CHAPTER-V

CORPORATE DISCLOSURE

AND

THE COMPANY ATTRIBUTES

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Contents</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
<td>184</td>
</tr>
<tr>
<td>2</td>
<td>Asset-size and disclosure score of a company</td>
<td>185</td>
</tr>
<tr>
<td>3</td>
<td>Capital-size and disclosure score of a company</td>
<td>191</td>
</tr>
<tr>
<td>4</td>
<td>Age and disclosure score of a company</td>
<td>195</td>
</tr>
<tr>
<td>5</td>
<td>Turnover and disclosure score of a company</td>
<td>199</td>
</tr>
<tr>
<td>6</td>
<td>ROI and disclosure score of a company</td>
<td>204</td>
</tr>
<tr>
<td>7</td>
<td>Conclusion</td>
<td>211</td>
</tr>
</tbody>
</table>
INTRODUCTION

In India, accounting and reporting have to be in compliance with the provisions of the companies Act, 1956, accounting standards issued by the Institute of Chartered Accountants of India (ICAI) and the guidelines prescribed by the Securities and Exchange Board of India (SEBI) for listing agreement. But the extent of disclosure of information in the annual reports of different companies varies from company to company. The difference in the disclosure of information may be in the form of the extent of disclosure, quality of disclosure, quantity of disclosure, presentation of information and voluntary disclosure. This may be because of the different attributes of various companies.


1 op.cit.
3 op.cit. pp. 16-31.
6 op.cit. p. 11-20.
7 op.cit.
8 op.cit. pp. 533-541.
9 op.cit.
11 op.cit.
12 op.cit.
In this chapter, an attempt has been made to analyse the association between the ‘extent of disclosure’ and company attributes. The company attributes selected for the study are:

(I) Asset-size of a company  
(II) Capital – size of a company

(III) Age of the company  
(IV) Turnover of a company,

(V) ROI of a company

(I) ASSET-SIZE AND DISCLOSURE SCORE OF A COMPANY

A number of possible reasons have been advanced in the literature in support of an a priori expectation that the extent of disclosure is positively associated with the size of the firm (Cerf, 1961; Singhvi and Dessai, 1971; Buzby, 1975; Firth, 1982; Subhash, 1992; Banerjee, 2001). One such reason is that collecting and disseminating information is a costly exercise and perhaps it is the larger firm, which can best afford such expenses. Some of the reasons for expecting a better disclosure by big companies are listed below:

1. To gain reputation, status, etc, so that the company securities can be marketed efficiently and profitably.

2. To obtain finance from financial institutions in India and to raise funds from the securities market abroad.

3. To garner public confidence.

13 op.cit.
14 op.cit, pp. 129-138.
15 op.cit, pp.16-31.
16 op.cit, pp.273-280.
17 op.cit.
18 op.cit.
Table 5.1
Asset-size and disclosure

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rs. in Lakhs</td>
<td>Mean</td>
<td>SD</td>
<td>CV</td>
<td>Mean</td>
<td>SD</td>
<td>CV</td>
</tr>
<tr>
<td>less than 2000</td>
<td>51.59</td>
<td>14.89</td>
<td>28.86</td>
<td>51.48</td>
<td>14.86</td>
<td>28.87</td>
</tr>
<tr>
<td>2000 - 5000</td>
<td>42.73</td>
<td>11.62</td>
<td>27.19</td>
<td>44.35</td>
<td>11.17</td>
<td>25.19</td>
</tr>
<tr>
<td>5000 - 10000</td>
<td>46.21</td>
<td>13.14</td>
<td>28.44</td>
<td>47.75</td>
<td>12.85</td>
<td>26.91</td>
</tr>
<tr>
<td>10000 - 15000</td>
<td>51.31</td>
<td>9.92</td>
<td>19.33</td>
<td>52.32</td>
<td>9.79</td>
<td>18.71</td>
</tr>
<tr>
<td>15000 - 20000</td>
<td>49.24</td>
<td>8.17</td>
<td>16.59</td>
<td>49.55</td>
<td>7.84</td>
<td>15.82</td>
</tr>
<tr>
<td>20000 - 50000</td>
<td>52.87</td>
<td>10.7</td>
<td>20.24</td>
<td>53.77</td>
<td>10.62</td>
<td>19.75</td>
</tr>
<tr>
<td>50000 - 100000</td>
<td>52.81</td>
<td>10.43</td>
<td>19.75</td>
<td>53.22</td>
<td>10.62</td>
<td>19.95</td>
</tr>
<tr>
<td>100000 - above</td>
<td>63.55</td>
<td>11.45</td>
<td>18.02</td>
<td>63.81</td>
<td>11.75</td>
<td>18.41</td>
</tr>
</tbody>
</table>

**Source:** Compiled from the annual reports of the selected companies from 1995-96 to 1999-00.
4. The same information, which has been collected for internal management system can be disclosed in the annual report, at very little extra cost.

5. The danger of full disclosure of information may be relatively less in case of big companies as compared to the small ones (regarding their competitive position).

6. Different government agencies, such as customs, Excise and sales-tax departments, NGO's are closely watching the functioning of large companies. Hence, the detailed disclosure of corporate information may lessen the undesired pressure from the government agencies and NGO's.

The relationship between asset size and disclosure score for the years 1995-96 to 1999-00 has been shown in Table 5.1. It can be observed from the table that for all the five years of the study the maximum mean disclosure per cent has been noticed in case of the companies falling in the asset size of Rs. 10000 crores and above. Some of the companies to name, from this category are- The Great Eastern shipping company Ltd, Reliance Industries Ltd and Tata steel. The minimum mean disclosure score per cent has been noticed in case of the companies falling in the asset size of Rs. 200 crores to 500 crores, for all the five years of the study. This fact is revealed by, the diagram shown in Figure 5.1.

Larger variations in the disclosure scores, as indicated by the coefficient of variation, have been found in case of the companies having assets of less than Rs. 200 crores, for all the five years of the study. There have been minimum variations in the disclosure scores of the companies having assets of Rs. 1500 crores
to 2000 crores for the first four years of the study, Rs. 1000 crores to Rs. 1500 crores and Rs. 10000 crores and above for 1999-00.

Figure 5.1

Assets Size and Mean Disclosure Score

Some significant observations which can be made regarding the inter-period comparison of the minimum and the maximum mean disclosure score of the companies are:

(a) The range of assets for the different years of the study for minimum and the maximum mean disclosure per cent has remained the same.

Source: Table 5.1
(b) The minimum mean disclosure per cent has constantly improved from 42.73 for the year 1995-96 to 49.87 for the year 1999-00.

(c) The maximum mean disclosure per cent has also constantly improved from 63.55 for the year 1995-96 to 69.05 for the year 1999-00.

From the foregoing analysis, it seems that there is a positive association between the asset size and the disclosure score. To know the significance of the relationship between the two variables, the following null hypothesis has been formulated and tested.

**Ho 5.1- Asset size of a company is not associated with its disclosure score.**

To test this null hypothesis, the following regression model have been applied:

\[ Y = a + b_1X_1 \]

Where \( Y \) = disclosure score  
\( a \) = intercept  
\( b_1 \) = co-efficient of independent variable  
\( X_1 \) = net tangible assets.

The regression model has been used to study the association between the asset size and the disclosure score of the companies, for the years 1995-96 to 1999-00. The results of these regression models have been shown in Table 5.2.

The value of \( R^2 \) for the year 1995-96 is 0.6887, which shows that 68.87 per cent disclosure score showed dependence on the asset size of a company. The \( t \)-value, which indicates the significance of the regression co-efficient, shows that this
is significant at a level of 5 per cent for the year 1995-96. The F-value is significant at 5 per cent for the year 1995-96. The value of $R^2$, which represents the variations in the dependent variable because of the independent variable, has constantly risen from 68.87 per cent in 1995-96 to 76.14 per cent in 1999-00.

**Table 5.2**

**Linear Regression results of Assets size and Disclosure**

<table>
<thead>
<tr>
<th>Year</th>
<th>Constant</th>
<th>$R^2$</th>
<th>T-Test</th>
<th>P</th>
<th>F-Test</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995-96</td>
<td>46.93273</td>
<td>0.688749</td>
<td>3.643764</td>
<td>0.010786</td>
<td>13.27702</td>
<td>0.010786</td>
</tr>
<tr>
<td>1996-97</td>
<td>47.89279</td>
<td>0.707747</td>
<td>3.811847</td>
<td>0.008844</td>
<td>14.53018</td>
<td>0.008844</td>
</tr>
<tr>
<td>1997-98</td>
<td>49.64901</td>
<td>0.730738</td>
<td>4.035232</td>
<td>0.00684</td>
<td>16.2831</td>
<td>0.00684</td>
</tr>
<tr>
<td>1998-99</td>
<td>51.02825</td>
<td>0.760653</td>
<td>4.36671</td>
<td>0.004736</td>
<td>19.06816</td>
<td>0.004736</td>
</tr>
<tr>
<td>1999-00</td>
<td>52.12757</td>
<td>0.76145</td>
<td>4.376292</td>
<td>0.004687</td>
<td>19.15193</td>
<td>0.004687</td>
</tr>
</tbody>
</table>

*Source: Compiled from Table 5.1*

If probability (p) is less than .01 = highly significant
If (p) is more than .01 but less than .05 = significant
If (p) is more than .05 = not significant

The t-value, which indicate the significance of the regression coefficient, show that, these are highly significant at a level of 5 per cent for the years 1996-97 to 1999-00. The F-values are highly significant at a level of 5 per cent for the years 1996-97 to 1999-00.

From the foregoing analysis it can be concluded that there is a **positive and highly significant association between the asset size and the disclosure score** in all the five years of the study, except for the year 1995-96, when it had been significant. So the null hypothesis that there is no association between the size of a
company as measured by its net tangible assets and the disclosure score has been rejected.

II. CAPITAL- SIZE AND DISCLOSURE SCORE

The variations in the disclosure scores of the different companies may be because of the differences in their capital- size. It is generally argued that the large companies with huge amount of capital disclose more information than the small ones. Table 5.3 shows the relationship between the disclosure score and the capital size of a company for the years 1995-96 to 1999-00.

It can be observed from Table 5.3 that for all the five years of the study, the maximum mean disclosure score per cent has been in the case of the companies falling in the capital size of Rs. 10000 crores and above, followed by Rs. 5000 crores to Rs. 10000 crores. The minimum mean disclosure score per cent for all the five years of the study has been noticed in the case of the companies having capital size of Rs. 100 crores to Rs. 500 crores. This fact can be observed from Figure 5.2.

Larger variations in the disclosure scores, as indicated by the co-efficient of variation, have been found in the case of the companies with capital size between Rs. 100 crores to Rs. 500 crores for the years 1995-96 and 1996-97; and below Rs. 100 crores for the years 1997-98 to 1999-00. There have been minimum variations in the disclosure score per cent of the companies having capital size of Rs. 10000 crores and above, for all the five years of the study.

A significant observation which can be made regarding the inter-period comparison of the minimum and the maximum disclosure score is that the minimum
Table 5.3
Capital-Size & Disclosures

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rs. in Lakhs</td>
<td>Mean</td>
<td>SD</td>
<td>CV</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>1</td>
<td>Below 1,000</td>
<td>57.28</td>
<td>15.46</td>
<td>26.99</td>
<td>60.46</td>
<td>17.73</td>
</tr>
<tr>
<td>2</td>
<td>1,000 - 5,000</td>
<td>43.59</td>
<td>12.61</td>
<td>28.93</td>
<td>44.32</td>
<td>12.29</td>
</tr>
<tr>
<td>3</td>
<td>5,000 - 10,000</td>
<td>47.61</td>
<td>13.55</td>
<td>28.46</td>
<td>49.32</td>
<td>12.91</td>
</tr>
<tr>
<td>4</td>
<td>10,000 - 50,000</td>
<td>51.32</td>
<td>9.71</td>
<td>18.92</td>
<td>52.18</td>
<td>9.69</td>
</tr>
<tr>
<td>5</td>
<td>50,000 - 1,000,000</td>
<td>58.82</td>
<td>11.89</td>
<td>20.21</td>
<td>58.55</td>
<td>12.23</td>
</tr>
<tr>
<td>6</td>
<td>1,000,000 and Above</td>
<td>65.85</td>
<td>9.82</td>
<td>14.91</td>
<td>66.48</td>
<td>9.87</td>
</tr>
</tbody>
</table>

Source: Compiled from the annual reports of the selected companies from 1995-96 to 1999-00.
mean disclosure per cent has constantly improved from 43.59 for the year 1995-96 to 48.5 for the year 1999-00. The maximum mean disclosure score per cent has also increased from 65.85 to 71.87 during the same period.

Figure 5.2

Capital size and Mean Disclosure Score

Source: Table 5.3.

From the above-mentioned analysis, it seems that there is a positive association between the capital-size and the disclosure score. To know the significance of the relationship between these two variables, the following null hypothesis has been formulated and tested.

Ho 5.3 - Size of a company, as measured by its capital, is not associated with its disclosure score.
To test this null hypothesis, the following regression models have been applied:

\[ Y = a + b_3 X_3 \]

Where

\[ Y \] = disclosure score

\[ a \] = intercept

\[ b_3 \] = co-efficient of independent variable

\[ X_3 \] = capital (measured in lakhs of rupees).

### Table 5.4

**Linear Regression results of Capital size and Disclosure**

<table>
<thead>
<tr>
<th>Year</th>
<th>Constant</th>
<th>R2</th>
<th>T-Test</th>
<th>P</th>
<th>F-Test</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995-96</td>
<td>48.43409</td>
<td>0.649445</td>
<td>2.722217</td>
<td>0.052866</td>
<td>7.410464</td>
<td>0.052866</td>
</tr>
<tr>
<td>1996-97</td>
<td>49.24343</td>
<td>0.65913</td>
<td>2.781128</td>
<td>0.049761</td>
<td>7.734673</td>
<td>0.049761</td>
</tr>
<tr>
<td>1997-98</td>
<td>51.569</td>
<td>0.621661</td>
<td>2.563694</td>
<td>0.062394</td>
<td>6.572528</td>
<td>0.062394</td>
</tr>
<tr>
<td>1998-99</td>
<td>53.01321</td>
<td>0.624636</td>
<td>2.579986</td>
<td>0.061328</td>
<td>6.656328</td>
<td>0.061328</td>
</tr>
<tr>
<td>1999-00</td>
<td>53.90244</td>
<td>0.655247</td>
<td>2.757266</td>
<td>0.050992</td>
<td>7.602524</td>
<td>0.050992</td>
</tr>
</tbody>
</table>

**Source:** Compiled from Table 5.3

If probability (p) is less than .01 = highly significant

If (p) is more than .01 but less than .05 = significant

If (p) is more than .05 = not significant

The result of this regression model is shown in Table 5.4. The t-values, which indicate the significance of the regression co-efficient, shows that these are significant at a level of 5 per cent for the years 1995-96, 1996-97 and 1999-00. The F-values are also significant at 5 per cent level for the years 1995-96, 1996-97 and 1999-00. The value of \( R^2 \), which represent the variations in the dependent variable because of the independent variable, has been almost constant at a per cent of 60's.
This clearly shows that, there is more than 60 per cent influence of independent variable on the dependent variable.

So from this analysis it can be concluded that there is a positive and significant association between the capital size and the disclosure score for the years 1995-96, 1996-97 and 1999-00. So the null hypothesis that there is no association between the capital size and the disclosure score has been rejected.

III. AGE AND DISCLOSURE SCORE OF A COMPANY

Age of a company may be one of the causes for the differences in the disclosure scores of the different companies. The general belief is that old companies disclose more information than the young companies. This may be because with maturity, the companies become aware of the benefits of greater disclosure.

It can be noticed from Table 5.5 that, the companies in the age group of 50 to 60 years have the maximum mean disclosure score per cent for all the years of the study. The companies in the age group of 60 and above years follow second in the list of highly disclosing companies for all the five years of the study. The companies in the age group of 10 to 20 years of age have the minimum mean disclosure for all the five years of the study. This trend can be seen in the Figure 5.3.

A significant observation, which can be made regarding the inter-period comparison of the minimum and the maximum mean disclosure scores of the companies, is that the mean disclosure score per cent of all the age groups are increasing steadily.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>CV</td>
<td>Mean</td>
<td>SD</td>
<td>CV</td>
<td>Mean</td>
<td>SD</td>
<td>CV</td>
<td>Mean</td>
<td>SD</td>
<td>CV</td>
</tr>
<tr>
<td>1</td>
<td>Less than 10</td>
<td>47.58</td>
<td>15.77</td>
<td>33.14</td>
<td>48.79</td>
<td>15.97</td>
<td>32.73</td>
<td>51.06</td>
<td>15.7</td>
<td>30.75</td>
<td>53.03</td>
<td>15.91</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>10 - 20</td>
<td>46.82</td>
<td>13.72</td>
<td>29.3</td>
<td>47.93</td>
<td>13.27</td>
<td>27.69</td>
<td>50.2</td>
<td>13.65</td>
<td>27.19</td>
<td>51.51</td>
<td>13.64</td>
<td>26.48</td>
</tr>
<tr>
<td>3</td>
<td>20 - 30</td>
<td>54.23</td>
<td>10.76</td>
<td>19.84</td>
<td>55.14</td>
<td>10.64</td>
<td>19.3</td>
<td>57.14</td>
<td>10.63</td>
<td>18.6</td>
<td>57.82</td>
<td>10.73</td>
<td>18.56</td>
</tr>
<tr>
<td>4</td>
<td>30 - 40</td>
<td>50.69</td>
<td>13.19</td>
<td>26.02</td>
<td>51.51</td>
<td>13.08</td>
<td>25.39</td>
<td>53.2</td>
<td>12.75</td>
<td>23.97</td>
<td>55.02</td>
<td>12.42</td>
<td>22.57</td>
</tr>
<tr>
<td>5</td>
<td>40 - 50</td>
<td>50.15</td>
<td>9.48</td>
<td>18.9</td>
<td>50.83</td>
<td>9.84</td>
<td>19.36</td>
<td>52.2</td>
<td>9.75</td>
<td>18.68</td>
<td>53.56</td>
<td>10.42</td>
<td>19.45</td>
</tr>
<tr>
<td>6</td>
<td>50 - 60</td>
<td>58.61</td>
<td>11.92</td>
<td>20.34</td>
<td>59.31</td>
<td>11.21</td>
<td>18.9</td>
<td>61.82</td>
<td>10.63</td>
<td>17.15</td>
<td>64.12</td>
<td>10.63</td>
<td>16.58</td>
</tr>
<tr>
<td>7</td>
<td>60 and Above</td>
<td>56.47</td>
<td>11.61</td>
<td>20.56</td>
<td>57.06</td>
<td>11.51</td>
<td>20.17</td>
<td>59.09</td>
<td>10.38</td>
<td>17.57</td>
<td>60.75</td>
<td>11.02</td>
<td>18.14</td>
</tr>
</tbody>
</table>

**Table 5.5**

Age and Disclosure Scores

**Source:** Compiled from the annual reports of the selected companies from 1995-96 to 1999-00.
It can be seen from this table that the companies in the age group of 60 and above disclose more information than the companies, which fall in the age group of less than 10 years old. This clearly shows that there is a positive association between the age of a company and the disclosure score.

**Figure 5.3**

**Age and Mean Disclosure Score**

![Graph showing age and mean disclosure score](image)

**Source:** Table 5.5

Larger variations in the disclosure scores, as indicated by the co-efficient of variation, have been found in case of the companies with an age of less than 10 years for all the five years of the study. There have been minimum variations in the disclosure scores of the companies with age of 40 to 50 for the year 1995-96, between 50 to 60 years of age for the remaining period of the study (i.e., from 1996-97 to 1999-00).
To know the significance of the relationship between the age of a company and the disclosure score, the following null hypothesis has been formulated and tested.

**Ho 5.4 - Age of a company is not associated with its disclosure score.**

To test this null hypothesis, the following regression model have been applied:

\[ Y = a + b_4 X_4 \]

Where

- \( Y \) = disclosure score
- \( a \) = intercept
- \( b_4 \) = co-efficient of independent variable
- \( X_4 \) = age of a company.

The result of the above regression model has been shown in Table 5.6. The t-values, which indicate the significance of the regression co-efficient, show that for the first four years of the study, these are significant at a level of 5 per cent. For the year 1999-00 it is not significant at 5 per cent level. The value of \( R^2 \), which represents the variations in the dependent variable because of the independent variable, has always been around, 55 per cent to 65 per cent for the first four years of the study. However, it has been below 50 per cent for the year 1999-00. The F-values are significant at a level of 5 per cent for the years 1995-96 to 1998-99. This analysis shows that there is a positive and significant relationship between the age of a company and the disclosure score.

---

198
Table 5.6
Linear Regression results of Age and Disclosure score

<table>
<thead>
<tr>
<th>Year</th>
<th>Constant</th>
<th>R²</th>
<th>T-Test</th>
<th>P</th>
<th>F-Test</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995-96</td>
<td>45.588</td>
<td>0.64421</td>
<td>3.0089</td>
<td>0.0298</td>
<td>9.0534</td>
<td>0.0298</td>
</tr>
<tr>
<td>1996-97</td>
<td>46.8525</td>
<td>0.61176</td>
<td>2.80687</td>
<td>0.03769</td>
<td>7.8785</td>
<td>0.0377</td>
</tr>
<tr>
<td>1997-98</td>
<td>48.9891</td>
<td>0.55726</td>
<td>2.50863</td>
<td>0.05392</td>
<td>6.2932</td>
<td>0.0539</td>
</tr>
<tr>
<td>1998-99</td>
<td>50.2816</td>
<td>0.57342</td>
<td>2.59249</td>
<td>0.04869</td>
<td>6.721</td>
<td>0.0487</td>
</tr>
<tr>
<td>1999-00</td>
<td>52.0437</td>
<td>0.48342</td>
<td>2.16311</td>
<td>0.08286</td>
<td>4.6791</td>
<td>0.0829</td>
</tr>
</tbody>
</table>

Source: Compiled from Table 5.5

If probability (p) is less than .01 = highly significant
If (p) is more than .01 but less than .05 = significant
If (p) is more than .05 = not significant

It can be concluded from this analysis that *age has a significant association with the disclosure score* of a company. So the null hypothesis that there is no association between the age of a company and the disclosure score has been rejected.

IV. TURNOVER AND DISCLOSURE SCORE

The variations in the disclosure scores of the different companies may be because of the difference in their turnover. It is generally argued that the big companies with larger turnover disclose more information than the smaller ones. This may be attributed to the fact that with increase in turnover, the company may have to disclose more to satisfy the various government agencies. Turnover from different geographical locations and products may need better disclosure. Satyam computer
### Table 5.7

**Turnover and Disclosures Scores**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rs. In Lakhs</td>
<td>Mean</td>
<td>SD</td>
<td>CV</td>
<td>Mean</td>
<td>SD</td>
<td>CV</td>
<td>Mean</td>
<td>SD</td>
<td>CV</td>
<td>Mean</td>
<td>SD</td>
<td>CV</td>
</tr>
<tr>
<td>1</td>
<td>Less than 2,000</td>
<td>46.14</td>
<td>12.94</td>
<td>28.05</td>
<td>46.59</td>
<td>12.1</td>
<td>25.97</td>
<td>48.41</td>
<td>10.9</td>
<td>22.52</td>
<td>49.09</td>
<td>12.14</td>
<td>24.73</td>
</tr>
<tr>
<td>2</td>
<td>2,000 - 5,000</td>
<td>51.36</td>
<td>17.75</td>
<td>34.56</td>
<td>51.97</td>
<td>17.59</td>
<td>33.85</td>
<td>53.48</td>
<td>18.24</td>
<td>34.11</td>
<td>55.76</td>
<td>18.66</td>
<td>33.46</td>
</tr>
<tr>
<td>3</td>
<td>5,000 - 10,000</td>
<td>40.91</td>
<td>8.41</td>
<td>20.56</td>
<td>42.22</td>
<td>7.48</td>
<td>17.72</td>
<td>44.75</td>
<td>6.09</td>
<td>13.61</td>
<td>45.46</td>
<td>6.51</td>
<td>14.32</td>
</tr>
<tr>
<td>4</td>
<td>10,000 - 15,000</td>
<td>48.96</td>
<td>11.55</td>
<td>23.59</td>
<td>50.11</td>
<td>11.63</td>
<td>23.26</td>
<td>52.08</td>
<td>11.72</td>
<td>22.5</td>
<td>53.12</td>
<td>11.53</td>
<td>21.71</td>
</tr>
<tr>
<td>5</td>
<td>15,000 - 20,000</td>
<td>44.69</td>
<td>13.26</td>
<td>29.67</td>
<td>45.39</td>
<td>13.25</td>
<td>29.19</td>
<td>47.9</td>
<td>13.01</td>
<td>27.16</td>
<td>49.3</td>
<td>12.74</td>
<td>25.84</td>
</tr>
<tr>
<td>6</td>
<td>20,000 - 50,000</td>
<td>48.32</td>
<td>10.65</td>
<td>22.04</td>
<td>49.49</td>
<td>9.88</td>
<td>19.96</td>
<td>51.65</td>
<td>10.13</td>
<td>19.61</td>
<td>53.4</td>
<td>10.02</td>
<td>18.76</td>
</tr>
<tr>
<td>7</td>
<td>50,000 - 1,00,000</td>
<td>55.04</td>
<td>9.55</td>
<td>17.35</td>
<td>55.72</td>
<td>9.53</td>
<td>17.1</td>
<td>57.73</td>
<td>9.8</td>
<td>16.98</td>
<td>59.89</td>
<td>10.03</td>
<td>16.75</td>
</tr>
<tr>
<td>8</td>
<td>1,00,000 and Above</td>
<td>62.08</td>
<td>11.01</td>
<td>17.74</td>
<td>62.76</td>
<td>11.1</td>
<td>17.69</td>
<td>64.48</td>
<td>10.77</td>
<td>16.7</td>
<td>65.71</td>
<td>11.06</td>
<td>16.85</td>
</tr>
</tbody>
</table>

**Source:** Compiled from the annual reports of the selected companies from 1995-96 to 1999-00.
services Ltd, Bajaj auto Ltd, Reliance industries Ltd and The great eastern shipping
compny Ltd, are a few examples to be mentioned here.

The relationship between the turnover and the disclosure score for the
years 1995-96 to 1999-00 has been presented in Table 5.7. It can be observed from
Table 5.7 that the companies having turnover of more than Rs. 10000 crores have the
maximum mean disclosure score per cent of 62.08, 62.76, 64.48, 65.71 and 66.95 for
the years 1995-96, 1996-97, 1997-98, 1998-99 and 1999-00 respectively. It can be
easily understand that the disclosure score per cent over a period of 5 years has been
constantly improving from 62.08 in 1995-96 to 66.95 for the year 1999-00.

The second highest disclosure score lies in the turnover range of Rs.
5000 crores to Rs. 10000 crores, for all the five years of the study. Here too, the
disclosure score per cent has been constantly improving from 55.04 in 1995-96 to
60.61 for the year 1999-00. This can be seen in Figure 5.4.

The companies having a turnover between Rs. 500 crores to Rs. 1000
crores have the minimum mean disclosure score per cent of 40.91, 42.22, 44.75,
respectively. The mean disclosure score per cent has been constantly increasing from
40.91 in 1995-96 to 46.26 for the year 1999-00.

Large variations in the disclosure scores as shown by the co-efficient of
variation have been found in the case of the companies with a turnover between Rs.
200 crores to Rs. 500 crores for all the five years of the study. There have been
minimum variations in the disclosure scores of the companies having turnover

201
between Rs 5000 crores to Rs.10000 crores for 1995-96 and 1996-97, and between Rs. 500 crores to Rs. 1000 crores, for the remaining three years of the study (i.e., from 1997-98 to 1999-00).

Figure 5.4

Turnover and Mean Disclosure Score

Source: Table 5.7

From this analysis it appears that there is a positive association between the turnover and the disclosure score. To find out the exact relationship between these two variables, the following null hypothesis has been formulated and tested.

**Ho 5.5** - The amount of turnover of a company is not associated with its disclosure score.

To test this null hypothesis, the following regression model has been used:

\[ Y = a + b_5 X_5 \]
Where

\[ Y = \text{disclosure score} \]

\[ a = \text{intercept} \]

\[ b_5 = \text{co-efficient of independent variable, and} \]

\[ X_5 = \text{net turnover}. \]

Table 5.8
Linear Regression results of Turnover and Disclosure score

<table>
<thead>
<tr>
<th>Year</th>
<th>Constant</th>
<th>R2</th>
<th>T-Test</th>
<th>P</th>
<th>F-Test</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995-96</td>
<td>44.87088</td>
<td>0.720715</td>
<td>3.934901</td>
<td>0.00767</td>
<td>15.48344</td>
<td>0.00767</td>
</tr>
<tr>
<td>1996-97</td>
<td>45.74109</td>
<td>0.735726</td>
<td>4.087022</td>
<td>0.00645</td>
<td>16.70375</td>
<td>0.00645</td>
</tr>
<tr>
<td>1997-98</td>
<td>47.85294</td>
<td>0.768079</td>
<td>4.457675</td>
<td>0.00429</td>
<td>19.87087</td>
<td>0.00429</td>
</tr>
<tr>
<td>1998-99</td>
<td>49.11551</td>
<td>0.747941</td>
<td>4.219473</td>
<td>0.00556</td>
<td>17.80395</td>
<td>0.00556</td>
</tr>
<tr>
<td>1999-00</td>
<td>50.21826</td>
<td>0.740996</td>
<td>4.143144</td>
<td>0.00606</td>
<td>17.16565</td>
<td>0.00606</td>
</tr>
</tbody>
</table>

Source: Compiled from Table 5.7

If probability (p) is less than .01 = highly significant
If (p) is more than .01 but less than .05 = significant
If (p) is more than .05 = not significant

The result of the regression model has been shown in Table 5.8. The t-values, which indicate the significance of the regression co-efficient, show that these are **highly significant** at a level of 5 per cent for all the five years of the study. The value of \( R^2 \), which represents the variations in the dependent variable because of the independent variable, also remains almost constant at a high level of 72 per cent and above, during the period of the study. It clearly shows that there is a **positive and strong association** between these two variables. The F-values, which indicates the
significance of association between any two variables, are also highly significant at 5 per cent level here.

So from this analysis it can be concluded that there is a **very strong, positive and significant association** between the turnover and the disclosure score in all the five years of the study. So the null hypothesis that there is no association between the turnover of a company and the disclosure score has been rejected.

V. ROI AND DISCLOSURE SCORE

The variation in the quality of disclosure can be explained, to some extent, by the differences in the profitability position of the companies. When the profitability is high in a company, the management may disclose detailed information in order to support the continuance of its positions and compensations. On the other hand, when the profitability is low, the management may disclose less information in order to cover up the reasons for the losses or declining profits.

Since Return On Investment (ROI) has been recognised as the indicator of the overall profitability of an enterprise, so it has been considered for the purpose of studying the relationship between profitability and the disclosure score. Singh and Bhargava (1978)\(^\text{19}\), Jawahar Lal (1985)\(^\text{20}\) and Subhash Chander (1992)\(^\text{21}\) have also concluded in their respective studies that the ROI of a company does influence the

\(^{19}\) op.cit., pp.257-264.  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>CV</td>
<td>Mean</td>
<td>SD</td>
<td>CV</td>
<td>Mean</td>
</tr>
<tr>
<td>1</td>
<td>Loss</td>
<td>46.94</td>
<td>14.15</td>
<td>30.14</td>
<td>47.66</td>
<td>13.71</td>
<td>28.77</td>
</tr>
<tr>
<td>2</td>
<td>0 - 2</td>
<td>44.55</td>
<td>12.48</td>
<td>28.01</td>
<td>46.12</td>
<td>12.31</td>
<td>26.76</td>
</tr>
<tr>
<td>4</td>
<td>5 - 10</td>
<td>52.38</td>
<td>12.3</td>
<td>23.48</td>
<td>53.2</td>
<td>11.56</td>
<td>21.73</td>
</tr>
</tbody>
</table>

Source: Compiled from the annual reports of the selected companies from 1995-96 to 1999-00.
disclosure score of a company. Table 5.9 shows the relationship between ROI and the mean disclosure score per cent for the years 1995-96 to 1999-00.

It can be observed from Table 5.9 that the maximum mean disclosure score per cent has been falling in the ROI range of 20 and above, for all the five years of the study. It can be also noticed that the mean disclosure score per cent over a period of five years of the study has been constantly improving. The second highest mean disclosure score per cent has been falling in the ROI range of 15 to 20.

The minimum mean disclosure score per cent has been observed in case of the companies with the ROI between 0 to 2 for the years 1995-96, 1996-97 and 1997-98, and loss [first range of ROI] for the years 1998-99 and 1999-00. This table reveals that the companies with higher ROI (20 and above) definitely disclose better than the companies with less ROI (loss). This can be seen from Figure 5.5.

Larger variations in the disclosure scores, as indicated by the co-efficient of variation, have been found in the case of the companies where the ROI stands nil, for all the five years of the study. There have been minimum variations in the disclosure score of the companies with the ROI range of 15 to 20 for 1995-96, 2 to 5 for 1996-97 and 1997-98, and 5 to 10 for 1998-99 and 1999-00.

From the foregoing analysis, it seems that there is a positive association between the ROI and the disclosure score. To know the significance of the relationship between these two variables, the following null hypothesis has been formulated and tested.
Figure 5.5

ROI and Mean Disclosure Score

Source: Table 5.9

**Ho 5.6 - ROI of a company has no association with its disclosure score.**

To test this null hypothesis, the following regression model has been applied:

\[ Y = a + b_6X_6 \]

Where

\[ Y \] = disclosure score

\[ a \] = intercept

\[ b_6 \] = co-efficient of independent variable, and

\[ X_6 \] = ROI.
Table 5.10

Linear Regression results of ROI and Disclosure score

<table>
<thead>
<tr>
<th>Year</th>
<th>Constant</th>
<th>R2</th>
<th>T-Test</th>
<th>P</th>
<th>F-Test</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995-96</td>
<td>46.42046</td>
<td>0.853854</td>
<td>5.40485</td>
<td>0.00293</td>
<td>29.2124</td>
<td>0.002931</td>
</tr>
<tr>
<td>1996-97</td>
<td>47.5271</td>
<td>0.860882</td>
<td>5.562429</td>
<td>0.00258</td>
<td>30.9406</td>
<td>0.002584</td>
</tr>
<tr>
<td>1997-98</td>
<td>49.8440</td>
<td>0.877682</td>
<td>5.989741</td>
<td>0.00186</td>
<td>35.877</td>
<td>0.00186</td>
</tr>
<tr>
<td>1998-99</td>
<td>51.79315</td>
<td>0.890242</td>
<td>6.368264</td>
<td>0.00141</td>
<td>40.5548</td>
<td>0.001412</td>
</tr>
<tr>
<td>1999-00</td>
<td>52.51118</td>
<td>0.890486</td>
<td>6.376222</td>
<td>0.0014</td>
<td>40.6562</td>
<td>0.001404</td>
</tr>
</tbody>
</table>

Source: Compiled from Table 5.9

If probability (p) is less than .01 = highly significant
If (p) is more than .01 but less than .05 = significant
If (p) is more than .05 = not significant

The result of this regression model has been shown in Table 5.10. The t-values, which indicate the significance of the regression co-efficient, show that these are highly significant at a level of 5 per cent for all the five years of the study. The value of R² is around 85 per cent to 90 per cent during the period of the study. This shows that the independent variable has a high influence on the dependent variable. The relationship between the ROI and the disclosure score is very strong. The F-values are also highly significant at a level of 5 per cent for all the five years of the study.

So from this analysis it can be concluded that there exists a positive and highly significant association between the ROI and the disclosure score of a company, in all the five years of the study. Thus the null hypothesis has been rejected.
<table>
<thead>
<tr>
<th>Year</th>
<th>Constant</th>
<th>Assets</th>
<th>Capital</th>
<th>Age</th>
<th>Turnover</th>
<th>ROI</th>
<th>R2</th>
<th>F-Test</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995-96</td>
<td>44.30714</td>
<td>-0.9746</td>
<td>0.33175</td>
<td>0.8980</td>
<td>0.3710</td>
<td>2.3590</td>
<td>0.0200</td>
<td>0.853094</td>
<td>0.395321</td>
</tr>
<tr>
<td>1996-97</td>
<td>45.4965</td>
<td>-1.0121</td>
<td>0.31355</td>
<td>0.84215</td>
<td>0.40139</td>
<td>2.2151</td>
<td>0.02866</td>
<td>1.081469</td>
<td>0.281675</td>
</tr>
<tr>
<td>1997-98</td>
<td>47.70688</td>
<td>-1.2812</td>
<td>0.2026</td>
<td>1.11326</td>
<td>0.2678</td>
<td>2.1663</td>
<td>0.03229</td>
<td>0.916709</td>
<td>0.361149</td>
</tr>
<tr>
<td>1998-99</td>
<td>49.00476</td>
<td>-1.2104</td>
<td>0.22854</td>
<td>1.0029</td>
<td>0.31793</td>
<td>2.2670</td>
<td>0.0252</td>
<td>1.060843</td>
<td>0.29091</td>
</tr>
<tr>
<td>1999-00</td>
<td>50.15133</td>
<td>-1.4624</td>
<td>0.1463</td>
<td>1.26978</td>
<td>0.20664</td>
<td>2.2152</td>
<td>0.02865</td>
<td>0.846589</td>
<td>0.3989</td>
</tr>
</tbody>
</table>

**Source:** Compiled from the annual reports of the selected companies from 1995-96 to 1999-00.

If probability (p) is less than .01 = highly significant
If (p) is more than .01 but less than .05 = significant
If (p) is more than .05 = not significant
MULTIPLE LINEAR REGRESSION ANALYSIS

The following multiple linear regression model has been applied to study the combined effect of all the variables taken together on disclosure score.

\[ Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 \]

Where

- \( Y \) = disclosure score
- \( a \) = intercept
- \( b \) = co-efficient of independent variable
- \( X_1 \) = net tangible assets
- \( X_2 \) = capital of a company
- \( X_3 \) = age of a company
- \( X_4 \) = turnover, and
- \( X_5 \) = ROI.

The result of this regression model has been presented in Table 5.11. In respect of age, the t-value, which indicates the significance of the regression co-efficient show that these are significant at 5 per cent level for all the five years of the study. The t-values associated with ROI are highly significant at 5 per cent level in all the five years of study. The values of asset size are showing negative association for all the five years of study. The t-values of capital and turnover are not significant at 5 per cent level for all the five years of the study.

The value of \( R^2 \), which represents the variations in the dependent variable because of the independent variable, is around 22 per cent, for all the five
years of the study. This shows that 22 per cent of the dependent variable has been influenced by the independent variables. The positive effect of the independent variable on the dependent variable has been slowly but steadily improving from 22.04 per cent in 1995-96 to 23.23 per cent in 1999-00. This clearly shows that the association between the two types of variables is increasing over the period of the study.

The F-values, which determine the significance of association between the two types of variables (i.e., dependent variable and independent variable), are highly significant at 5 per cent level, for all the five years of the study. This clearly shows that there exists a positive and statistically high significant relationship between the dependent and independent variables.

From the aforementioned regression analysis of the association between the company attributes [taken individually or jointly] and the extent of disclosure score, the following conclusions may be drawn:

1. There is a positive and highly significant association between the asset-size and the disclosure score in all the five years of the study.

2. Regression analysis has shown that the nature of the industry doesn’t influence significantly the disclosure score of a company.

3. The capital size of a company has a positive and significant association with the disclosure score in the years 1995-96, 1996-97 and 1999-00.
4. The age of a company, whether regressed individually or jointly with other variables, has a positive and significant association with the disclosure score in all the five years of the study.

5. The turnover of a company has a very strong, positive and significant association with the disclosure score in all the five years of this study.

6. The ROI of a company, whether regressed individually or jointly with other variables, has a very strong, highly significant association with the disclosure score in all the five years of this study.

7. The five independent variables, when regressed together have a positive and highly significant association with the disclosure score, in all the five years of the study. However, the asset-size, capital and turnover of a company, regressed with other variables has no significant association with the disclosure score in all the five years of the study. The possible reason for the insignificant association between these variables, when regressed jointly, with the disclosure score, may be that a majority of the companies are very 'conservative' as far as disclosure in annual report is concerned.

8. The influence of the five independent variables on the disclosure has increased constantly from 22.04 per cent in 1995-96 to 23.23 per cent in 1999-00.

9. The mean disclosure score per cent for all the five variables, have shown a steady increase during the five years of this study.
The conclusion of this analysis is almost similar to the ones of Cerf (1961)\(^{22}\), Singh and Dessai (1971)\(^{23}\), Buzby (1975)\(^{24}\), Singh and Bhargava (1978)\(^{25}\), Firth (1979)\(^{26}\), McNally, Hock Eng and Hasseldine (1982)\(^{27}\), Jawahar Lal (1985),\(^{28}\) Chow and Wong Boren (1987)\(^{29}\) and Subhash Chander (1992)\(^{30}\).

\(^{22}\) op.cit.
\(^{23}\) op.cit, pp. 129-138.
\(^{24}\) op.cit, pp.16-31.
\(^{25}\) op.cit, pp.257-264.
\(^{26}\) op.cit, pp.273-280.
\(^{27}\) op.cit, p.11-20.
\(^{28}\) op.cit.
\(^{29}\) op.cit, pp.533-541.
\(^{30}\) op.cit.