Corporate Disclosure Practices and Their Determinants: A Study of Prominent Indian Companies

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Abstract

Indian economy used to be a protective socialistic economy having mixed form of enterprises both public and private. But the economic reforms initiated by the Government of India since 1990s, changed the pattern and working of Indian economy drastically. Globalization in the early 1990s and privatization/disinvestment of the public sector undertakings (PSUs) in the mid of 1990s have created new opportunities and challenges. Indian economy, nowadays, is very open and market driven. With the openness of the Indian economy, Indian companies also need disclosure requirements as per global scenario. With this, legal and governing bodies have tightened the norms for disclosure. Nowadays, corporate disclosure is a term of precise discussions, legal frameworks, researches and many more. The present paper is an attempt to analyse the corporate disclosure practices in India by examining the association between selected company attributes and the extent of corporate disclosure. For this purpose five company attributes have been selected namely (i) total assets, (ii) total sales, (iii) market capitalisation, (iv) net profit, and (v) age. The study covers 30 large Indian companies selected from the S&P CNX Nifty Index of the National Stock Exchange of India (NSE) consisting 50 largest Indian companies. The period of the study is five years from 2010-2011 to 2014-2015. The study found that the selected company attributes are related with the extent of corporate disclosure but differently. The study also highlights some important suggestions on the basis of the findings to improve the level of corporate disclosure and to carry further research.

INTRODUCTION

With the emergence of corporate governance in the Indian corporate scene, higher transparency and better disclosure has assumed pertinent significance. Society looks to corporations for assistance in efficient allocation of resources and expects corporations to assume responsibility of providing relevant and necessary information. Financial reporting is an important means with the help of which management communicate desired information to the target users.

The divorce between ownership and management of company form of organizations, increasing complexity and size of enterprises, growing awareness among public for information, changing socio-economic and political environment in the country and greater emphasis on rational decision making have enhanced the need for and significance of disclosure of information in the annual

reports of companies. Stockholders require financial information in order to measure management performance and to evaluate their own holdings. Potential investors require financial data when comparing prospective investment. International Investors require governance structure while investing funds (McKinnsey & Co., 2002). Creditors must consider financial strengths of organizations before permitting them to borrow funds. Labour unions, financial analysts, and economists often expect a considerable amount of reliable financial data. Disclosure of financial information also benefits the employees of an organization as it enables them to assess risk and growth potentials of organizations, their job securities and promotional possibilities. And financial reporting is nothing if it is not an exercise in communication

The present study examines association between selected company attributes and extent of corporate disclosure of large companies in India. Indian capital market is importantly dominated by group of large capitalized companies. So, it is need of hour to make a comparative analysis of selected company attributes and extent of corporate disclosure of companies falling within the domain of large segment in India.

RESEARCH METHODOLOGY

Objective of the Study

The study attempts to analyze association between selected company attributes and extent of corporate disclosure.

Sample and Time Period of Study

The study covers a sample of 30 companies which have been selected from the S&P CNX Nifty Index of National Stock Exchange of India (NSE). To make inter-period analysis, period of five years has been selected from 2010-2011 to 2014-2015.

Index of Disclosure Items

For examining association between selected company attributes and extent of corporate disclosure practices of large companies in India, an index of disclosure for voluntary items has been constructed consisting of 72 voluntary items of disclosure. The index has been developed by taking into account various factors, which include the followings:

1. Framework for preparation of financial statements set by the Institute of Chartered Accountants of India (ICAI),
2. Factors considered by the Institute of Chartered Accountants of India (ICAI) for the purpose of giving best presented report awards,
3. Evaluating annual reports of company winning the 'ICAI Award for Excellence in Financial Reporting',
4. Analyzing research studies conducted in the field of corporate disclosure,
5. Scanning annual reports of sample companies, and
6. Discussions with academicians, financial analysts, researchers and experts of this field.

The items of index have been classified into six categories, which are given in following Table:

Table 1A: Items Included in Index of Voluntary Items

S. No.	Group	No. of Items	Percent of Total
1.	Information on Accounting and Finance.	20	27.78 %
2.	Information on Human Resource, Marketing and Production.	8	11.11 %
3.	Other/General Information.	9	12.5 %
4.	Information to Be Placed Before the Board of Directors (Appendix I A of Clause 49).	15	20.83 %
5.	Corporate Governance Non-Mandatory Items (Appendix I D of Clause 49).	7	9.72 %
6.	Other Voluntary Disclosed Corporate Governance Matters.	13	18.05 %
	Total	72	100 %

Un-weighted scores have been assigned to the items for their disclosure ranging between '0' and '1' scores. If an item is disclosed by a company then 1 score is assigned and 0 for non-disclosure. Earlier studies reflect that researchers have used both weighted and un-weighted scores to check level of disclosure. Un-weighted index based analysis thereof bring objectivity and independence because such analysis is not influenced by perceptions of a particular group. Therefore, to maintain the objectivity and independence in scoring and analysis of study, un-weighted scores have been used.

Hypothesis

For the purpose of establishing relationship and to find out significance of such relationship between selected company attributes and extent of corporate disclosure following basic null hypothesis has been formulated:

H_o = **There is no significant association between company attribute and extent of disclosure.**

This hypothesis has been alternatively used for establishing relationship between different selected company attributes and extent of disclosure. The hypotheses used have been tested with the help of t-test.

Company Attributes

Five company attributes have been identified, namely, (i) total assets, (ii) total sales, (iii) market capitalization, (iv) net profit, and (v) age.

Statistical Tools Used

To evaluate and analyze association between selected company attributes and extent of disclosure, various statistical tools have been applied including average (mean), standard deviation, coefficient of variation, correlation, regression, t-value etc. for each company attribute.

FINDINGS OF THE STUDY

The analysis has been divided into two main parts. Part-I covers analysis related with association between individual company attributes and extent of disclosure. Part-II deals with analysis based on panel data results.

PART – I

Part-I has been further divided into five sub-parts covering individual company attributes and extent of disclosure.

1.   Total Assets and Disclosure

A number of researchers have analyzed the association between assets and extent of disclosure. The researchers highlighted the fact that there existed positive relationship between assets size and extent of disclosure. Various reasons may be attributed, to such behavior. The most important reason for this may be that collecting, refining, and reporting of information is a costly affair which can be afforded by only large firms having huge sums of money at their disposal to spend for this exercise. Other reasons accountable for this association may include management perceptions and compliance with regulatory requirements etc.

To know the significance of relationship between total assets and disclosure scores, following null hypothesis has been developed:

H_o =   Total assets of a company are not significantly associated with its disclosure scores.

The above hypothesis has been tested with the help of following regression model and also by calculating t-value for regression coefficient, which has been tested at various levels of significance;

$$Y = a + b_1 x_1$$

Where,   Y = dependent variable (disclosure score)

a = intercept

b_1 = co-efficient of independent variable

x_1 = independent variable (total assets).

The above equation states that disclosure (dependent variable) depends upon total assets (independent variable) and results of regression analysis have been shown in Table 1.1.

Correlation results given in Table 1.1 show that majority of large companies have shown high positive degree of association. Only five companies, namely, Dabur India Ltd.   (-0.64), Indian Petrochemicals Corporation Ltd. (-0.10), Larsen and Toubro (-0.45), Steel Authority of India Ltd. (-0.65) and Zee Telefilms Ltd. (-0.55) have shown negative correlation. The highest value of correlation coefficient (0.97) is found in case of Dr. Reddy's Laboratories Ltd. and lowest positive correlation value of 0.18 is found in Hindustan Petrochemicals Corporation Ltd. Therefore, correlation results demonstrate that total assets and disclosure scores are highly related with each other. The values of R^2 for these companies also show similar results in Table 1.1, where high values are found for majority of these companies. The highest value of R^2 is found in case of Dr. Reddy's Laboratories Ltd. and Gujarat Ambuja Cements Ltd. (0.94 each) showing that 94% of their variation in disclosure is explained by their total assets. Other companies having high value of R^2, showing high association between total assets and disclosure, include Wipro Technologies Ltd. (0.92), Satyam Computers Ltd. (0.86), Grasim Industries Ltd. (0.79), etc. But only a very few large companies produced low R^2 value including Indian Petrochemicals Corporation Ltd. (0.01), Hindustan Petroleum Corporation Ltd. (0.03) and Cipla Ltd. (0.07).

On the other hand, t-values indicating significance of regression coefficient reflect that these are significant in case of 16 large companies at different levels of significance. Therefore, the null hypothesis is rejected for these 16 large companies. There exists a positive and significant relationship between total assets and disclosure scores in these companies. But t-values for the remaining 14 large companies are found to be insignificant. Hence, null hypothesis is accepted for these companies and there exists insignificant relationship between total assets and disclosure scores.

Table 1.1: Correlation and Regression Results of Total Assets and Disclosure

S. No.	Company	Total Assets and Disclosure				
		Correlation (r)	Constant (a)	Coefficient of Independent Variable (b)	t-value	R^2
1.	ACC LTD.	0.61	14.87	0.00268	1.726	0.37
2.	BAJAJ AUTO LTD.	0.81	13.54	0.00297	3.08**	0.66
3.	BHEL LTD.	0.87	-7.07	0.00572	3.875****	0.76
4.	BPCL LTD.	0.73	18.50	0.00078	2.417*	0.53
5.	CIPLA LTD.	0.27	17.92	0.00326	0.637	0.07
6.	DABUR INDIA LTD.	-0.64	80.47	-0.09642	-1.843	0.41
7.	DR. REDDY'S LTD.	0.97	-29.15	-0.00935	8.391****	0.94
8.	GRASIM INDUS. LTD.	0.89	-23.37	0.00931	4.326****	0.79

9.	GUJARAT AMBUJA CEMENT LTD.	0.97	-7.93	0.00801	9.389****	0.94
10.	HERO HONDA MOTORS LTD.	0.83	10.61	0.01581	3.365***	0.69
11.	HINDALCO INDUSTRIES LTD.	0.83	23.15	0.00053	3.292***	0.69
12.	HUL LTD.	0.61	2.96	0.00876	1.708	0.37
13.	HPCL LTD.	0.18	23.95	0.00046	0.414	0.03
14.	INFOSYS TECHNOLOGIES LTD.	0.89	33.02	0.00482	4.268****	0.79
15.	IPCL LTD.	-0.10	28.36	-0.00069	-0.232	0.01
16.	ITC LTD.	0.88	7.86	0.00285	4.177	0.77
17.	L&T LTD.	-0.45	34.48	-0.00188	-1.13	0.20
18.	M&M LTD.	0.62	-0.20	0.00592	1.772	0.38
19.	MTNL LTD.	0.50	3.35	0.00124	1.298	0.25
20.	ONGC LTD.	0.78	12.84	0.00016	2.784**	0.61
21.	RANBAXY LABORATORIES LTD.	0.81	14.22	0.00321	3.153***	0.66
22.	RELIANCE INDUSTRIES LTD.	0.71	10.72	0.00034	2.263*	0.50
23.	SATYAM COMPUTERS LTD.	0.93	15.85	0.00245	5.838****	0.86
24.	SAIL LTD.	-0.65	58.52	-0.00224	-1.938	0.42
25.	SUN PHARMA LTD.	0.83	11.55	0.00232	3.337***	0.69
26.	TATA CHEMICALS LTD.	0.66	-13.71	0.00904	1.965*	0.44
27.	TATA STEEL LTD.	0.61	0.41	0.00183	1.722	0.37
28.	VSNL LTD.	0.58	-3.34	0.00373	1.609	0.34
29.	WIPRO TECHNOLOGIES LTD.	0.96	4.80	0.00689	7.746****	0.92
30.	ZEE TELEFILMS LTD.	-0.55	19.33	-0.00063	-1.478	0.3

* Significant at 10% level of significance (t-value=1.943, dof=6)   ** Significant at 5% level of significance (t-value=2.447, dof=6)

*** Significant at 2% level of significance (t-value=3.143, dof=6)   **** Significant at 1% level of significance (t-value=3.707, dof=6)

So, the overall analysis of Table 1.1 reflects that in majority of the companies, the association between total and disclosure is found to be positive and significant. Hence, it can be concluded that size of a company as measured by total assets has significant effect on disclosure scores in large companies.

2. Total Sales and Disclosure

To evaluate relationship between sales and disclosure scores, following null hypothesis has been formulated:

H_o =   Total sales of a company are not significantly associated with its disclosure score.

To test this hypothesis, following regression model and t-value for regression co-efficient test at different significant levels, has been applied:

$$Y = a + b_2 x_2$$

Where, Y = dependent variable (disclosure score)

a = intercept

b_2 = co-efficient of independent variable

$x_{2 =}$ independent variable (total sales).

The above regression model has been used to study the relationship between sales and disclosure score for the selected companies. Table 1.2 shows results of correlation, regression analysis and t-value.

The data given in Table 1.2 reflects that positive correlation coefficient is found in case of all the large companies. The highest values of correlation coefficients are shown by companies, namely, Dr. Reddy's Laboratories Ltd. (0.96), Wipro Technologies Ltd. (0.96), Gujarat Ambuja Cements Ltd. (0.94), Indian Petrochemicals Corporation Ltd. (0.93), Zee Telefilms Ltd. (0.92), Satyam Computers Ltd. (0.91) and Steel Authority of India Ltd. (0.90), etc. Only limited number of large companies produced very low correlation coefficient including Videsh Sanchar Nigam Ltd. (0.12) and Cipla Ltd. (0.33).

Table 1.2: Correlation and Regression Results of Total Sales and Disclosure

Total Sales and Disclosure						
S. No.	Company	Correlation (r)	Constant (a)	Coefficient of Independent Variable (b)	t-value	R^2
1.	ACC LTD.	0.59	17.81	0.001442	1.618	0.35
2.	BAJAJ AUTO LTD.	0.85	16.76	0.002156	3.593***	0.72
3.	BHEL LTD.	0.85	3.72	0.002301	3.642***	0.72
4.	BPCL LTD.	0.81	15.51	0.000206	3.094**	0.66
5.	CIPLA LTD.	0.33	16.31	0.003465	0.777	0.11

6.	DABUR INDIA LTD.	0.63	-57.02	0.071536	1.824	0.40
7.	DR. REDDY'S LTD.	0.96	23.35	0.015707	8.179****	0.92
8.	GRASIM INDUS. LTD.	0.80	-14.86	0.007884	3.01**	0.64
9.	GUJARAT AMBUJA CEMENT LTD.	0.94	14.57	0.002408	6.154****	0.88
10.	HERO HONDA MOTORS LTD.	0.86	8.24	0.003743	3.781****	0.74
11.	HINDALCO INUSTRIES LTD.	0.70	26.31	0.000252	2.197*	0.49
12.	HUL LTD.	0.52	-60.89	0.008122	1.376	0.27
13.	HPCL LTD.	0.54	18.18	0.000196	1.434	0.29
14.	INFOSYS TECHNOLOGIES LTD.	0.89	33.19	0.003633	4.315****	0.79
15.	IPCL LTD.	0.93	7.31	0.002154	5.648****	0.86
16.	ITC LTD.	0.84	1.81	0.002075	3.489***	0.71
17.	L&T LTD.	0.88	2.49	0.001883	4.142****	0.77
18.	M&M LTD.	0.87	8.15	0.001774	3.866****	0.76
19.	MTNL LTD.	0.29	8.14	0.001533	0.673	0.08
20.	ONGC LTD.	0.83	13.23	0.000233	3.326***	0.69
21.	RANBAXY LABORATORIES LTD.	0.80	9.61	0.004607	3.001**	0.64
22.	RELIANCE INDUSTRIES LTD.	0.61	14.68	0.000233	1.715	0.37
23.	SATYAM COMPUTERS LTD.	0.91	16.22	0.002238	4.762****	0.83
24.	SAIL LTD.	0.90	-4.18	0.000966	4.681****	0.81
25.	SUN PHARMA LTD.	0.85	6.34	0.009271	3.684***	0.72
26.	TATA CHEMICALS LTD.	0.76	6.06	0.004623	2.648**	0.58
27.	TATA STEEL LTD.	0.82	9.59	0.001024	3.25***	0.67
28.	VSNL LTD.	0.12	18.18	0.000189	0.28	0.01
29.	WIPRO TECHNOLOGIES LTD.	0.96	4.74	0.004619	7.324****	0.92
30.	ZEE TELEFILMS LTD.	0.92	14.01	0.006133	5.284****	0.85

* Significant at 10% level of significance (t-value=1.943, dof=6)   ** Significant at 5% level of significance (t-value=2.447, dof=6)

*** Significant at 2% level of significance (t-value=3.143, dof=6)   **** Significant at 1% level of significance (t-value=3.707, dof=6)

So, correlation analysis reflects that there exists high positive relationship between sales and disclosure scores in large companies. The Table further shows that t-values for majority of the large companies (22 companies) are significant at different significance levels. Thus, null hypothesis is rejected for these companies. There exists positive and significant relationship between sales and disclosure in majority of these large companies. Similarly, values of R^2 are found to be high in majority of the large companies. It further strengthens the inference that there exists significant positive relationship between sales and disclosure in large companies.

3.   Market Capital and Disclosure

Companies having high market capital are generally well performing companies. Hence, their reporting may be better as compared to others. To examine relationship between market capital and disclosure scores, following null hypothesis has been developed:

H_o =   Market capital of company has no significant association with its disclosure score.

The above null hypothesis has been tested with the help of regression model and by calculating t-values for regression coefficient, which has been tested at various significant levels. The regression model is as under:

$$Y = a + b_3 x_3$$

Where,   Y = dependent variable (disclosure score)

a = intercept

b_3 = regression co-efficient of independent variable

x_3 = independent variable (market capital).

The above regression equation states that disclosure score is a function of market capital. In other words, market capital influences disclosure scores. Table 1.3 shows results of correlation co-efficient, regression co-efficient and t-value for regression coefficient.

Glances at correlation co-efficient values shown in Table 1.3 provide that only very few large companies have produced either very high positive or very low positive correlation values. Only one large company has shown very high value of correlation co-efficient, i.e., Sun Pharmaceuticals Ltd. (0.93). Four large companies have produced negative correlation values which include Hindustan Levers Ltd. (-0.76), Zee Telefilms Ltd. (-0.63), Mahanagar Telephone Nigam Ltd. (-0.55), and Cipla Ltd. (-0.15). Most of the remaining large companies have correlation co-efficient between low positive and high positive. So, correlation analysis reflects that there exists positive relationship between market capital and disclosure scores in majority of the large companies.

Table 1.3: Correlation and Regression Results of Market Capital and Disclosure

S. No.	Company	Correlation (r)	Constant (a)	Coefficient of Independent Variable (b)	t-value	R^2
	Market Capital and Disclosure					
1.	ACC LTD.	0.58	20.88	0.00062	1.597	0.34
2.	BAJAJ AUTO LTD.	0.75	22.01	0.000611	2.55**	0.56
3.	BHEL LTD.	0.80	18.26	0.000608	3.024**	0.64
4.	BPCL LTD.	0.83	18.16	0.001051	3.409***	0.69
5.	CIPLA LTD.	-0.15	26.54	-0.000611	-0.362	0.02
6.	DABUR INDIA LTD.	0.73	11.41	0.007998	2.376*	0.53
7.	DR. REDDY'S LTD.	0.84	23.99	0.003693	3.437***	0.71
8.	GRASIM INDUS. LTD.	0.79	21.23	0.001939	2.845**	0.62
9.	GUJARAT AMBUJA CEMENT LTD.	0.85	13.68	0.001626	3.562***	0.72
10.	HERO HONDA MOTORS LTD.	0.74	13.24	0.002397	2.446*	0.55
11.	HINDALCO INUSTRIES LTD.	0.47	26.32	0.000192	1.185	0.22
12.	HUL LTD.	-0.76	67.71	-0.000897	-2.631	0.58
13.	HPCL LTD.	0.41	23.54	0.000599	0.993	0.17
14.	INFOSYS TECHNOLOGIES LTD.	0.37	38.38	0.000265	0.888	0.14
15.	IPCL LTD.	0.84	12.25	0.003677	3.431***	0.71
16.	ITC LTD.	0.50	17.21	0.000329	1.287	0.25
17.	L&T LTD.	0.75	14.08	0.000821	2.567**	0.56
18.	M&M LTD.	0.78	14.01	0.001106	2.827**	0.61
19.	MTNL LTD.	-0.55	21.79	-0.000519	-1.463	0.30
20.	ONGC LTD.	0.75	17.62	0.000049	2.559**	0.56
21.	RANBAXY LABORATORIES LTD.	0.54	14.91	0.000628	1.446	0.29
22.	RELIANCE INDUSTRIES LTD.	0.87	12.82	0.000306	3.893****	0.76
23.	SATYAM COMPUTERS LTD.	0.45	17.67	0.000346	1.112	0.20
24.	SAIL LTD.	0.87	9.91	0.000773	4.023****	0.76
25.	SUN PHARMA LTD.	0.93	10.49	0.00087	5.761****	0.86
26.	TATA CHEMICALS LTD.	0.72	10.86	0.002827	2.341*	0.52

27.	TATA STEEL LTD.	0.73	15.74	0.000542	2.376*	0.53
28.	VSNL LTD.	0.32	17.32	0.000246	0.755	0.10
29.	WIPRO TECHNOLOGIES LTD.	0.16	20.94	0.000167	0.355	0.03
30.	ZEE TELEFILMS LTD.	-0.63	18.22	-0.000118	-1.812	0.40

* Significant at 10% level of significance (t-value=1.943, dof=6) ** Significant at 5% level of significance (t-value=2.447, dof=6)

*** Significant at 2% level of significance (t-value=3.143, dof=6) **** Significant at 1% level of significance (t-value=3.707, dof=6)

The Table also shows that t-values for majority of large companies (17 companies) are significant at different levels of significance. Therefore, null hypothesis is rejected for these companies. So, it leads to the conclusion that market capital is significantly associated with disclosure scores in these large companies. On the other hand, values of R^2 are also found to be highly positive in most of the large companies. Only very few large companies have produced meager values of R^2 including Videsh Sanchar Nigam Ltd. (0.10), Satyam Computers Ltd. (0.20) Mahanagar Telephone Nigam Ltd. (0.30), Wipro Technologies Ltd. (0.03), Associated Cements Companies Ltd. (0.30) and Zee Telefilms Ltd. (0.40). So, overall analysis of the results shown in Table 1.3 reflects that there exists positive and significant relationship between market capital and disclosure scores in large companies.

4.   Net Profit and Disclosure

Profitability is an important factor affecting corporate disclosure practices. Companies having high profits have huge amount of funds at their disposal to spend on corporate disclosure exercise. To study relationship between net profit and disclosure score of a company, the following null hypothesis has been formulated:

H_o =   Net profit of a company has no significant association with its disclosure score.

The above hypothesis has been tested with the help of regression model and t-value for regression coefficient. For this purpose, the following regression model has been applied:

$$Y = a + b_4 x_4$$

Where,   Y = dependent variable (disclosure score)

a = intercept

b_4 = co-efficient of independent variable

x_4 = independent variable (net profit).

The above regression model states that disclosure score is a function of net profits. Table 1.4 reveals results of correlation, regression and t-value for regression coefficient. Table 1.4 shows that

only two companies have shown negative correlation values, namely, Zee Telefilms Ltd. (-0.77) and Mahanagar Telephone Nigam Ltd. (-0.26). The remaining 28 large companies (93.33 per cent of total) have shown positive correlation values. Two companies have shown very negligible positive correlation values, namely, Sun Pharmaceuticals Ltd. (0.0019) and Bharat Petroleum Corporation Ltd. (0.09), whereas 26 large companies (86.67 per cent of the total) have shown moderate or high degree of correlation coefficient. The highest value of correlation coefficient has been produced by companies, namely, Wipro Technologies Ltd. (0.97), Dabur India Ltd. (0.95), Reliance Industries Ltd. (0.92), Hero Honda Motors Ltd. (0.90), Indian Petrochemicals Corporation Ltd. (0.90); and Indian Tobacco Company Ltd. (0.90).

Table 1.4: Correlation and Regression Results of Net Profit and Disclosure

S. No.	Company	Correlation (r)	Constant (a)	Coefficient of Independent Variable (b)	t-value	R^2
	Net Profit and Disclosure					
1.	ACC LTD.	0.59	21.75	0.008628	1.629	0.35
2.	BAJAJ AUTO LTD.	0.40	22.44	0.006087	0.973	0.16
3.	BHEL LTD.	0.78	15.39	0.012564	2.798**	0.61
4.	BPCL LTD.	0.09	25.52	0.000967	0.218	0.009
5.	CIPLA LTD.	0.16	19.83	0.008082	0.36	0.026
6.	DABUR INDIA LTD.	0.95	2.22	0.267021	7.126****	0.91
7.	DR. REDDY'S LTD.	0.35	41.57	0.019172	0.822	0.12
8.	GRASIM INDUS. LTD.	0.84	15.98	0.030221	3.533***	0.71
9.	GUJARAT AMBUJA CEMENT LTD.	0.82	16.69	0.009017	3.181***	0.67
10.	HERO HONDA MOTORS LTD.	0.90	7.73	0.038803	4.751****	0.81
11.	HINDALCO INUSTRIES LTD.	0.57	25.84	0.002101	1.571	0.32
12.	HUL LTD.	0.59	0.06	0.020862	1.643	0.35
13.	HPCL LTD.	0.20	26.41	0.001995	0.452	0.04
14.	INFOSYS TECHNOLOGIES LTD.	0.88	32.13	0.014036	4.212****	0.77
15.	IPCL LTD.	0.90	17.35	0.014655	4.725****	0.81
16.	ITC LTD.	0.90	7.90	0.011725	4.782****	0.81
17.	L&T LTD.	0.75	12.91	0.015811	2.52**	0.56
18.	M&M LTD.	0.88	13.71	0.013214	4.109****	0.77

19.	MTNL LTD.	-0.26	18.83	-0.001681	-0.6	0.07
20.	ONGC LTD.	0.90	14.51	0.000719	4.616****	0.81
21.	RANBAXY LABORATORIES LTD.	0.36	19.14	0.008775	0.854	0.13
22.	RELIANCE INDUSTRIES LTD.	0.92	11.22	0.003491	5.201****	0.85
23.	SATYAM COMPUTERS LTD.	0.94	16.41	0.008888	6.034****	0.88
24.	SAIL LTD.	0.87	14.75	0.002106	4.041****	0.76
25.	SUN PHARMA LTD.	0.0019	14.71	0.000022	0.004	0.000003
26.	TATA CHEMICALS LTD.	0.83	6.15	0.045346	3.317***	0.69
27.	TATA STEEL LTD.	0.75	16.57	0.002742	2.55**	0.56
28.	VSNL LTD.	0.25	17.87	0.001381	0.587	0.06
29.	WIPRO TECHNOLOGIES LTD.	0.97	5.03	0.022915	8.259****	0.94
30.	ZEE TELEFILMS LTD.	-0.77	19.05	-0.014226	-2.732	0.59

* Significant at 10% level of significance (t-value=1.943, dof=6)   ** Significant at 5% level of significance (t-value=2.447, dof=6)

*** Significant at 2% level of significance (t-value=3.143, dof=6)   **** Significant at 1% level of significance (t-value=3.707, dof=6)

The Table reflects that majority of the companies have shown positive relationship between net profit and disclosure scores. On the other hand, t-values for majority of the companies (17 out of total 30 companies) have been found to be significant at different significant levels. The null hypothesis is rejected for 17 large companies. Therefore, it can be concluded that there exists significant positive relationship between net profit and disclosure scores. The values of R^2 are also found to be high in majority of the large companies, except for very few companies.

Hence, from the analysis of Table 1.4, it can be concluded that there exists positive relationship between net profit and disclosure scores. This relationship is significant for good number of companies. It implies that there is significant positive relationship between net profit and disclosure scores.

5.   Age of a Company and Disclosure

Disclosure of a company may be affected by age factor. It may be because of the reason that as a company gets matured it becomes aware about the benefits of disclosing more information. Companies become more responsive towards external environment as they get matured leading to more disclosure. To examine relationship between age of a company and its disclosure score, following null hypothesis has been formulated:

H₀ =   Age of a company has no significant association with its disclosure score.

To test this hypothesis, the following regression equation has been developed:

$$Y = a + b_5 x_5$$

Where,   Y = Dependent variable (disclosure score)

a = intercept

b_5 = co-efficient of independent variable

x_5 = Independent variable (age).

The above hypothesis has also been tested with the help of t-value. The regression equation states that disclosure score is a function of age of a company. Therefore, age of a company influences its disclosure score. Table 1.5 exhibits results of correlation analysis, regression analysis and t-value for regression co-efficient.

Table 1.5: Correlation and Regression Results of Age and Disclosure

S. No.	Company	Correlation (r)	Constant (a)	Coefficient of Independent Variable (b)	t-value	R^2
	Age and Disclosure					
1.	ACC LTD.	0.50	-17.39	0.607142	1.288	0.25
2.	BAJAJ AUTO LTD.	0.91	-72.85	1.714285	4.856****	0.83
3.	BHEL LTD.	0.93	-100.78	3.214285	5.58****	0.86
4.	BPCL LTD.	0.93	-68.21	1.892857	5.708****	0.86
5.	CIPLA LTD.	0.48	-99.75	1.821428	1.22	0.23
6.	DABUR INDIA LTD.	0.83	-104.42	4.821428	3.266***	0.69
7.	DR. REDDY'S LTD.	0.94	-25.92	3.785714	6.416****	0.88
8.	GRASIM INDUS. LTD.	0.96	-221.57	4.535714	7.772****	0.92
9.	GUJARAT AMBUJA CEMENT LTD.	0.89	-21.14	2.107142	4.296****	0.79
10.	HERO HONDA MOTORS LTD.	0.91	-69.21	5.214285	4.823****	0.83
11.	HINDALCO INUSTRIES LTD.	0.84	2.14	0.571428	3.507***	0.71
12.	HUL LTD.	0.83	-225.14	3.642857	3.292***	0.69
13.	HPCL LTD.	0.56	-36.85	1.285714	1.527	0.31
14.	INFOSYS TECHNOLOGIES LTD.	0.94	-64.57	5.142857	6.302****	0.88
15.	IPCL LTD.	0.92	-68.71	2.714285	5.113****	0.85

16.	ITC LTD.	0.93	-263.67	3.107142	5.476****	0.86
17.	L&T LTD.	0.90	-122.82	2.535714	4.665****	0.81
18.	M&M LTD.	0.88	-79.21	1.678571	4.236****	0.77
19.	MTNL LTD.	0.63	6.67	0.607142	1.814	0.4
20.	ONGC LTD.	0.91	7.28	1.357142	4.781****	0.83
21.	RANBAXY LABORATORIES LTD.	0.90	-77.64	2.392857	4.561****	0.81
22.	RELIANCE INDUSTRIES LTD.	0.79	-77.78	3.535714	2.836**	0.62
23.	SATYAM COMPUTERS LTD.	0.90	-0.85	1.392857	4.505****	0.81
24.	SAIL LTD.	0.98	-114.71	3.571428	11.068****	0.96
25.	SUN PHARMA LTD.	0.85	1.14	1.357142	3.605***	0.72
26.	TATA CHEMICALS LTD.	0.96	-132.57	2.321428	7.585****	0.92
27.	TATA STEEL LTD.	0.93	-191.71	2.214285	5.643****	0.86
28.	VSNL LTD.	0.31	12.46	0.392857	0.729	0.1
29.	WIPRO TECHNOLOGIES LTD.	0.94	-311.42	5.857142	6.057****	0.88
30.	ZEE TELEFILMS LTD.	0.89	6.64	0.499999	4.341****	0.79

* Significant at 10% level of significance (t-value=1.943, dof=6)   ** Significant at 5% level of significance (t-value=2.447, dof=6)

*** Significant at 2% level of significance (t-value=3.143, dof=6)   **** Significant at 1% level of significance (t-value=3.707, dof=6)

Table 1.5 shows that all large companies have shown positive values of correlation co-efficient. It reflects that age of a company is positively associated with its disclosure scores in large companies. Only two companies have shown value of correlation co-efficient less than 0.5, namely, Videsh Sanchar Nigam Ltd. (0.31) and Cipla Ltd. (0.48). The remaining 28 companies (93.33 per cent of the total) have shown moderate or high positive values of correlation co-efficient. On the other hand, t-value is found significant in case of 25 large companies (83.33 per cent of the total). Therefore, null hypothesis is rejected for these 25 companies, leading to conclude that age of a company is significantly associated with its disclosure score. Value of R^2 is also found highly positive in majority of the large companies. The highest value of R^2 is found in Steel Authority of India Ltd. (0.96) showing that 96 per cent of variation in disclosure score is influenced by age of this company. So, analysis shows that null hypothesis is rejected for majority of the large companies. Therefore, there exists s significant relationship between age and disclosure scores of large companies.

PART – II

Panel Data Analysis

Panel results have also been calculated to find relationship between selected company attributes and disclosure in aggregate terms. Panel data values put light on aggregate impact of these variables on disclosure. For this purpose, various values have been calculated which include correlation, t-value for correlation coefficient, regression (full and step-wise) etc.

To know the significance of relationship between various selected companies attributes and disclosure, following null hypothesis has been developed:

H_o =   Disclosure is not significantly associated with selected company attributes.

The above null hypothesis has been tested with the help of t-values. Table 1.6 reveals correlation results and t-values for correlation coefficient for selected large companies to find relationship between selected company attributes and disclosure.

Table 1.6: Panel Data Correlation Analysis

Statistical Tools	Total Assets	Sales	Market Capital	Net Profit	Age
Disclosure [Correlation (r)]	0.007	0.131	0.267**	0.132	0.003
Disclosure [t-value for r]	0.105	1.901	3.996*	1.923	0.037

* indicates that the correlation coefficient is significant at 5% level of significance,

** indicates that the correlation coefficient is significant at 1% level of significance.

Table 1.6 reveals that positive values of correlation coefficient are seen in all company attributes. The Table shows that highest value of correlation coefficient (0.267) has been produced by market capital and disclosure variables. Net profit and sales have produced correlation coefficient values of 0.132 and 0.131 respectively. Total assets and age have produced lowest values of 0.007 and 0.003 respectively. Therefore, correlation analysis highlights that market capitalization has highest impact on disclosure. The t-values show that only in case of market capital, correlation coefficient is significant at 5% level of significance large companies. Therefore, null hypothesis is rejected for market capital only. Table 1.6 also reveals that for other variables, t-values are found insignificant. Therefore, it concludes that though all the selected five company attributes have been positively related with disclosure in these companies but their relationship is not significant except with market capital.

Further, to study the nature of relationship between selected company attributes and disclosure, regression analysis has been done with the help of following regression model:

Disclosure = f (Total Assets, Sales, Market Capital, Net Profit, Age)

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5$$

Where,   Y = Disclosure score (dependent variable)

               a = Intercept

               b_1, b_2, b_3, b_4, b_5 = regression coefficients

               x_1 = Total Assets

               x_2 = Sales

               x_3 = Market Capital

               x_4 = Net Profit

               x_5 = Age.

Table 1.7 shows the values of regression coefficients for the panel data. Table 1.8 reflects the coefficients for full regression analysis and t-values for regression coefficients.

Table 1.7: Full Regression Results

Model 1	R	R^2	Adjusted R^2
Full Regression	0.423	0.179	0.159

Table 1.8: Coefficients of Full Regression

Sr. No.	Constants	Unstandardized Coefficients (B)	t-value	Significance
1.	Total Assets	0.0005299	-4.583*	0.0001
2.	Sales	0.0001986	3.612*	0.0001
3.	Market Capital	0.0002392	4.413*	0.0001
4.	Net Profit	0.0006404	0.866	0.388
5.	Age	-0.03706	-1.285	0.200

Table 1.7 reflects that regression coefficient (R^2) value comes out to be 0.179 in these selected large companies, which reveals that selected company attributes taken together have 17.90% impact on disclosure. Further, Table 1.8 describes that t-values for regression coefficients are significant for attributes like total assets, sales and market capital at 1 % level of significance. Therefore, null hypothesis is rejected for these attributes. So, analysis reflects that there is a significant relationship between total assets, sales and market capital in the selected large companies.

Further, to check the significance of individual attributes, step-wise regression model has been used, the values of which are shown in Tables 1.9.

Table 1.9 reveals that regression coefficients are found significant in case of market capital, total assets and sales with highest regression coefficients (R^2) i.e. 0.071, 0.124 and 0.169 respectively. It states that market capital has highest 7.10 per cent impact on disclosure in large companies followed by market capital and total assets together with 12.40 per cent and market capital, total assets and sales together with 16.90 per cent impact.

Table 1.9: Step-wise Regression

Step-wise Regression (Large Companies)	R	R^2	Adjusted R^2
Model 1	0.267	0.071	0.067
Model 2	0.352	0.124	0.116
Model 3	0.411	0.169	0.157

Model 1 Constant; Market Capital,

Model 2 Constant; Market Capital, Total Assets

Model 3 Constant; Market Capital, Total Assets, Sales

Dependent Variable: Disclosure

Table 1.10 describes coefficients for step-wise regression analysis.

Table 1.10: Coefficients for Step-wise Regression

Regression Model	Constants	Unstandardized Coefficients (B)	t-value	Significance
Model 1	Market Capital	0.0001380	3.995	0.0001
Model 2	Market Capital	0.0002444	5.412	0.0001
	Total Assets	-0.0002483	-3.529	0.0010
Model 3	Market Capital	0.0002584	5.832	0.0001
	Total Assets	-0.0004339	-4.907	0.0001
	Sales	0.0001778	3.333	0.0010

Table 1.10 shows that t-value of regression coefficient for market capital is found significant at 1% level of significance alone along with total assets and sales. Total assets are significant at 10% level of significance with market capital and at 1% level of significance along with market capital and sales. But t-value for regression coefficient in sales is significant at 10% level of significance.

CONCLUSION

The above analysis highlights the association between selected company attributes and extent of corporate disclosure. Different selected attributes have shown different association with corporate disclosure. Importantly, impact of selected company attributes is different when they were studied individually and in aggregate terms. All the selected company attributes have been positively related with corporate disclosure. Individually, total assets, total sales and age have significant impact on corporate disclosure.

REFERENCES

1. Banerjee, Bhabatosh and Sen, Swagata (2004), "Segment Reporting Practices in India", *The Management Accountant*, October.

2. Barrett, M. Edgar (1976), "Financial Reporting Practices: Disclosure and Comprehensiveness in an International Setting", *Journal of Accounting Research*, Vol. 14, No.1.

3. Batra, G.S. (2004), "Indian Stock Market and Financial Reporting Trade-Offs", *Journal of Accounting and Finance*, Vol. 18, No.1, October-March.

4. Chander, Subhash (1992), *Corporate Reporting Practices in Public and Private Sectors*, Deep and Deep Publications, New Delhi.

5. Garg, Mahesh Chand and Verma, H.L. (1994), "Disclosure of Accounting Policies", *The Chartered Accountant*, March.

6. Hossain, Mohammed (2008), "The Extent of Disclosure in Annual Reports of Banking Companies", *European Journal of Scientific Research*, Vol.23, No. 4.

7. Kant, Kamal (2002), "*Corporate Disclosure, Quality of Governance and Shareholder Value*", Ph.D. Dissertation, December, University Business School, Panjab University, Chandigarh.

8. Khanna, Yakesh and Singh, D.R. (1981), "Disclosure of Marketing Information and Organizational Correlates" *The Chartered Accountant*, March.

9. Lal, Jawahar (1979), "*Corporate Financial Reporting Practices in India with Special Reference to Manufacturing Industries*" Ph.D. Dissertation, Delhi School of Economics, University of Delhi, Delhi.

10. Lal, Jawahar (1982), "The Quality of Corporate Financial Disclosure", *The Management Accountant*, December.

11. Lele, R.K. and Lal, Jawahar (1980), "Company Characteristics and the Extent of Disclosure", *The Chartered Accountant*, November.

12. Pasricha, J.S. (2000), "Interim Reporting – A Device for Investors" *The Chartered Accountant*, March.

13. Rao, Nageshwar and Gupta, Deepak (2004), "Social Responsibility Disclosure Practices in Public Enterprises", *The Indian Journal of Commerce*, Vol. 57, No.1, January-March.

14. Saeed, M. (1990), *Corporate Financial Reporting*, Anmol Publications, New Delhi.

15. Seshanand, B. Madhu (2003), "Intellectual Capital Reporting – As a Supplement to Financial Statements" *The Management Accountant*, July.

16. Singhvi, Surendra S. and Desai, Harsha B. (1971(, "An Empirical Analysis of the Quality of Corporate Financial Disclosure", *The Accounting Review*, January.

17. Ubha, Dharminder Singh (1999), "*Corporate Disclosure Practices in India*", Ph.D. Dissertation, May, Department of Commerce, Punjabi University, Patiala.

18. Venkatesh, S. (1997), "Financial Disclosure: Mandatory or Voluntary?", *The Chartered Accountant*, April.

19. Whittred, Greg and Zimmer, Ian (1984), "Timeliness of Financial Reporting and Financial Distress", *The Accounting Review*, Vol. LIX, No. 2, April.