CHAPTER - XI

CONCLUDING OBSERVATIONS AND SUGGESTIONS

In this final chapter we are ready to sum up this report with the help of the following sections, namely:

1. Summary of the Empirical Work
2. Conclusions of the Study
3. Limitations and Shortcomings and

1. Summary of the Empirical Work

In this research report, at the beginning discussion was made of the object of this study and survey of existing literature on financial ratio analysis and study of share price behaviour. The relationship between aspects of equity share price (i.e., the average, relative dispersion indicating risk etc. of it) on the one side and operating and financing efficiencies on the other, of individual companies was studied subsequently, for some selected Indian manufacturing as well as non-manufacturing companies. This was done to get the overall performance measure on a comprehensive and objective basis. The statistical analysis of both time series and cross-sectional data was done, applying the canonical correlation analysis technique and using the existing parametric tests of significance for such correlation. The independent variables were some suitable financial ratios. In the course of the analysis, the model of relationship in both additive and multiplicative versions was examined, taking historical cost as
well as current value based independent financial ratio variables and using fixed set as well as changeable subset from a larger set of variables. Some possible applications of the model of relationship were also demonstrated at length, in Chapter X. Such applications include testing of some financial hypotheses, estimation and prediction of dependent variables and testing of the significance of the influences of size variable and of exogeneous variables on share price behaviour.

For time series study, a total number of twenty four manufacturing companies in engineering and cotton textile industries and a total number of sixteen non-manufacturing companies in banking, trading, investment & finance and transporting sectors were selected. For cross-sectional study, a total number of thirty companies in general engineering industry were taken into account. The operating and other financial data together with the data on equity share prices were collected from Bombay Stock Exchange Official Directory. The data relating to some exogeneous macro-variables were collected from Reserve Bank of India Bulletins.

The relationship stated earlier was postulated for the main purpose of computing corporate operating efficiency and overall performance scores. On testing the results the said relationship was found significant in most of the cases. The empirical results are described in a nut shell in the following section.
2. Conclusions of the Study

The empirical analyses of data were performed satisfactorily, applying canonical correlation analysis technique to establish the relationship between aspects of share price in terms of average, relative dispersion indicating risk etc. of it and corporate overall performance in terms of operating and financing efficiencies expressed by some suitable financial ratios. The statistical parametric tests, viz., the approximate chi-square tests due to Marriott and due to Bartlett and the union-intersection test due to Roy, revealed that the postulated relationship is significant in most of the cases. The testing results improved for some cases when (i) changeable subsets of variables from a larger set were used, (ii) suitably defined current values of variables were used and/or (iii) multiplicative version of the model was tried. Besides the cases of manufacturing companies the relationship was found significant enough in the cases of non-manufacturing companies also, rather with higher level of significance in cases of some of those non-manufacturing companies. In the case of State Bank of India (a statutory corporation under the State Bank of India Act, 1955), the relationship was found significant only when an exogeneous variable (all India share price index for all industries) accompanied the independent set of internal financial ratio variables. The postulated relationship was found statistically significant in both the time series and cross-sectional studies.
(for five cross-section years), in the cases of selected Indian companies. But the cross-sectional results were less prominent in comparison to the time series results.

In Chapter X, by application of the model of relationship established in the preceding chapters, the following current issues were also dealt with, namely:

1. Testing of leverage and dividend policy irrelevance hypotheses
2. Estimation and prediction of future prices of equity shares
3. Examination of influence of size variable on share price and
4. Examination of influences of exogeneous variables on share price.

3. Limitations and Shortcomings

Notwithstanding anything contained or expressed in the preceding chapters this study is subject to the following limitations and shortcomings in some respect or other (as evidenced from weak predictive power of future values of dependent variables):

1. Selection of total number, type and definitions of variables
2. Consideration of historical costs of current assets and liabilities
3. Possible errors in data set collected from a secondary source
(4) Possible influences of technological and other environmental changes on long period time series data — an aspect of contingency theory

(5) Heterogeneity of financial characteristics of different units possibly impairing the form and strength of the relationship — another aspect of contingency theory

(6) Possible occurrence of errors of the simple model as a consequence of countless exogeneous influences of forces of the outside system — another aspect of contingency theory and

(7) The chance of creation of bias for the undernoted statistical issues in context to any correlation analysis, i.e., either multivariate regression or canonical correlation, in the testing results, viz., for

(i) assumption of joint normal distribution of variables (or of their natural logarithms),
(ii) assumption of linear relation in variables as well as in parameters,
(iii) multicollinearity of variables,
(iv) autocorrelation of dependent as well as of independent variables and
(v) possible heteroskedasticity of variance of error term.

There are, at present, an acute dearth of suitable techniques to repair most of the shortcomings under statistical issues in case of canonical correlation analysis. Many of the other limitations may be overcome through further study with

(a) refinement of the model of relationship,
(b) suitable definitions and selection of variables,
(c) selection of more homogeneous industry group in cross-sectional analysis but with sufficiently large number of units,
(d) consideration of small span of study period but with all
data for every small section of a financial year so that
the total number of cases remains large enough, in time
series analysis and
(e) collection of data from primary source.

Most of these prescribed remedies may be made by (I) further
development of the model by continuous trial and (II) applying
this model in more economically and industrially developed
countries where suitable data for the cases (c), (d) and (e)
mentioned above are easily available and the current values of
current assets and other liabilities as well as required
disaggregated and reliable data are readily published in time with
no discontinuity.

4. Suggestions and Policy Implications

For further development and refinement of the model of
relationship described in the preceding section, the tentative
suggestions were listed in the last paragraph of that section.
However, the following policy implications and practical utilities
of the model are enumerated below:

(1) Comparison of operating efficiency and financing
effectiveness of private sector as well as of public
sector (with shares publicly issued) companies may be
made, on objective and comprehensive basis.

(2) Horizontal and vertical comparison of corporate overall
performance may be made on objective footing and
comprehensive basis, in cross-sectional and time series analyses respectively of the said companies.

(3) Testing of some financial hypotheses, e.g., irrelevance hypotheses of financial leverage or dividend policy, may be done, encompassing the corporate world.

(4) Examination of the impacts of some apparently extraneous or exogeneous influences on share price behaviour, may be made.

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