# CHAPTER 5

# SUMMARY AND CONCLUSION

The investment decision of an investor is based on the profitability, dividend pattern and market price of the share. Therefore, it is necessary to analyse the dividend determinant factors and its effect on profitability and share price of the company.

The current study examines the impact of dividend policy on profitability and share price of NIFTY companies for the study period of fifteen years from 2004-05 to 2018-19. The sample consists of 34 companies belonging to financial sector (8), Automobile Sector (5), Energy Sector (8), Pharmaceutical Sector (4), Information Technology Sector (5), and Metal Sector (4) were selected on the base of indexed in NIFTY 50. The required data were collected from prowess database. Summary statistics, repeated measures ANOVA, correlation analysis, multiple regression analysis and panel data regression analysis were applied for evaluating the data.

The objectives of the current study are,

- To identify the factors that determines the dividend policy of select nifty companies.
- To examine the impact of dividend policy on profitability of select nifty companies.
- To analyse the impact of dividend policy on share price of select nifty companies.

The hypothesis framed for the research study are given below,

- The factors determining dividend policy of companies do not vary significantly among different sectors.
- Dividend policy does not have significant effect on profitability of select nifty companies.
- Dividend policy does not have significant effect on share price of select nifty companies.

The dependent and independent variables employed in the study are,

- To explore the factors determining dividend policy, Dividend Payout Ratio as an dependent variable and the determinants such as Profitability, Liquidity, Leverage, Firm Size, Growth, Risk, Past Dividend, Earnings per share, Tangibility, Investment Opportunities and Cash flow as independent variables.
- To examine the effect of dividend policy on profitability of NIFTY companies, Return on Asset, Return on Net Worth and Return on Capital Employed as dependent variables and Dividend Payout Ratio and Dividend Yield Ratio as independent variables.
- To study the impact of dividend policy on share price of NIFTY companies, Share Price as dependent variable and Dividend Payout Ratio and Dividend Yield Ratio as independent variables.

## 5.1 FINDINGS OF THE STUDY

The summary of the major research outcome is exhibited under the following heads:-

i. Factors determining dividend policy of NIFTY companies

ii. Impact of dividend policy on profitability of NIFTY companies

iii. Impact of dividend policy on share price of NIFTY companies

### i. FACTORS DETERMINING DIVIDEND POLICY OF NIFTY COMPANIES

The factors that determine dividend policy namely, profitability, liquidity, leverage, firm size, growth, risk, past dividend, earnings per share, tangibility, investment opportunities and cash flow were evaluated and the findings are summarized below:-

- **Sector Wise Analysis of Dividend Determinant Factors**

  - As far as the net profit margin is concerned among all the selected sectors, the metal sector has highest value of profitability in the year 2010-11 as it registered remarkably high performance in the year 2010-11. The automobile sector has shown the least average value of (5.99) in the year 2014-15. Mostly all the sectors fluctuated during the study period.
  - Among all the six sectors, the IT and pharmaceutical sector has highest value of liquidity. It indicates that the two sectors have more ability to meet the short term

obligation of the business enterprise and recorded the sound short term financial strength of the firm. The energy sector registered least value of (0.57) in the year 2017-18 and 2018-19.

- Amidst all the selected sectors, the financial sector has used a large (12.08) amount of long term financing in the year 2006-07. It reveals that the main source of fund from deposits and investments. The IT sector has shown the least average value of 0.01 in the year 2005-06 indicates that they are not depend more on outsiders fund.
- Among all the sectors, financial sector has recorded the maximum mean value (13.29) of firm size in the year 2018-19. The pharmaceutical sector has shown the least value of 7.51 in the year 2008-09. The maximum inconsistency was found in the year 2004-05 in all the sectors except automobile and IT sector.
- Among all the six sectors, the automobile sector recorded the maximum growth rate at 10.11in the year 2014-15 it indicates that the sector could convert more of market capitalization from its net assets while metal sector has shown the least value of 0.96 in the year 2008-09.
- As far as the risk is concerned among all the selected sectors, the IT sector has highest value of risk in the year 2004-05 and the automobile sector has shown the least value of (0.14) in the year 2014-15.
- Among all the six sectors, the pharmaceutical sector has the maximum (88.2) amount of past dividend in the year 2018-19. The minimum value (8.66) have also found in the pharmaceutical sector during the year 2014-15. Generally all the sectors fluctuated during the study period.
- Amidst all the selected sectors, the earnings per share in the automobile sector have recorded a maximum average value of 243.42 in the year 2018-19. It reveals the competence of automobile sector to pay dividend to their investors. The minimum mean value have been found in the metal sector during the year 2015-16.
- Among all the six sectors, the automobile sector has a maximum average value of (91.61) fixed asset to total asset in the year 2004-05. The minimum mean value has found in the financial sector in the year 2018-19.

- In all the sectors, the pharmaceutical sector has shown the high investment opportunities in the year 2017-18. There was less investment opportunities in the metal sector in the year 2004-05.
- Amidst all the six sectors, the average value of cash flow has maximum of 43.37 in the metal sector during 2004-05. It indicates that the sector generates sufficient source to use financial activities of the business enterprise. The minimum mean value have been found in the financial sector during the year 2006-07.

➢ **Repeated Measures ANOVA**

- The profitability ratio, leverage ratio, firm size, growth ratio, past dividend, earnings per share and tangibility for different sectors change significantly at each year.
- The liquidity ratio, risk ratio, investment opportunities and cash flow for different sectors do not change significantly at each year.

➢ **Relationship between Dividend Determinant Factors**

- Financial sector depicts that there exists high degree of relationship between profitability and cash flow. The correlation was found to have positive and significant at 1percent level. The Firm size was found to have the highest negative correlation (-0.680) with Risk, statistically significant at 1percent level. That is when there is higher Risk then the Firm size decreases.
- Automobile sector reveals that the Cash Flow was found to have highest positive correlation (0.733) with Profitability while Leverage recorded highest negative correlation (-0.685), significant at 1percent level.
- In the energy sector, highest positive correlation (0.597) exists between Growth and Cash Flow, statistically significant at 1percent level. That is when there is

higher Cash Flow then the Growth increases. The Cash Flow was observed to have highest negative correlation (-0.665) with Leverage at 1percent level significance.

- In the pharmaceutical sector, highest positive correlation (0.720) was found between Profitability and Cash Flow at 1percent level of significance. Investment Opportunities was observed to have highest negative correlation (-0.825) with Past Dividend, statistically significant at 1% level.
- In the information technology sector, cash Flow have a highest positive correlation (0.791) with Profitability at 1percent level of significance. Risk recorded highest negative correlation (-0.574) with Firm Size, statistically significant at 1% level.
- In the metal sector, highest correlation (0.834) was found between Growth and Cash Flow. The correlation was found to have positive and significant at 1percent level. The Cash Flow was found to have the highest negative correlation (-0.740) with Firm Size, statistically significant at 1% level.

➢ **Effect of Dividend Determinant Factors on Dividend Payout Ratio**

- In the financial sector, Past Dividend is more influential on the dependent variable compared to other variables with the highest beta value of 0.763 followed by Investment opportunities with the beta value of 0.246. Leverage is the least contributing variable with the lowest beta value of 0.001.
- In the automobile sector, Investment Opportunities is more influential on the dependent variable compared to other variables with the highest beta value of 0.750 followed by Cash Flow with the beta value of 0.260. Tangibility is the least contributing variable with the lowest beta value of 0.026.
- In the energy sector, Past Dividend is more influential on the dependent variable compared to other variables with the highest beta value of 0.607 followed by Cash Flow with the beta value of 0.181. Firm Size is the least contributing variable with the lowest beta value of 0.002.

- In the pharmaceutical sector, Investment Opportunities is more influential on the dependent variable compared to other variables with the highest beta value of 0.672 followed by Profitability with the beta value of 0.455. Tangibility is the least contributing variable with the lowest beta value of 0.017.
- In the information technology sector, Leverage is more influential on the dependent variable compared to other variables with the highest beta value of 0.433 followed by Cash Flow with the beta value of 0.432. Growth is the least contributing variable with the lowest beta value of 0.024.
- In the metal sector, Profitability is more influential on the dependent variable compared to other variables with the highest beta value of 0.848 followed by Risk with the beta value of 0.325. EPS is the least contributing variable with the lowest beta value of 0.013.

**ii.IMPACT OF DIVIDEND POLICY ON PROFITABILITY OF NIFTY COMPANIES**

- **Relationship between Dividend Policy and Profitability**
  - The results of correlation analysis for the financial sector have shown that Dividend Payout Ratio have a positive correlation with Return an Asset at 5 % level of significance and with RONW and ROCE at 1% level of significance.
  - The results of correlation analysis for the automobile sector have shown that have ROCE a high positive correlation with ROA at 1 % level of significance.
  - In the energy sector, there exists positive correlation between all the select variables, at 1 % level of significance.
  - The results of correlation analysis for the pharmaceutical sector have shown that ROCE have a high positive correlation with RONW at 1 % level of significance.

- The results of correlation analysis for the Information Technology sector have shown that Return on Net Worth have a high positive correlation with Return on Asset at 1 % level of significance.
- The results of correlation analysis for the Metal sector have shown that Dividend Yield Ratio have a positive correlation with ROA, ROCE and RONW at 1 % level of significance.

➢ **Effect of Dividend Policy on Profitability**

❖ **Financial Sector**

- The Random Effect model has shown that the Dividend Yield Ratio has a significant positive effect on Return on Asset and Dividend Payout Ratio has a significant negative effect on Return on Asset. Thus, the null hypothesis rejected. The increase in Dividend Yield Ratio will lead to increase in share price of a company which in turn will increase the Return on Asset of the company. The decrease in Dividend Payout Ratio indicates deteriorate the performance of the company which leads to decrease the Return on Asset of the company.
- The Fixed Effect Model has depicts that the Dividend Yield Ratio has a significant positive effect on Return on Net Worth. Hence, the null hypothesis rejected. Dividend Payout Ratio has not significantly influencing the Return on Net Worth. Hence, the null hypothesis accepted for this variable.
- The Random Effect Model has displayed that the Dividend Yield Ratio has a significant positive effect on Return on Capital Employed and Dividend Payout Ratio has a significant negative effect on the dependent variable. Thus, the null hypothesis rejected.

❖ **Automobile Sector**

- The coefficient of Pooled OLS Model describes Dividend Yield Ratio has a positive relationship and Dividend Payout Ratio has a negative relationship on Return on Asset at five per cent level of significance. Thus, the null hypothesis rejected.

- The Fixed Effect Model demonstrates that Dividend Yield Ratio has positive relationship and Dividend Payout Ratio has negative relationship with Return on Net Worth statistically significant at one per cent level. Hence, the null hypothesis rejected.
- Pooled OLS Model shows that the Dividend Yield Ratio was found to have positive relationship, while a negative relationship was observed in Dividend Payout Ratio with Return on Capital Employed, significant at five per cent level. Thus, the null hypothesis rejected.

❖ **Energy Sector**

- The Random Effect Model has shown that Dividend Yield Ratio has a positive effect on Return on Asset at one per cent level of significance. Hence, the null hypothesis rejected for this independent variable.
- The Random Effect Model illustrates that Dividend Yield Ratio was found to have positive effect with Return on Net Worth at one per cent level of significance. Thus, the null hypothesis rejected for this variable.
- The Random Effect Model has shown that the Dividend Yield Ratio has a significant positive effect on Return on Capital Employed. Thus, the null hypothesis rejected for this independent variable.

❖ **Pharmaceutical Sector**

- The Fixed Effect Model depicts that Dividend Yield Ratio has significant positive relationship with Return on Asset. Hence, the null hypothesis rejected for this variable.
- The Random Effect Model has displayed that the Dividend Yield Ratio positively influence the Return on Net Worth significant at one per cent level. Thus, the null hypothesis rejected for this variable.
- The coefficient of Random Effect Model describes Dividend Yield Ratio and Dividend Payout Ratio has an insignificant relationship with Return on Capital Employed. Thus, the null hypothesis accepted.

❖ **Information Technology Sector**

- The Random Effect Model describes Dividend Yield Ratio and Dividend Payout Ratio has an insignificant relationship with the Return on Asset. Thus, the null hypothesis accepted.
- The Random Effect Model has shown that Dividend Payout Ratio has a negative effect on Return on Net Worth at five per cent level of significance. Hence, the null hypothesis rejected for this variable.
- The Random Effect Model has shown that the Dividend Yield Ratio has a significant negative effect on Return on Capital Employed. Thus, the null hypothesis rejected for this variable.

❖ **Metal Sector**

- The Fixed Effect Model depicts that Dividend Yield Ratio was found to have significant positive relationship at one per cent, while a significant negative relationship at five per cent was observed in Dividend Payout Ratio with Return on Asset. Hence, the null hypothesis rejected.
- The Fixed Effect Model shows that the Dividend Yield Ratio has a significant positive effect and Dividend Payout Ratio has a significant negative effect on Return on Net Worth. Hence, the null hypothesis rejected.
- The Coefficient of Fixed Effect Model describes, Dividend Yield Ratio has a positive relationship at one per cent level of significance and Dividend payout Ratio has a negative relationship at five per cent level of significance with Return on Capital Employed. Hence, the null hypothesis rejected.

**iii.Impact of dividend policy on share price of NIFTY companies**

➢ **Relationship between Dividend Policy and Share Price**

- In the financial sector, Dividend Yield Ratio has a negative correlation with Share price at 1 per cent level of significance.
- There exists insignificant relationship found between dividend policy and share price of automobile sector.

- Dividend Yield Ratio and Dividend Payout Ratio were negatively correlated with Share Price but not significant in energy sector.
- In the pharmaceutical sector, Dividend Yield Ratio has a negative correlation on Share Price at 1percent level of significance.
- There was an insignificant relationship found between dividend policy and share price of IT sector.
- There exists insignificant relationship found between dividend policy and share price of metal sector.

➢ **Effect of Dividend Policy on Share Price**

- In the financial sector, Fixed Effect Model demonstrates that Dividend Yield Ratio and Dividend Payout Ratio have negatively related with Share Price at one per cent level of significance. Hence, the null hypothesis rejected.
- In the automobile sector, Random Effect Model has shown that Dividend Yield Ratio has a significant negative effect on Share Price at one per cent level of significance. Hence, the null hypothesis rejected.
- In the energy sector, Fixed Effect Model shows that Dividend Yield Ratio has a negative effect on Share price at five per cent level of significance and Dividend Payout Ratio has a positive effect on share price at one per cent level of significance.
- In the pharmaceutical sector, Random Effect Model has shown that the Dividend Yield Ratio has a significant negative effect on Share Price. Thus, the null hypothesis rejected for this variable.
- In the Information technology sector, coefficient value of Random Effect Model describes Dividend Yield Ratio and Dividend Payout Ratio has an insignificant relationship with the Share Price. Thus, the null hypothesis accepted.
- In the metal sector, Random Effect Model shows that Dividend Yield Ratio and Dividend Payout Ratio has an insignificant relationship with the Share Price. Thus, the null hypothesis accepted.

## 5.2 CONCLUSION

The current study attempted to identify the factors determining dividend policy and to analyse the effect of dividend policy on profitability and share price of NIFTY companies for the period of 2004-05 to 2018-19. The determinants contributing to dividend policy identified from the study proves that the dividends disseminated highly influence the dividend policies of financial, energy, IT and metal sectors. Automobile and pharmaceutical sectors have shown growth prospects by making productive investments during the study period and it highly influence the dividend policy. The ability to generate more profits of metal and IT sectors. The result reveals that, in the financial sector, dividend yield ratio has a significant positive effect on profitability while dividend payout ratio registered a significant negative effect on return on asset and return on capital employed during the study period. The effect of dividend policy on profitability of automobile and energy sectors reveals that, dividend yield ratio recorded positive effect while dividend payout ratio shows negative effect on profitability. In case of energy and pharmaceutical sectors, dividend yield ratio has a significant effect on profitability but return on capital employed did not show effect on dividend yield ratio of pharmaceutical sector. In the IT sector, dividend policy observed negative effect on return on net worth and return on capital employed. On analysing the effect of dividend policy on share price, the metal sector depicts that the dividend payout ratio shows positive effect on share price.

## 5.3 SUGGESTIONS

Based on the findings, the following suggestions have been given,

- The business pressures in the micro and macro environment has affected the automobile industry and has affected the Return on Assets, Return on Net Worth and Return on Capital Employed which can be set-off by right policy decisions.
- The earning capacity and financial stability of the financial, automobile, energy and pharmaceutical industries should be improved to increase the share price.
- Companies should adopt effective strategies to meet the economic challenges and improve its market share.

- Companies should make efficient investment decisions to ensure secured returns to its shareholders, which will have the impact on firm performance and share price.
- Companies should maintain the sufficient liquidity position to meet the short term obligations to improve its business operations.
- Companies should have the ability to manage its financial and operational risks to withstand the competitive edge and maintain its market.
- Companies need to balance the effective use of debt and equity to keep the average cost of capital as its minimum.
- Companies should manage cash flow effectively is very important, it is the key to survival of business.

## 5.4 SCOPE FOR FURTHER RESEARCH

Attempts have been made to make the research study intensive. But still further work may be undertaken in the area of the study.

- The present study has focused on NSE NIFTY index for a period of fifteen years. Further research can focus on other NSE and BSE index covering additional years.
- Further research shall focus on the dependence of dividend policy on economic determinants.