
<th>EPS</th>
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<td>2010</td>
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<td>2014</td>
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The book value of the company showing upward trend during the last five years except 2011. The highest value is on 2014. It shows the positive side for assets. As well as the earnings per share have a consistent growth during this tenure from 2010-14 the lowest was on 2011 and the highest on 2012. Being stable in EPS helps the investors to retain in the market.
The P/E ratio started with less growth during 2010-2011 but later escalated and stable for last three years it is a good indicator for wealth maximisation of a company. The Dividend per share is very good during 2012 because the profit after tax earned very less during this period.

**Closing Price**

![Closing Price Chart](image)

The closing price is a average market price in a particular year which is stable over the period of five years except 2011 which is low when compared to other years value. Market price is very essential for the growth of company in financial markets.

**Maruthi Suzuki Ltd**

![Book Value Chart](image)

![Earnings Per Share Chart](image)

The book value of the company showing upward trend during the last five years. The highest value is on 2014. It shows the positive and consistent growth for assets. As well as the earnings per share have a consistent growth during this tenure from
2010-14 the lowest was on 2012 and the highest on 2014. Being stable in EPs helps the investors to retain in the market.

The P/E ratio started with good growth during 2010-2011 but during 2012 it shows down trend later escalated and stable for next two years it is a good indicator for wealth maximisation of a company. The Dividend per share is very good during 2013-2014 for the period of two years when compare to other periods.

The closing price is an average market price in a particular year for this company it has good start and slack is there during 2011 but rest of the period are quite stable which is a good indication for the growth of the company in financial markets.

**TATA Motors**
TATA Motors

The book value of the company showing an upward trend during the first two years. Later it shows the downward trend and also stable in that trend during 2013-14. It indicates the book value of assets has not improved. As well as the earnings per share have an in consistent growth during the tenure from 2010-14 the lowest was on 2014 and the highest on 2012. Being unstable in EPs may affect the market price of the share.

The P/E ratio started with good growth during 2010-2011 but during 2012 it shows down trend and it has continued for the rest three years which is not a good sign for the company this status is due to poor operating profit and profit after tax yield is very less. The Dividend per share is very good during 2010-2011 for the period of two years when compare to other periods because of less profit retained to equity share holders.

Closing Price
The closing price or average market price for this company has an optimum start and slack is identified during 2011 but slowly revived over a period of years which is a worthy indication for the growth of the company in financial markets and reached the heights during 2014.

**Mahindra & Mahindra**

![Mahindra & Mahindra](image1)

The book value of the company showing a downward status during the first two years. Later it shows the upward trend and also stable in that trend during 2012-14. It indicates the book value of assets has improved in an considerable amount. As well as the earnings per share have a consistent growth during the tenure from 2010-14 the highest was on 2014 and the highest on 2012. Being stable in EPs may affect the market price of the share in the positive direction.

![M&M](image2)

The dividend per share graph shows the right direction in terms of earnings to investors from company specific during the study phase i.e 2010-2014. The P/E ratio also shows an consistent and stable growth during this period.
The closing price of the company had a reliable state during the five year period that is stable for four years except 2011 which yields lowest value due to less PE and book value.

**IT Industries**

**Infosys**

The book value for Infosys shows a tremendous growth over the period of five years. But the earnings per share are not showing such a state like BV started with slow pace and slowly shows uptrend in later years.
The dividend per share are inconsistent in terms of performance during the five year period because the allocation in profit after tax is not up to the expectation of investor as well as PE ratio it has a stable growth over the period of five years.

Closing Price

The closing price of Infosys shows an inverse normal distribution during the tenure of five years even though the growth phase is there when calculated in terms of percentage growth is nominal.

Tata consultancy Services
The book value for TCS shows an incredible growth over the period of five years. The earnings per share are also steady during the five year phase of study which is a good indicator for the company’s growth side.

![Graph showing Dividend per Share for TCS](image1)

The Dividend per share showing an uneven trend during the five year study this may be due to inappropriate operating profit and tax effect. When analysing the part of PE ratio it has a constructive trend during the five year period which will improve the market capitalisation percentage.

**Wipro Technologies**

![Graph showing Book Value for Wipro](image2)

The book value of the company showing rising trend during the five years except 2011. The highest value is on 2010 and 2014. It shows the positive side for assets growing in the organisation. As well as the earnings per share have a consistent growth during this tenure from 2010-14 the lowest was on 2012 and the highest on 2010 and 2014 similar to book value. Being stable in EPS helps the investors to retain in the market.
The dividend per share has an same trend during 2010-2012 three years later it has shown some progress in the year 2013 and 2014. On the other side PE ratio has inverse normal distributions that is started with optimum growth and slow down during 2011-12 and revived in later years.

### Closing Price

The closing price of the shares shows the similar trend like PE ratio started with incredible growth and slow down during 2011-12 and fetched good spread during 2013 and 2014 i.e 71-72 % rise in that tenure.

### Oracle Financial Services
The book value of the company has a productive improvement and growth over a period of years and has a good percentage of growth also indicates. The earnings per share started with a nominal percentage and grown later with tentativeness.

No dividend has declared during the last five years. When seeing the side of price earnings ratio has no effect from DPS since it has not declared for five years the EPS is at good side but the level of growth during this five year phase are very minimal.

Closing Price

The closing price has started with good growth and slightly slacked during the year 2011 and revived immediately up to 55% and also consistent for the last three years.

Conclusion

The current study examines about the influence of book value, earnings per share and price earnings ratio towards the market.
price of the share and it shows a significant effect hence H₁ is accepted and H₀ is rejected. But the dividend per share doesn’t have positive or negative effect towards the market price. The scope for further study can be extended with other companies and as well as other validating techniques in order to evaluate the system to the next level which can specifically explain the unsolved factors.

References

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