The influence of dividend policy on the efficiency of investment on the selected Automobile companies on Bombay Stock Exchange (BSE)

Chia Aminpanah
Phd student, University of Kerala, Department of Commerce, Thriuvananthapuram, Kerala, India

&

DR S. Sajeev
Assistant professor, Institute of management in Government, VikasBhavan P.O, Thiruvananthapuram, Kerala

ABSTRACT
Dividend policy refers to management’s long-term decision on how to extend the amount of cash flows from business activities that is, how much to invest in the business, and how much to return to shareholders. The determination of the amount of dividends payable is an important decision that companies undertake since the objective of the firm is to maximize the shareholders’ wealth as measured by the price of the company’s common stock. The investment on the capital market is connected with investors’ taking risk of the depreciation of the invested capital. Taking such risk into consideration the investors expect a higher return rate from the one they can achieve from the investment in securities with zero risk, but which consequently characterize a lower return rate. The expected or realized return rate from investment in shares depends, first of all, on the changes of prices of quoted companies possessed by an investor in his portfolio.

In this article the impact and influence of Dividend policy on the efficiency of investment on the 5 selected Automobile companies in Bombay Stock Exchange (BSE) will be studied. The name of selected industries are:


The conclusion of this study shows that the influence of payout dividend in a bigger extend on the basis of P/E has more effectiveness than the P/BV in portfolio constructed.

Key terms: Dividend Policy, Efficiency of Investment, Portfolio.

INTRODUCTION
Dividend policy refers to management’s long-term decision on how to extend the amount of cash flows from business activities that is, how much to invest in the business, and how much to return to shareholders. The determination of the amount of dividends payable is an important decision that companies undertake since the objective of the firm is to maximize the shareholders’ wealth as measured by the price of the company’s common stock. The investment on the capital market is connected with investors’ taking risk of the depreciation of the invested capital. Taking such risk into consideration the investors expect a higher return rate from the one they can achieve from the investment in securities with zero risk, but which consequently characterize a lower return rate. The expected or realized return rate from investment in shares depends, first of all, on the changes of prices of quoted companies possessed by an investor in his portfolio.

Many factors influence the changes of share prices, such as expected growth rate of company value, the level of market interest rates and the possibility of paying out dividend by an entity and risk and profitability of investment projects implemented by a company. When the analyze of the companies from the point of view of the paid out dividend, especially for investors, it is important if a company pays out a dividend in the situation when it does not find possibilities of investing the earned profit in projects which increase its profitability.The policy of payouts for shareholders involves dividend policy and buy-back policy. The dividends paid out to shareholders are a direct way of transferring
profit from the companies. And the buy-back method is an indirect way of remunerating the shareholders. This is because buy-back results in a decrease of the number of company shares and in, this way, in the conditions of constant or rising profits in the future, in the long term causes an increase of share prices on the capital market, which consequently causes an increase of investment value. The companies interchangeably use these methods of distribution of the capital to shareholders. The common ways to distribution of net profit are: a. Dividend b. Prize for employee c. reserve capital d. mandatory capital e. royalty’s f. retained earnings.

For the capital market investors the measure of the attractiveness of a dividend is the dividend yield the value of which changes with a change of a share quotation. The dividend yield is described by the formula:

\[ DY = \frac{D}{P} \times 100\% \]

Where:
- \(DY\): Dividend yield
- \(D\): Dividend per one share
- \(P\): Current share price

This formula shows a way to measure how much cash flow you are getting for each unit invested in an equity position - in other words, how much "bang for your buck" you are getting from dividends. Investors who require a minimum stream of cash flow from their investment portfolio can secure this cash flow by investing in stocks paying relatively high, stable dividend yields.

Investors who make transactions in a long run can use temporary falls to invest means obtained from dividends for the future investments on the stock exchange. It leads to an increase of long-term profitability of investment and Investors who buy to their investment portfolios long-term shares, can compare the dividend rate not only to the prices of current quotations, but also to the average price of all investments in a given company. It is a typically ‘investor’ approach that is characterized by a long term binding of investors with a dividend company. The dividend policy of a company should comprise the assumptions concerning, among others, future investment of an entity, maintaining liquidity, capital cost or investors’ expectations connected with the division of profits and also should constitute a balance between company ability of reinvesting profits and its other needs and investors’ expectations as for dividend yield and the certainty of its payout in the future.

In this article the impact and influence of Dividend policy on the efficiency of investment on the 5 selected Automobile companies in Bombay Stock Exchange (BSE) will be studied. The name of selected industries are:

1. TATA Motors
2. Ashok Leyland
3. Bajaj Auto LTD
4. Mahindra & Mahindra
5. MarutiSusuki

**OBJECTIVE**
To comparison of methods of creating security portfolios based on profit or book value criteria and taking into consideration dividend companies in Bombay stock Exchange from 2005 to 2012.

**HYPOTHESIS**
Paid out dividends have a bigger influence on the efficiency of portfolios constructed on the basis of P/E ratio than on the basis of P/BV ratio.

**Research Methodology and Analysis:**
In this section the analysis of the efficiency of investment in dividend companies will be done. The methods used for analysis in this article were taken from the famous article by BartłomiejJabloński in university of Economic in Katowice, Poland with some changes due to change in the time dimensions and place dimensions.
The analysis of the efficiency was made on the basis of portfolios constructed according to the below table.

**Table 1: Criteria of selection of shares to portfolios**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Desired result</th>
<th>Threshold values</th>
</tr>
</thead>
<tbody>
<tr>
<td>DY</td>
<td>Maximal</td>
<td>NO</td>
</tr>
<tr>
<td>P/E</td>
<td>Minimal</td>
<td>Value Lower than P/E Bombay Stock Exchange Index</td>
</tr>
<tr>
<td>P/BV</td>
<td>Minimal</td>
<td>Value Lower than P/BV Bombay Stock Exchange Index</td>
</tr>
</tbody>
</table>

The specificity of ratios used in the selection of shares to portfolios gives them an advantage over other ratios of the fundamental analysis: the value of their indications change every day with market share valuation. That is why their values directly or indirectly show upward rerating and undervaluation of share quotation prices in comparison with market parameters.

**Table 2: Portfolio rules basis**

<table>
<thead>
<tr>
<th>Portfolio</th>
<th>Investment if:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DY of shares</td>
</tr>
<tr>
<td>P/E</td>
<td>maximal</td>
</tr>
<tr>
<td>P/BV</td>
<td>maximal</td>
</tr>
</tbody>
</table>

Table 2 shows the accepted threshold values for P/E and P/BV ratios were set as a dynamic parameter that changes according to the moods on the capital market. In research the rules of creating portfolios were adopted.

**Graph 1: The changes of Bombay Stock Exchange Index (BSE) in the period covered by the analysis shows:**

![Graph showing the changes of Bombay Stock Exchange Index (BSE) over time](image-url)
The annual profitability of the analyzed portfolios in the period 2005 – 2012 was presented below:

**Table 3: The result of the applied strategies of paid out dividend (annual simple return rate) [%] 0**

<table>
<thead>
<tr>
<th>year</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSE Index</td>
<td>5.52</td>
<td>9.13</td>
<td>13.55</td>
<td>17.50</td>
<td>9.12</td>
<td>16.80</td>
<td>18.25</td>
<td>19.20</td>
</tr>
<tr>
<td>Portfolio P/E [D]</td>
<td>30.00</td>
<td>99.10</td>
<td>81.80</td>
<td>74.12</td>
<td>104.77</td>
<td>61.21</td>
<td>24.76</td>
<td>53.15</td>
</tr>
<tr>
<td>Portfolio P/BV[D]</td>
<td>8.10</td>
<td>41.40</td>
<td>102.09</td>
<td>73.77</td>
<td>97.64</td>
<td>15.80</td>
<td>24.82</td>
<td>14.91</td>
</tr>
</tbody>
</table>

This table 3 shows the results of the strategy used taking into consideration the paid out dividend (portfolio marked as [D]) which during the period of bull market on Bombay Stock Exchange (BSE), constitute a capital flow increasing the profitability of the portfolio. Similarly, the dividend received during the period of slump on the capital market, constitute flows diminishing the depreciation of the value of portfolio.

**Table 4. The results of strategies applied without taking into consideration paid out dividend (annual simple return rate) [%]**

<table>
<thead>
<tr>
<th>year</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSE Index</td>
<td>5.52</td>
<td>9.13</td>
<td>13.55</td>
<td>17.50</td>
<td>9.12</td>
<td>16.80</td>
<td>18.25</td>
<td>19.20</td>
</tr>
<tr>
<td>Portfolio P/E [D]</td>
<td>28.10</td>
<td>84.71</td>
<td>103.03</td>
<td>81.36</td>
<td>99.10</td>
<td>63.49</td>
<td>23.81</td>
<td>46.77</td>
</tr>
<tr>
<td>Portfolio P/BV[D]</td>
<td>7.50</td>
<td>37.50</td>
<td>91.22</td>
<td>74.29</td>
<td>86.13</td>
<td>13.20</td>
<td>23.91</td>
<td>11.10</td>
</tr>
</tbody>
</table>

**Table 5: Annual geometric return rate of portfolios [%]**

| BES Index | 14.10 |
| Portfolio P/E [D] | 110.91 |
| Portfolio P/E [0] | 89.17 |
| Portfolio P/BV [D] | 88.65 |
| Portfolio P/BV [0] | 74.13 |

The table 5 presents annual geometric return rate from investment with taking into consideration paid out dividends and without paid out dividends to investment profitability.

The carried out research shows that portfolios built according to the P/E strategy (company profit criterion) are characterized by a higher rate of return than the portfolios built according to P/BV strategy (book value criterion). Moreover, cutting off the received dividend resulted in case of both strategies in decreasing of the profitability of investment. This difference is especially visible in case of the strategy based on the P/E parameter, in which the annual fall of profitability exceeds 10% (table 5). This is caused by the fact that companies selected the portfolio according to the profit criterion, characterize a higher profit than companies selected the portfolio according to the book value criterion. A higher profit earned by companies, has a reflection in higher dividends, which in an essential way influences the differences between „Portfolio P/E [D]” and Portfolio „P/E [0]” portfolios.
The graph presents the comparison of annual effective annual return rate of the variants of the discussed strategies.

**Conclusion**

On the basis of conducted research one can conclude that in the analyzed period 2005 - 2012 a higher rate of return was possible to achieve by investing in dividend companies according to the company profit criterion (parameter P/E), and not according to book value criterion (parameter P/BV).

The result of the above analysis has confirmed the hypothesis means: The influence of payout dividend in a bigger extend on the basis of P/E has more effectiveness than the P/BV in portfolio constructed. This is caused by the fact that, the payout of dividend is based on the earned profit and not on the book value. The companies characterizing low P/E parameter earned high profits in comparison to quotation prices. It results in a possibility of payout of a big dividend characterized as a share of dividend in EPS. It caused high values of DY parameter which were one of selection criteria when creating the portfolio.

On the basis of the conducted research one can draw another conclusion. If an investor is going to construct a portfolio for which the main criteria of selection of shares will be dividend, they should construct it on the basis of P/E parameter. On the other hand, in the situation when an investor takes into consideration dividend in his choices but assumes a lack of payout in the future, he or she can use the P/BV parameter as an additional criteria of the selection of shares to portfolio.

**References & Bibliography**

. Bartłomiej Jabłoński, University of Economics in Katowice, Department of Investments and Real Estate ul. 1 Maja 50, 40-287 Katowice, Poland, Email:katedra.iin@ue.katowice.pl


