CHAPTER - 6

RESEARCH FINDINGS

Findings of the study are based on ratio and regression. Data were not available for all the companies. Hence the available data were used for the analysis.

From the study it is seen that the following factors, viz.

a) Production
b) Consumption to sales ratio
c) Working capital
d) Current ratio
e) Employment

had the maximum impact on net profit of the units.

For a combination of 4 or 5 of the above variables, the R² value (adjusted) ranges from 0.7632 to 0.9838 for individual units. For the total sample units, the adjusted R² value obtained was 0.5285, which is considered significant. The dependent variables in this case in the order of ranking are:

It is noteworthy that production, turnover and employment have not been the major factors that determined profitability and its sustenance.
a) Consumption to sales ratio

b) Working capital

c) Expenditure

d) Turnover

e) Production

f) Employment

6.1. Result of Multiple regression

The $R^2$ value of 0.5285 indicates that the profitability is explained fairly well by the above mentioned independent variables.

Significant negative co-efficient for expenditure and ratio of cost of materials consumed to sales establishes their inverse correlation to profitability justifying the arguments from a definitional view point.

It is significant to note that the ratio of cost of materials consumed to sales has been the largest single factor that has a telling impact on profitability. Review of public enterprises conducted periodically also establishes this observation. As an example, in the textile sector, the cost of cotton has risen to as high as 70% from an acceptable norm of 56-60% (SITRA) affecting the profitability adversely. No corresponding increase is visible in the selling price of yarn.

It is noteworthy that production, turnover and employment have not been the major factors that determined profitability and its sustenance. On the other hand
working capital availability had a very significant positive impact on profitability. This stresses the need for a more careful attention on micro level management issues. In State Public Sector Undertakings it is observed that the expenditure has proportionately increased with increase in turnover, in some cases at a faster rate. To put the units on a stable footing what is required is optimal value addition and not maximum value addition. This calls for expenditure reduction and subsequent lowering of input costs.

The Multiple Regression Analysis was made with respect to the 12 companies. For this analysis “Net Profit” or “Loss” has been taken as dependent variable and independent variables considered for this purpose were:-

1) Production (PRDN)
2) Consumption to sales (CTS)
3) Working Capital (WC)
4) Current Ratio (CR)
5) Employment (EMPL)
6) Expenditure (EXPN)
7) Receivables to Sales (RTS)
8) Capacity Utilisation (CPUT)
9) Stock of Finished Goods to Sales (SFGS)
10) Capital Invested (CI)
11) Debt Equity Ratio (DER)
12) Turnover (TO)
The analysis showed that out of the 12 independent variables, even two variables showed a very high $R^2$ value (0.9838). The applicable factors to different companies and corresponding adjusted $R^2$ values are given in the following table no. 6.1.

### TABLE - 6.1
Results of Regression Analysis

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of Unit</th>
<th>Applicable Performance Parameters</th>
<th>Adjusted $R^2$ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TCC</td>
<td>PRDN WC EXPN</td>
<td>0.8712</td>
</tr>
<tr>
<td>2</td>
<td>KAMCO</td>
<td>PRDN WC</td>
<td>0.9838</td>
</tr>
<tr>
<td>3</td>
<td>MCL</td>
<td>PRDN CR EMPL RTS</td>
<td>0.7632</td>
</tr>
<tr>
<td>4</td>
<td>KR</td>
<td>WC CPUT</td>
<td>0.8933</td>
</tr>
<tr>
<td>5</td>
<td>TKC</td>
<td>PRDN CTS RTS</td>
<td>0.7973</td>
</tr>
<tr>
<td>6</td>
<td>KCC</td>
<td>PRDN CTS EMPL EXPN</td>
<td>0.7830</td>
</tr>
<tr>
<td>7</td>
<td>KSTC</td>
<td>PRDN CTS SFGS</td>
<td>0.8657</td>
</tr>
<tr>
<td>8</td>
<td>MI</td>
<td>EMPL RTS CPUT CI DER</td>
<td>0.8576</td>
</tr>
<tr>
<td>9</td>
<td>TCL</td>
<td>CTS WC CR SFGS</td>
<td>0.9227</td>
</tr>
<tr>
<td>10</td>
<td>PH(IM)</td>
<td>CTS CR DER TO</td>
<td>0.8298</td>
</tr>
<tr>
<td>11</td>
<td>KEL</td>
<td>CTS WC CR EMPL CI</td>
<td>0.8477</td>
</tr>
<tr>
<td>12</td>
<td>UEI</td>
<td>PRDN CTS WC CR EMPL</td>
<td>0.9640</td>
</tr>
<tr>
<td>ALL UNITS</td>
<td>CTS WC EXPN TO PRDN EMPL</td>
<td>0.5285</td>
<td></td>
</tr>
</tbody>
</table>

Source: Worked on the basis of the tables given earlier.
The first hypothesis is that the performance of the state public sector manufacturing units in Kerala has not been satisfactory.

From the study and analysis it is found that out of the 47 manufacturing undertakings, only 18 enterprises have made profits during 1992-93. The other 29 have made losses. Total profits made by the profit making undertakings during the same year was Rs. 4189.05 lakhs against Rs. 5372.11 lakhs of total losses made by the loss-making enterprises. Thus the manufacturing sector has incurred a net loss of Rs. 1183.06 lakhs during the period. However, there has been improvement in the subsequent years as can be seen from Table 3.1.