A Study on Factors Determining Dividend Policy in Cement Industry

Dr. S. Dinesh, Dr. S.C.B. Samuel Anbu Selvan,
Assistant Professor Assistant Professor
School of Management Department of Commerce
SASTRA University, Thanjavur, India. The American College, Madurai, India

ABSTRACT

The increasing globalization of financial markets has heightened interest in emerging markets. However, much of the research in accounting and finance has focused on developed markets. The company may distribute profits in the form of either regular cash dividends or it may distribute profits in the form of shares dividends to shareholders. Trend analysis for the Cement industry over the last 12 years with all the above mentioned variables has significant relationship with the trend estimation except in respect of a few variables like Net worth, Return On Capital Employed and Dividend Payout Ratio. These variables do not have significant relationship with the projected values. The outcome of the research will help the finance managers in dividend decisions. Companies that want to achieve a target payout ratio can use the models developed in this research to manage the important determinants that have been identified in the result and achieve the desired result.

Keywords: Dividend determinants, Payout, Net worth.

INTRODUCTION:

Efficient functioning financial market plays a crucial role in facilitating the intermediation process between savers and borrowers, thereby helping translate savings into investments. The more efficient this process, the less is the cost of investing, and subsequently, the higher rate of investment/saving. The development of stock exchanges is crucial to achieve economic growth for development economics. The increasing globalization of financial markets has heightened interest in emerging markets. However, much of the research in accounting and finance has focused on developed markets. The topic of dividend policy remains one of the most controversial issues in corporate finance. Dividend may be defined as the distribution of created value to the shareholders. It may be in the form ‘Cash Dividend’ or through distribution of stocks of the company which is known as ‘Stock Dividend’. Dividend policy may be defined as the trade-off between the magnitude of retained earnings and distributed cash or securities. Dividend decision should not merely be taken to be a decision of appropriation of profits to the shareholders. There are several complex issues in it. As such the factors influencing the dividend are when, why, how the companies pay dividends and weather dividends creating or destroy value.

STATEMENT OF THE PROBLEM:

Previous studies have dealt with the dividends policy concept but most of them have dealt with one type of dividend (the cash dividend) (Miller and Modigliani, 1961, Horne and McDonald, 1971, Partington, 1985, Holder et al., 1998) and do not make a clear distinction between the dividends policy concept and dividend types. The dividends policy concept consists of three types of dividends (cash, share and repurchase) (Moyer et al., 1995). A number of studies deals with either share dividend (Barker, 1958, Grinblatt et al., 1984, Bali, 2003) or share repurchase (Ikenberry et al., 1995). The company may distribute profits in the form of either regular cash dividends or it may distribute profits in the form of shares dividends to shareholders. However, both forms may be distributed at the same time. On the other hand, shareholders can also obtain profits (as a capital gains)
when the company repurchases its shares, and considers the regular cash dividend as something quite common (Broyles, 2003).

OBJECTIVES OF THE STUDY:

- To identify the trends and patterns of major dividend determinants in cement industry
- To test the validity of dividend determinant variables for cement industry

LITERATURE REVIEW:

Merton H. Miller¹, “Both views are correct in their own ways. The academic is thinking of the expected dividend; the practitioner of the unexpected.” Miller conveys us that the practitioners’ view that dividends matter very much and the academic view that dividends do not matter. B. Graham and D.L. Dodd², According to Graham and Dodd, the stock market places considerably more weight on dividends than on retained earnings. James Walter³, According to Walter, 4 dividend payout ratio do affect the share prices - (1) when the rate of return on investments exceeds the cost of capital, the price per share increases as the dividend payout ratio decreases, (2) when the rate of return on investment is equal to the cost of capital, the price per share does not changes in dividend payout ratio, (3) when the rate of return on investments is less than the cost of capital, the price per share increases as the dividend payout ratio increases.

M. H. Miller and F. Modigliani⁴, Miller and Modigliani have advanced the view that the value of firm depends solely on its earnings power and is not influenced by the manner in which its earnings are split between dividends and retained earnings. The view is referred to as the ‘dividend irrelevance theorem’. Myron J. Gordon⁵, Gordon leads to conclusions, which are similar to that of the Walter’s. Moreover, Gordon’s model contends that dividend policy of the firm is relevant and the investors put a positive premium on current incomes/dividends. He argues that dividend policy affects the value of shares even in a situation in which the return on investment of a firm is equal to the required rate (r = ke).

RESEARCH DESIGN:

Research design is the blueprint of research work. Basically, since the nature of the study is Empirical and analytical. Several evidences from the earlier researches, company records are taken into consideration and multivariate analysis are used to arrive at the appropriate determinants that have more impact on dividend decisions. This research design is also Analytical because several financial data like sales turnover, EPS, DPS, PE, R&D expenses, EBIT, PAT….etc. are taken into consideration for our analysis.

‘Capitoline Plus’ and ‘Capitalstocks.ole’, manufactured, maintained and marketed by Capital Market, Mumbai, or ‘Prowess’, manufactured, maintained and marketed by Centre for Monitoring Indian Economy (CMIE), Mumbai are notable amongst these. These two sources form the primary source of data required for the study. The researcher has selected the following influencing variables to determine the dividend policy of select manufacturing and service sectors.

- DPS (Rs) Dividend Per Share
- EPS(Rs) Earnings Per Share
- RONW (%) Return on Net Worth
- ROCE (%) Return on Capital Employed
- AGE(Yrs) Age of the Firm
- SIZE(Rs) Size of the Firm
- GROW(Rs) Growth in Sales
- TANG(Rs) Tangibility of the Firm
- DER(Times) Debt Equity Ratio
- OPR (%) Operating Profit Ratio
- NPR (%)Net Profit Ratio
- NPR (%)Net Profit to Net Worth
- DPR(Times) Dividend Payout Ratio
- OCR (%) Operating Cost Ratio
- PAT(Rs) Profit After Tax
- INT(Rs) Interest Paid
- DTAX(Rs) Dividend Tax
- CTAX(Rs) Corporate Tax
DATA ANALYSIS AND DISCUSSION:

The determinants of dividend in cement industry were tested by analyzing different variables that have an impact on the dividend policy.

**Dividend Determinants Of Cement Industry**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
<th>Variance</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPS (Rs)</td>
<td>7.11</td>
<td>0.85</td>
<td>7.96</td>
<td>4.238</td>
<td>2.837</td>
<td>8.054</td>
<td>0.553</td>
<td>-1.860</td>
</tr>
<tr>
<td>EPS (Rs)</td>
<td>68.69</td>
<td>0.86</td>
<td>69.55</td>
<td>23.665</td>
<td>22.848</td>
<td>522.070</td>
<td>0.709</td>
<td>-0.518</td>
</tr>
<tr>
<td>RONW (%)</td>
<td>53.33</td>
<td>-5.35</td>
<td>47.98</td>
<td>17.677</td>
<td>15.950</td>
<td>254.430</td>
<td>0.563</td>
<td>-0.338</td>
</tr>
<tr>
<td>ROCE (%)</td>
<td>35.37</td>
<td>4.35</td>
<td>39.72</td>
<td>17.553</td>
<td>12.142</td>
<td>147.450</td>
<td>0.737</td>
<td>-0.696</td>
</tr>
<tr>
<td>AGE (Yrs)</td>
<td>11.00</td>
<td>36.80</td>
<td>47.80</td>
<td>42.300</td>
<td>3.605</td>
<td>13.000</td>
<td>0.000</td>
<td>-1.200</td>
</tr>
<tr>
<td>SIZE (Rs)</td>
<td>1.38</td>
<td>2.31</td>
<td>3.69</td>
<td>3.066</td>
<td>0.52024</td>
<td>0.271</td>
<td>-0.536</td>
<td>-1.378</td>
</tr>
<tr>
<td>GROW (Rs)</td>
<td>2026.29</td>
<td>51.95</td>
<td>2078.24</td>
<td>635.258</td>
<td>667.753</td>
<td>445894.38</td>
<td>1.455</td>
<td>1.243</td>
</tr>
<tr>
<td>TANG (Rs)</td>
<td>3.73</td>
<td>0.29</td>
<td>4.02</td>
<td>0.848</td>
<td>1.189</td>
<td>1.416</td>
<td>2.340</td>
<td>4.744</td>
</tr>
<tr>
<td>DER (Times)</td>
<td>2.11</td>
<td>0.67</td>
<td>2.78</td>
<td>1.365</td>
<td>0.717</td>
<td>0.514</td>
<td>0.685</td>
<td>-0.559</td>
</tr>
<tr>
<td>OPR (%)</td>
<td>23.48</td>
<td>13.18</td>
<td>36.66</td>
<td>23.235</td>
<td>7.782</td>
<td>60.563</td>
<td>0.556</td>
<td>-0.877</td>
</tr>
<tr>
<td>NPR (%)</td>
<td>6.12</td>
<td>0.29</td>
<td>6.41</td>
<td>2.495</td>
<td>2.306</td>
<td>5.320</td>
<td>0.614</td>
<td>-1.281</td>
</tr>
<tr>
<td>NPNW(%)</td>
<td>12.29</td>
<td>0.40</td>
<td>12.69</td>
<td>4.114</td>
<td>4.088</td>
<td>16.713</td>
<td>1.031</td>
<td>0.149</td>
</tr>
<tr>
<td>DPR (Times)</td>
<td>.45</td>
<td>.11</td>
<td>.56</td>
<td>.342</td>
<td>.138</td>
<td>.019</td>
<td>.006</td>
<td>-0.834</td>
</tr>
<tr>
<td>OCR (%)</td>
<td>18.38</td>
<td>66.09</td>
<td>84.47</td>
<td>76.013</td>
<td>5.991</td>
<td>35.894</td>
<td>-.238</td>
<td>-.842</td>
</tr>
<tr>
<td>PAT(Rs)</td>
<td>640.96</td>
<td>0.00</td>
<td>640.96</td>
<td>323.151</td>
<td>262.622</td>
<td>68970.448</td>
<td>-1.186</td>
<td>-2.081</td>
</tr>
<tr>
<td>INT (Rs)</td>
<td>110.25</td>
<td>62.65</td>
<td>172.90</td>
<td>96.722</td>
<td>36.353</td>
<td>1321.595</td>
<td>1.195</td>
<td>0.227</td>
</tr>
<tr>
<td>DTAX (Rs)</td>
<td>26.90</td>
<td>0.00</td>
<td>26.90</td>
<td>12.684</td>
<td>9.9281</td>
<td>98.568</td>
<td>-0.006</td>
<td>-1.801</td>
</tr>
<tr>
<td>CTAX (Rs)</td>
<td>130.91</td>
<td>17.91</td>
<td>148.82</td>
<td>62.622</td>
<td>38.732</td>
<td>1500.204</td>
<td>1.142</td>
<td>.907</td>
</tr>
</tbody>
</table>

Dividend per share ranged from Rs 0.85 to Rs 7.96 with an average of Rs 4.238. The standard deviation of the industry was 2.837 and the variance 8.054. Further, the skewness is positive.

Earnings per share ranged from Rs 0.86 to Rs 69.55 with an average of Rs 23.665. The standard deviation was 22.848 and the variance 522.070. Further, the skewness is positive.

Return on Net worth of the firms under study in the cement industry ranged from -5.35% to 47.98% with a mean of 17.677% and standard deviation 15.950%. The variance was 445894.38. Further, it is noted that the skewness highlighted negatively.

Return on Capital employed of the firms under study in Cement industry ranged from 4.35% to 39.72% with an average of 17.553. The standard deviation was 12.142 and the variance 147.450. Further, it is noted that the skewness was positive.

Age of the firms under study in the Cement industry ranged from 36.80 years to 47.80 years with an average of 42.300 years. The standard deviation was 3.605 and the variance 13.000. Further, it is noted that the skewness was positive.

Size of the firms under study in the Cement industry ranged from 2.31 to 3.69 with an average of 3.066. The standard deviation of the industry was 0.52024 and the variance 0.271. Further, it is noted that the skewness was negative.

Growth of the firms under study in the Cement industry ranged from 51.95 to 2078.24 with an average of 635.258. The standard deviation of the industry was 667.753 and the variance 445894.38. Further, it is noted that the skewness was positive.

Tangibility of the firms under study in Cement industry ranged from 0.29 to 4.02 with an average of 0.848. The standard deviation of the industry was 1.189 and the variance 1.416. Further, it is noted that the skewness is positive.
Debt equity ratio of the firms under study in Cement industry ranged from .67 to 2.78 with an average of 1.365. The standard deviation of the industry was 0.717 and the variance 0.514. Further, it is noted that the skewness is positive.

Operating profit ratio of the firms under study in the Cement industry ranged from 13.18% to 36.66% with an average of 23.235%. The standard deviation was 7.782 and the variance 60.563. Further, it is noted that the skewness was positive.

Net profit ratio of the firms under study in the Cement industry ranged from 0.29% to 6.41% with an average of 2.495%. The standard deviation of the industry was 2.306 and the variance 5.320. Further, it is noted that the skewness was positive.

Net profit to Net worth ratio of the firms under study in the Cement industry ranged from 0.40% to 12.69% with an average of 4.114%. The standard deviation of the industry was 4.088 and the variance 16.713. Further, it is noted that the skewness was positive.

Dividend payout ratio of Cement industry ranged from 0.11 to 0.56 with an average of 0.342. The standard deviation of the industry was 0.138 and the variance 0.019. Further, it is noted that the skewness was positive.

Operating cost ratio of the firms under study in the Cement industry ranged from 66.09 to 84.47 with an average of 76.013. The standard deviation was 5.991 and the variance 35.894. Further, it is noted that the skewness highlighted negatively.

Profit after tax of the firms under study in the Cement industry ranged from 0.00 to 640.96 with an average of 323.151. The standard deviation was 262.622 and the variance 68970.448. Further, it is noted that the skewness was negative.

Interest paid during the current year ranged from 62.65 to 172.90 with an average of 96.722. The standard deviation was 36.353 and the variance 12684. Further, it is noted that the skewness was positive.

Dividend tax paid during the current year ranged from .00 to 26.90 with an average of 12.684. The standard deviation of the industry was 9.9281 and the variance 98.568. Further, it is noted that the skewness was negative.

Corporate tax paid during the current year ranged from 17.91 to 148.82 with an average of 62.622. The standard deviation was 38.732 and the variance 1500.204. Further, it is noted that the skewness was positive.

FINDINGS OF THE STUDY:

➢ To analyse the trend of cement industry the researcher has selected six variables viz., Net sales, Net Profit, Net worth, Reserves and Surplus, Return on Capital Employed, and Dividend payout ratio. Trend analysis for the Cement industry over the last 12 years with all the above mentioned variables has significant relationship with the trend estimation except in respect of a few variables like Net worth, Return On Capital Employed and Dividend Payout Ratio. These variables do not have significant relationship with the projected values.

➢ The co-efficient of determination $R^2$ value shows that these variables put together explained the variations of DPS to the extent of 99% with respect to Cement industry.

➢ The critical ratios of all the manifest variables except SIZE are above the table value 2.962 and significant at 1 percent level. Among the selected variables, eleven variables are the most influential factors in determining the dividend policy of select companies in cement industry.

SUGGESTIONS OF THE STUDY:

➢ An investor in shares would like to estimate the expected dividend per share before deciding to invest in a share. The multiple regression models developed in the research will enable an investor to estimate the dividend per share and make an appropriate decision.

➢ The outcome of the research will help the finance managers in dividend decisions. Companies that want to achieve a target payout ratio can use the models developed in this research to manage the important determinants that have been identified in the result and achieve the desired result.

CONCLUSION:

The extent of relationship between the dependent and independent variables were identified and rediscovered by applying multiple regression analysis- a major multivariate tool. In the meanwhile, twelve hypotheses were tested to arrive at the tentative assumption in the formulation of the conceptual framework. Trend analysis for the Cement industry over the last 12 years with all the above mentioned variables has significant relationship.
with the trend estimation except in respect of a few variables like Net worth, Return On Capital Employed and Dividend Payout Ratio. These variables do not have significant relationship with the projected values.

REFERENCES:


