Chapter 6

Findings and Conclusion

6.1 Introduction

This chapter summarises the findings from the analyses made in the study and arrives at conclusions based on the findings and their interpretations.

6.2 Findings from the Observations

In the following sections, significant relationships between independent variables in the two years preceding the year under consideration with the dependent variable in the year under consideration are analysed. Based on these analyses, conclusions are arrived at.

6.2.1 Analysis of Hypothesis 1

Hypothesis 1: Short-termism in capital markets will not have a significant impact on long term prospects of firms in India

The significant relationships between the dependent and independent variables are summarised below:

Sales value does not have a significant relationship with any of the independent variables. PBT in the immediately succeeding 2nd year is impacted by employee expense, interest expense and depreciation expense of current year at significance levels of 5%, 5% and 1% respectively. EPS of current year has a significant relationship with interest expense incurred both one year and two years earlier with significance levels of 10% and 1% respectively. Employee expense incurred one year earlier has a significant relationship with market capitalisation of current year at a significance level of 10%. Dividend Payout in both the immediately preceding two years has a significant relationship with market capitalisation of current year at a significance level of 10%.
From the above analysis, it can be concluded that hypothesis 1 is not supported at a significance level of 5%.

6.2.2 Analysis of Hypothesis 2

Hypothesis 2: Increase or decrease in Policy Related Expenses incurred in any particular year will not have a significant impact on long term prospects of firms in India.

The significant relationships between the dependent and independent variables are summarised below:

It is observed that EPS and market capitalisation have significant relationships with interest expense and dividend payout respectively. EPS has a significant relationship with interest expense incurred in both the immediately preceding two years at significance levels of 5% and 1% respectively. Market capitalisation has a significant relationship with dividend payout in both the immediately preceding two years at a significance level of 10%. PBT also has a significant relationship with interest expense incurred two years earlier at a significance level of 10%.

From the above analysis, it can be concluded that hypothesis 2 is not supported at a significance level of 5%.

6.2.3 Analysis of Hypothesis 3

Hypothesis 3: Increase or decrease in Discretionary Expenses incurred in any particular year will not have a significant impact on long term prospects of firms in India.

The significant relationships between the dependent and independent variables are summarised below:

Sales value does not have a significant relationship with any of the independent variables. PBT in the immediately succeeding 2\textsuperscript{nd} year is impacted by employee expense of current year at a significance level of 5%. EPS of current year has a significant relationship with publicity expense incurred two years earlier at a
significance level of 10%. Market capitalisation of current year has a significant relationship with expenditure on R & D incurred one year earlier at a significance level of 10%.

From the above analysis, it can be concluded that hypothesis 3 is not supported at a significance level of 5%.

6.2.4 Analysis of Hypothesis 4

Hypothesis 4: Short-termism in capital markets will not have a significant impact on long term prospects of firms in the chemicals sector in India

The significant relationships between the dependent and independent variables are summarised below:

Dividend payout has a significant relationship at a significance level of 1% with sales value with a lag of one year. Expenditure on R & D incurred two years earlier has a significant relationship at a significance level of 5% with PBT of current year. EPS of current year is impacted by publicity expense incurred two years earlier with a significance level of 5%. EPS is also impacted by interest expense incurred one year earlier at a significance level of 5%.

From the above analysis, it can be concluded that hypothesis 4 is not supported at a significance level of 5%.

6.2.5 Analysis of Hypothesis 5

Hypothesis 5: Short-termism in capital markets will not have a significant impact on long term prospects of firms in the pharma sector in India

The significant relationships between the dependent and independent variables are summarised below:

Dividend payout made during both the two years immediately preceding the current year has a significant relationship with sales value of current at a significance level of 1%. Expenditure on R & D incurred one year earlier has a significant relationship with PBT of current year at a significance level of 1%. Both expenditure on R & D
and interest expense incurred one year earlier have a significant relationship with EPS of current year at significance levels of 5% and 10% respectively. Employee expense, interest expense and dividend payout, all three incurred two years earlier, have significant relationships with market capitalisation of current year with significance levels of 10%, 1% and 10% respectively.

From the above analysis, it can be concluded that hypothesis 5 is not supported at a significance level of 5%.

### 6.2.6 Sectoral Comparison

As mentioned in Chapter 1, the scope of the study includes finding out if there are any differences between the sample as a whole and the two sectors, namely the chemicals and pharma sectors. The similarities and differences between the sample as a whole and the two sectors are discussed below. Hypothesis 1 is applicable for the sample as a whole. Hypotheses 4 and 5 are applicable for the chemicals and the pharma sectors respectively.

The similarity between hypothesis 1 on the one hand and hypotheses 4 and 5 on the other is that all three hypotheses are not supported at a significance level of 5%. The difference between the two sets of hypotheses is that the independent variables and the dependent variables that have significant relationships are not the same.

Sales value does not have a significant relationship with the lags of any of the independent variables in the case of hypothesis 1. However, in the case of both the other hypotheses, sales value has significant relationships with lags of dividend payout.

None of the dependent variables are impacted by expenditure on R & D incurred in either of the previous two years in the case of hypothesis 1. However, in the case of hypothesis 4, two year lag of expenditure on R & D has a significant influence on PBT. In the case of hypothesis 5, one year lag of expenditure on R & D has significant relationships with both PBT and EPS.
PBT has a significant relationship with two year lag of depreciation expense in the case of hypothesis 1. However, in the case of hypotheses 4 and 5, none of the dependent variables are impacted by depreciation expense incurred in either of the previous two years.

6.3 Conclusion

The study is aimed at studying the effect of short-termism on the long-term performance of firms in the Indian context. This is sought to be done through an empirical analysis. The study is split into two parts:

1. Study of sample as a whole
2. Study of specific sectors in the sample

The primary scope of the study is on the sample as a whole i.e. firms from different sectors. This is in line with most researches reviewed in Chapter 2. The sectoral study explores at a preliminary level if there are differences in the findings between the sample as a whole and specific sectors in the sample.

The sample comprises of financial data of 390 firms from different sectors. These firms are chosen from among those included in the various stock indices of the National Stock Exchange of India. Panel data is used for the analysis.

The study uses four dependent variables, and six independent variables. Lags for one and two years of the independent variables are also used in the study. The dependent variables are Sales value, profit before tax, earnings per share and market capitalisation. The independent variables are employee expense, publicity expense, expenditure on R & D, interest expense, depreciation expense and dividend payout. The first three independent variables are collectively classified as discretionary variables by which it is meant that the managements of firms have the discretion to decide the level of spending on these expense items. The last three independent variables are classified as policy related variables. All these three variables are influenced by policy decisions of the managements of firms. Interest expense and
depreciation expense are proxies for level of debt and quantum of assets in the firm respectively.

The study also uses six control variables, namely, age of the firm, size of the firm, industry to which the firm belongs, proportion of promoters’ shareholding in the total shareholding of the firm, proportion of shareholding of non-promoter institutional shareholders in the total shareholding of the firm and ratio of book value to market value of the shares of the firm.

To assess the long-term effect of the independent variables on the dependent variables, regression analysis using FE and RE models are applied to find out statistically significant relationships between the two sets of variables. The premise for finding out this relationship is that if a statistically significant relationship exists between the lags of an independent variable in the two years immediately preceding a given year and a dependent variable of a given year, it can be concluded that any change in the independent variable in any one year will have a long-term effect on the dependent variable.

Based on the above, five hypotheses are used in the study. These are:

1. Hypothesis 1

   Short-termism in capital markets will not have a significant impact on long term prospects of firms in India

2. Hypothesis 2

   Increase or decrease in Policy Related Expenses incurred in any particular year will not have a significant impact on long term prospects of firms in India

3. Hypothesis 3

   Increase or decrease in Discretionary Expenses incurred in any particular year will not have a significant impact on long term prospects of firms in India
4. Hypothesis 4

Short-termism in capital markets will not have a significant impact on long term prospects of firms in the chemicals sector in India

5. Hypothesis 5

Short-termism in capital markets will not have a significant impact on long term prospects of firms in the pharma sector in India

As discussed in the foregoing section, the conclusions arrived at based on the findings in the study are that one year and two year lags of one or more of the independent variables considered in the study have a long-term impact on one or more of the dependent variables considered in the study at a significance level of 5%. All the five hypotheses do not find support at a significant level of 5%. This leads to the conclusion that short-termism has an impact on long-term prospects of firms in India. This conclusion is in line with the prior research studies.

6.4 Contributions by the Study

The study makes a beginning in the study of effect of short-termism in the Indian capital markets. It should be considered as exposing the tip of the iceberg. More studies may follow to analyse various related aspects like causes for short-termism, the reasons for the dependent variables being impacted by the lags of the independent variables, sectors that experience short-termism and such other related aspects.

This study is timely and pertinent to the capital markets in the country now as it can act as a catalyst for the concerned authorities, industry associations and experts in the industry to investigate further and also to formulate strategies to reduce or eliminate short-termism from the Indian capital markets.

6.5 Scope for Further Research

The study is only a beginning in the study of the phenomenon of short-termism in the Indian Capital Markets. Further studies are possible to cover various other aspects of short-termism.
The causes for an independent variable and a dependent variable having a significant relationship or not having a significant relationship can be studied. The causes for direct and inverse relationship between independent and dependent variables can be studied. These studies will help in a better understanding of the causes for short-termism.

Sectoral studies can be extended to other sectors.

The analysis of the relationship can be done through other methods like structural equation models.

There is scope to take into consideration a more detailed break-up of some of the expenses. For instance, employee expense can be studied with respect to fixed and variable components, cost of training and other such similar components. Similarly, depreciation expense can be analysed as depreciation on existing assets and that on new assets.

The study has considered financial data on an annual basis. Considering that the focus by many researchers and the phenomenon of short-termism revolves around quarterly financial results, the study can be extended to cover quarterly financial results.

The scope can be extended to include dependent variables in the past year as an independent variable in the regression analysis.