# Financial Reporting by Indian Companies: Compliance with Accounting Standards

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By

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# **Flow of Presentation**

- Introduction
- Motivation of the study
- Objectives of the study
- Literature review
- Data and methodology
- Empirical models
- Findings
- Conclusion
- Limitations of the study
- Further research directions

# Introduction

- Transparency through better financial disclosures has been consistently demanded by stakeholders, particularly from corporate world.
- Disclosure of financial as well as non financial information is essential for reporting performance of an entity.
- Growing size of corporations, increasing capital requirements, and internationalisation of capital markets are giving rise to **new challenges** in disclosure practices.

- Due to separation of ownership and management in corporations, managers may consider their own interest at the cost of stakeholder's interest. (Agency theory).
- The Asian Financial Crisis of 1997 and the Enron debacle in the U.S are few important examples.
- Regulators and policy makers calls for improved corporate transparency, increased scrutiny and often enacts significant changes to accounting and disclosure requirements.
- Financial crises and corporate scandals often bring about securities regulation reforms and greater reporting and disclosure requirements.

# Financial Disclosure through GAAP

- Disclosure of financial as well as non financial information is essential for reporting performance of an entity.
- The reporting is done mainly through Annual Report along with other publications like quarterly reports.
- To standardize the accounting information, every organization would have to establish certain accounting policies based on Generally Accepted Accounting Principles (GAAP).
- GAAP is a common set of accounting principles, standards and procedures that are use to record financial information and compile financial statements.

## Accounting Standards – An Indian GAAP

- In India, The Institute of Chartered Accountants of India (ICAI) has constituted the Accounting Standards Board (ASB) to formulate Accounting Standards (AS).
- While formulating the Accounting Standards, the ASB takes into consideration the applicable laws, customs, usages and business environment prevailing in India.
- Accounting Standards contain the principles governing accounting practices and determine the appropriate disclosures required to be made in financial statements which are published in annual reports.
- Accounting standards require mandatory disclosure i.e. the minimum standard of disclosures required to be made in financial statements published in corporate annual reports.

# Motivation of the Study

- The empirical research on compliance with AS has been largely focused on developed countries. Studies conducted for developing countries have been limited.
- Despite regulatory requirements, the quality of disclosure continues to be poor. Indian annual reports were lagging behind their foreign counterparts with respect to disclosures (Shankar (1972), Sheshan and Gujarathi (1980), Vashal (2006)).
- A Study on Compliance of Financial Reporting Requirements conducted by FRRB (ICAI) has also identified several instances of non-compliance with GAAP.

- Corporate attributes or characteristics have been used for explaining the level of disclosure in the corporate annual report (Cerf (1961), Wallace et. al., (1994)).
- Identifying factors leading to such disclosures will help not only the policy makers for framing appropriate policy but also the investors, analysts, portfolio managers and lenders for ascertaining the quality of reporting by corporate.
- The regulatory institutions (e.g. SEBI and ICAI) would be interested in extent of compliance and factor affecting lower level of compliance (if any).
- They will be in a better position to take remedial actions if the studies identify level of disclosures and factors affecting it.

# Objectives of the study

- To examine the level of compliance with mandatory disclosure requirements of the accounting standards.
- To identify the relationship between the level of disclosure compliance and the key **financial parameters** like size, profitability and leverage.
- To recognize the relationship of the level of disclosure compliance with **company characteristics** like age, foreign ownership, foreign listing, audit firm and listing category.

|     | Literature Review                  |  |   |   |  |  |
|-----|------------------------------------|--|---|---|--|--|
| S/N | Author(s) and<br>Year              | Country of<br>Study/No. of<br>firms                    | Independent<br>variables/Dependent Variables  | Data<br>Analysis/Results  |  |  |
| 1   | Singhvi (1968)                     | United states<br>and India<br>45<br>Companies          | <u>Independent</u><br>Company size, profitability,<br>number of shareholders, type of<br>management<br><u>Dependent</u><br>Weighted disclosure index (34)         | Univariate<br>size,<br>shareholders<br>(No.), type of<br>management |  |  |
| 2   | Singhvi and<br>Desai(1971)         | United states<br>155<br>Companies                      | <u>Independent</u><br>Company size, listing status,<br>profitability, audit firm, number<br>of shareholders<br><u>Dependent</u><br>Weighted disclosure index (34) | UnivariateandLinear RegressionListing status                        |  |  |
| 3   | Buzby(1975)<br>Financial Reporting | United States<br>88<br>Companies<br>by Indian Companie | <u>Independent</u><br>Company size, listing status<br><u>Dependent</u><br>Weighted disclosure index (39)<br>s: Compliance with Accounting Standards               | Univariate and<br>Ranked<br>Correlation<br>Size                     |  |  |

| /  |                                |                                 |  |   |
|----|--------------------------------|---------------------------------|--|---|
| 4  | Firth (1979)                   | United Kingdom<br>180 Companies | <u>Independent</u><br>Company size, listing status, audit<br>firm<br><u>Dependent</u><br>Weighted disclosure index (48)                              | Univariate<br>Size, listing status  |
| 5  | McNally et al (1982)           | New Zealand<br>103 Companies    | <u>Independent</u><br>Company size, rate of return,<br>growth, audit firm, industry<br><u>Dependent</u><br>Weighted disclosure index (41)            | Univariate,<br>Kruskal-Wallis,<br>Rank order<br>Correlation                   |
| 6  | Chow and Wong-<br>Boren (1987) | Mexico <b>52 Companies</b>      | <u>Independent</u><br>Company size, financial leverage,<br>assets in place.<br><u>Dependent</u><br>Weighted and unweighted<br>disclosure index. (24) | Univariate,<br>Bivariate<br>Correlation and<br>Multiple<br>Regression<br>Size |
| 7  | Cooke(1993)                    | Japan 48 Companies              | Independent<br>Listing status<br>Dependent<br>Unweighted disclosure index<br>(equal weight/dichotomous) (106)  | Univariate<br>Size  |
| 11 | Financial Reporting by         | Indian Companies: Co            | ompliance with Accounting Standards  |   |

| Wallace et al(1994)            | Spain<br>50<br>Companies                      | <u>Independent</u><br>Company size, profitability, listing status,<br>industry, liquidity, audit firm, gearing.<br><u>Dependent</u><br>Unweighted disclosure index<br>(equal weight/dichotomous) (79)             | Multivariare Rank<br>OLS Regresssion<br>Size, Listing and<br>Liquidity   |
|--------------------------------|---|---|--|
| Meek et<br>al(1995)            | UK, US,<br>France,<br>Germany,<br>Netherlands | <u>Independent</u><br>Company size, profitability, country origin,<br>listing status, industry, leverage, multinationality.<br><u>Dependent</u><br>Unweighted disclosure index<br>(equal weight/dichotomous) (85) | Linear Regression<br>models<br>size,<br>country origin<br>listing status |
| Ferguson, Lam<br>and Lee(2002) | Hong Kong<br>142<br>Companies                 | <u>Independent</u><br>Firm type (Local, H-Share, Red chip), Industry type, firm<br>size, leverage, multiple listing.<br><u>Dependent</u><br>Unweighted disclosure Index (93)<br>(equal weight/dichotomous)        | Univariate and Linear<br>OLS Regression<br>Firm type, leverage           |

| /  |   |  |  | `  |
|----|---|--|--|--|
|    | Eng and<br>Mak(2003)                      | Singapore                                      | IndependentManagerialownership,governmentownership,proportionofoutsidedirectors,sixe,leverage,growth,industry,auditfirm,analyst,profitability.JependentWeighted disclosure Index   | OLS Regression                                   |
|    | Glaum and<br>Street (2003)                | Germany  | IndependentCompany size, Industry type,profitability, multinational, domicile,maturity, growth, growth options,choice, ownership structure, country,listing.DependentUnweighted disclosure Index(equal weight/dichotomous) | Univariate and<br>Ordinary Least<br>Square (OLS) |
| 13 | Rathinam<br>(1996)<br>Financial Reporting | India<br>160<br>Companies<br>s by Indian Compa | Independent<br>Age, profitability, asset size, turnover<br><u>Dependent</u><br>Unweighted disclosure Index   | Ordinary Least<br>Square (OLS)                   |

What do we contribute to literature?

- Comprehensive Index covering all disclosure requirement of Accounting Standards (Indian GAAP).
- Examining Annual Report of sample of 500 listing companies (10 %) thoroughly to assign disclosure score.
- Companies selected from India (one of the largest emerging economy).
- Identifying possible factors affecting Disclosure Level (Company attributes).
- Recommendations to Regulatory Authorities about the level of disclosures and factor affecting them.

## Data

- The data for the study has been collected from Annual reports of company for the year ended 31<sup>st</sup> March 2010.
- Annual Report is considered most authentic source of information as it is certified by directors, auditors and submitted to legal authorities.
- In order to extract the information items, all areas (financial and non–financial) of the annual reports were considered.

## Sample

- The study focuses on Indian companies.
- In India, companies are listed with multiple stock exchanges. Companies listed with Bombay Stock Exchanges (BSE) are chosen for study as BSE is the oldest in Asia (established in 1875) and one of the leading stock exchanges in India.
- There are 5000 listed companies on BSE.
- A random sample of 500 companies was selected from the companies listed on the BSE.
- The sample represented about 10% of the population.

# **Sample Characterists**

# **Sample Listed Companies (500)**

| On the<br>Basic of | Less Than 20               | 179 | On the<br>basic of<br>Industry | Manufacturing | 336 |
|--------------------|----------------------------|-----|--------------------------------|---------------|-----|
| Age                | 20 to 50                   | 232 |                                | Sorvico       | 164 |
|                    | 50 and above               | 89  | 1                              | Service       | 104 |
|                    | Total                      | 500 |                                | Total         | 500 |
| On the             | Big 4                      | 87  | On the                         |               |     |
| basic of           | Non Big 4                  | 413 | basic of<br>Listing            | A Group       | 40  |
| Audit              | Total                      | 500 |                                |               |     |
| On the<br>Basic of | Listed Abroad<br>And India | 33  | (as per                        | B Group       | 283 |
| Listing            | Listed only in<br>India    | 467 | DSC)                           | T Group       | 177 |
|                    | Total                      | 500 |                                | Total         | 500 |



# **Disclosure Questionnaire/Index**

- There are 29 mandatory Accounting Standards (AS), as applicable to the companies as on 31<sup>st</sup> March 2010.
- On the basis of disclosures requirements of each AS a questionnaire consisting of 149 items of disclosures has been prepared.

| No.    | Name of Standard  | No. of<br>disclosures |
|--------|---|-----------------------|
| AS-1   | Disclosures of accounting policies  | 2                     |
| AS-2   | valuation of inventories  | 3                     |
| AS-3   | Cash Flow Statements  | 7                     |
| AS-4   | Contingencies and Events Occurring After the Balance Sheet Date                             | 2                     |
| AS-5   | Net Profit or Loss for the Period, Prior Period Items and Changes in<br>Accounting Policies | 2                     |
| AS-6   | Depreciation Accounting   | 7                     |
| AS-7   | Construction Contracts  | 3                     |
| AS-8   | Research and Development (Withdrawn and included in AS 26)                                  | 0                     |
| AS-9   | Revenue Recognition   | 2                     |
| AS-10  | Accounting for Fixed Assets   | 6                     |
| AS-11  | The Effects of Changes in Foreign Exchange Rates  | 6                     |
| AS-12  | Accounting for government grants  | 4                     |
| AS-13  | Accounting for investments  | 8                     |
| AS-14  | Accounting for Amalgamations  | 3                     |
| AS-15  | Accounting for Employee Benefits  | 8                     |
| AS-16  | Borrowing Costs   | 2                     |
| AS 17  | Segment reporting   | 11                    |
| AS-18  | Related Party Disclosures   | 2                     |
| AS-19  | Leases  | 12                    |
| AS-20  | Earnings Per Share  | 7                     |
| AS-21  | Consolidated Financial Statements   | 3                     |
| AS-22  | Accounting for Taxes on Income  | 3                     |
| AS-23  | Accounting for Investments in Associates in Consolidated Financial<br>Statements            | 6                     |
| AS-24  | Discontinuing Operations  | 11                    |
| AS -25 | Interim Financial Reporting   | 9                     |
| AS-26  | Intangible Assets   | 3                     |
| AS-27  | Financial Reporting of Interests inJoint Ventures   | 4                     |
| AS-28  | Impairment of Assets  | 5                     |
| AS-29  | Provisions, Contingent Liabilities and Contingent Assets                                    | 8                     |
|        | TOTAL   | 149                   |

Example – AS 19 Leases

AS provides following disclosures for Financial Lease

22. The lessee should, in addition to the requirements of AS 10, Accounting for Fixed Assets, AS 6, Depreciation Accounting, and the governing statute, make the following disclosures for finance leases:

- (a) assets acquired under finance lease as segregated from the assets owned;
- (b) for each class of assets, the net carrying amount at the balance sheet date;
- (c) a reconciliation between the total of minimum lease payments at the balance sheet date and their present value. In addition, an enterprise should disclose the total of minimum lease payments at the balance sheet date, and their present value, for each of the following periods:
  - (i) not later than one year;

(ii) later than one year and not later than five years;

*(iii) later than five years;* 

- (d) contingent rents recognised as expense in the statement of profit and loss for the period;
- (e) the total of future minimum sublease payments expected to be received under non-cancellable subleases at the balance sheet date; and
- (f) a general description of the lessee's significant leasing arrangements including, but not limited to, the following:
  - (i) the basis on which contingent rent payments are determined;
  - (ii) the existence and terms of renewal or purchase options and escalation clauses; and
  - (iii) restrictions imposed by lease arrangements, such as those concerning dividends, additional debt, and further leasing.

#### AS 19 Leases (Disclosures considered in our questionnaire)

| Leases   | 1/0/NA   |
|--|--|
| Financial Lease:   |  |
| Has assets acquired under finance lease as segregated from the assets owned disclosed?   |  |
| Whether for each class of assets, the net carrying amount at the balance sheet date is been disclosed?   |  |
| Whether a reconciliation between the total of minimum lease payments at the balance sheet date and their present value been disclosed?         |  |
| Whether the total of minimum lease payments at the balance sheet date, and their present value disclosed, for each of the following periods:   |  |
| (i) Not later than one year?   |  |
| (ii) later than one year and not later than five years?  |  |
| (iii) Later than five years?   |  |
| Whether rents recognised as expense in the statement of profit and loss for the period disclosed?  |  |
| Has the total of future minimum sublease payments expected to be received under non cancellable subleases at the balance sheet date disclosed? |  |
| A general description of lessee's significant leasing arrangements including, but not limited to, the following:                               |  |
| the basis on which contingent rent payments are determined.  |  |
| The existence and terms of renewal or purchase options and escalation clauses.   |  |
| restrictions imposed by lease arrangements, such as those concerning dividends, additional debt, and further leasing.                          |  |
|  | Financial Lease:<br>Has assets acquired under finance lease as segregated from the assets owned disclosed?<br>Whether for each class of assets, the net carrying amount at the balance sheet date is been disclosed?<br>Whether a reconciliation between the total of minimum lease payments at the balance sheet date and their present value been disclosed?<br>Whether the total of minimum lease payments at the balance sheet date, and their present value disclosed, for each of the following periods:<br>(i) Not later than one year?<br>(ii) later than one year and not later than five years?<br>Whether rents recognised as expense in the statement of profit and loss for the period disclosed?<br>Has the total of future minimum sublease payments expected to be received under non cancellable subleases at the balance sheet date disclosed?<br>A general description of lessee's significant leasing arrangements including, but not limited to, the following:<br>the basis on which contingent rent payments are determined.<br>The existence and terms of renewal or purchase options and escalation clauses.<br>restrictions imposed by lease arrangements, such as those concerning dividends, additional debt, and further leasing. |

Example- AS 11 The Effects of Changes in Foreign Exchange Rates AS provides following disclosures

- (a) the amount of exchange differences included in the net profit or loss for the period; and
- (b) net exchange differences accumulated in foreign currency translation reserve as a separate component of shareholders' funds, and a reconciliation of the amount of such exchange differences at the beginning and end of the period.

41. When the reporting currency is different from the currency of the country in which the enterprise is domiciled, the reason for using a different currency should be disclosed. The reason for any change in the reporting currency should also be disclosed.

42. When there is a change in the classification of a significant foreign operation, an enterprise should disclose:

- (a) the nature of the change in classification;
- (b) the reason for the change;
- (c) the impact of the change in classification on shareholders' funds; and
- (d) the impact on net profit or loss for each prior period presented had the change in classification occurred at the beginning of the earliest period presented.

43. The effect on foreign currency monetary items or on the financial statements of a foreign operation of a change in exchange rates occurring after the balance sheet date is disclosed in accordance with AS 4, Contingencies and Events Occurring After the Balance Sheet Date.

44. Disclosure is also encouraged of an enterprise's foreign currency risk management policy.

### AS 11 Disclosures in our Questionnaire

| AS-11 | The Effects of Changes in Foreign Exchange Rates   | 1/0/NA |
|-------|--|--------|
| 35    | Whether the amount of exchange differences included in the net profit or loss for the period is disclosed?   |        |
| 36    | Whether net exchange differences accumulated in foreign currency translation reserve as a separate component of shareholders' funds, and a reconciliation of the amount of such exchange differences at the beginning and end of the period disclosed?       |        |
| 37    | Whether change in the classification of a significant foreign operation, an enterprise should disclose:  |        |
|       | (a) the nature of the change in classification;  |        |
|       | (b) the reason for the change;   |        |
|       | (c) the impact of the change in classification on shareholders'?   |        |
| 38    | Whether the contingent liability denominated in foreign currency at the balance sheet date is disclosed by using the closing rate?   |        |
| 39    | When the reporting currency is different from the currency of the country in which the enterprise is domiciled, the reason for using a different currency should be disclosed. The reason for any change in the reporting currency should also be disclosed. |        |
| 40    | Whether an enterprise's foreign currency risk management policy is disclosed?  |        |

## Method of Calculating Disclosure Score

- Disclosure Score is computed using Unweighted approach and each item of disclosure is given equal important.
- Unweighted approach reduces subjectivity and it provides a neutral assessment of items.
- On the questionnaire, each item is given equal weightage and coded as 1 if disclosed; and 0 if not disclosed and NA if not applicable.
- **Disclosure Score (DS) :** Disclosure Score has been computed by dividing total no. of disclosures made with total no. of disclosures applicable.
  - **DS** = <u>Total No. of Disclosures made</u>

Total Disclosures – Disclosures Not Applicable

# Compliance Level of Each AS by sample companies

| No.       | Name of Standard                   | Disclosures<br>by<br>Companies |
|-----------|------------------------------------|--------------------------------|
| AS-<br>1  | Disclosures of accounting policies | 90.33%                         |
| AS-<br>2  | valuation of inventories           | 74.55%                         |
| AS-<br>3  | Cash Flow Statements               | 68.48%                         |
| AS-<br>9  | Revenue Recognition                | 61.30%                         |
| AS-<br>19 | Leases                             | 52.90%                         |
|           | +                                  |                                |

# Disclosure scores achieved by Companies

|         | Overall | A Group | B Group | T (other)<br>Group |
|---------|---------|---------|---------|--------------------|
| Average | 0.71    | 0.90    | 0.72    | 0.51               |
| Maximum | 1       | 1       | 1       | 0.98               |
| Minimum | 0.45    | 0.72    | 0.50    | 0.45               |
| Range   | 0.54    | 0.28    | 0.49    | 0.53               |

# Company Attributes as Independent/Explanatory Variables

| Variable        | Proxy                     | Nature/Formu<br>la                               | Calculation                 | Expressed as    |
|-----------------|---------------------------|--|-----------------------------|-----------------|
| Size (Turnover) | Net sales                 |  | Log of Net sales            | Log (TURN)      |
| Profitability   | Net Profit ratio (NPR)    | NPR = Profit<br>after Sales/Net<br>Sales         | % of NPR                    | NPR             |
| Leverage        | Debt/Equity<br>Ratio(D/E) | D/E = Debt<br>(Secured<br>+Unsecured)/E<br>quity | % of DE Ratio               | D/E             |
| Age             | Age of company            |  | Log of<br>Company Age       | Log(Age)        |
| Foreign Listing | Listing abroad            | Dummy  | 1ifListedabroad0ifnotabroad | Foreign Listing |

## Method of Calculating Disclosure Score

- Disclosure Score is computed using Unweighted approach and each item of disclosure is given equal important.
- Unweighted approach reduces subjectivity and it provides a neutral assessment of items.
- On the questionnaire, each item is given equal weightage and coded as 1 if disclosed; and 0 if not disclosed and NA if not applicable.
- **Disclosure Score (DS) :** Disclosure Score has been computed by dividing total no. of disclosures made with total no. of disclosures applicable.
  - **DS** = <u>Total No. of Disclosures made</u> Total Disclosures – Disclosures Not Applicable

# **Company Attributes as** Independent/Explanatory Variables



| Variable              | Proxy   | Nature/Formula   | Calculation   | Expressed as     |
|-----------------------|---|--|---|------------------|
| Size (Turnover)       | Net sales   |  | Log of Net sales  | Log (TURN)       |
| Size (Total Assets)   | Total Assets (TA)   | TA = Fixed Assets +<br>Investments + Current<br>Assets | Log of Total Assets   | Log (TA)         |
| Size (Listing Status) | Listing Category as per BSE (A, B or T)                     | Dummy  | 1 if A or B Group<br>0 if T Group   | Listing Category |
| Profitability         | Net Profit ratio (NPR)                                      | NPR = Profit after<br>Sales/Net Sales                  | % of NPR  | NPR              |
| Leverage              | Debt/Equity<br>Ratio(D/E)                                   | D/E = Debt (Secured<br>+Unsecured)/Equity              | % of DE Ratio   | D/E              |
| Age                   | Age of company  |  | Log of Company Age  | Log(Age)         |
| Foreign Listing       | Listing abroad  | Dummy  | 1 if Listed abroad<br>0 if not listed abroad  | Foreign Listing  |
| Foreign Ownership     | % of Foreign Holding  | Dummy  | 1 if more than 24% of<br>foreign ownership<br>0 if less than 24 % of<br>foreign ownership | For Own          |
| Big 4 Audit firm      | Audit by Big 4 Audit<br>firm<br>prting by Indian Companies: | <b>Dummy</b><br>Compliance with Accounti               | 1 if audit by Big 4<br>0 if audit by others<br>ng Standards                               | Big 4 Audit firm |

| Hypothesis     | Measure                                  | Expected Sign |
|----------------|--|---------------|
| H <sub>1</sub> | size                                     | +             |
| H <sub>2</sub> | Profitability                            | +             |
| H <sub>3</sub> | Leverage                                 | +             |
| H <sub>4</sub> | Age                                      | +             |
| H <sub>5</sub> | Foreign Listing                          | +             |
| H <sub>6</sub> | Foreign Ownership                        | +             |
| H <sub>7</sub> | Companies audited<br>by Big 4 Audit firm | +             |

## Formulation of Model

- In order to determine the effect of company characteristics on compliance with OLS Regression technique is used.
   MODEL
- $CI = \alpha + \beta_1 SIZE + \beta_2 NPR + \beta_3 DE + \beta_4 AGE + \beta_5 FOREIGN$ LISTING +  $\beta_6 BIG$  4 AUDIT FIRM +  $\varepsilon_i$

 $\beta_0$  = regression intercept;  $\beta_{i (1 \text{ to } 7)}$  = parameters to be estimated and  $\varepsilon_j$  = the error term.

# Statistical Tools for Data Analysis

The collected data has been analysed with the help of following techniques. The software used are MS-Excel Data Analysis and SPSS 17.0.

- Multiple Linear regressions
- Correlation Analysis
- Collinearity diagnosis
# **Results and Discussions- DS**

| СІ        | Big Audit<br>Firm Y/N  | NPR   | Turnover<br>(Rs. Cr.)  | D/E Ratio  | For Own  | Foreign<br>Listing   | Listing<br>Category   | Age  |
|-----------|--|---|--|--|--|--|---|--|
| 0.714341  | 0.0786026  | 0.2146547   | 1368.6639  | 4.9727   | 4.2016   | 0.043  | 0.5982  | 30.0917  |
| 0.224096  | 0.2697070  | 0.8482682   | 8052.9018  | 20.502   | 11.711   | 0.204  | 0.4913  | 19.6624  |
| 0.5351851 | 1  | 7.9691888   | 109232.2   | 66.012   | 87.92  | 1  | 1   | 117  |
| 0.4648148 | 0  | -1.08   | 0.00525  | 0.998  | 0  | 0  | 0   | 2  |
| 1         | 1  | 6.8891888   | 109232.24  | 67.01  | 87.92  | 1  | 1   | 119  |
| 500       | 500  | 500   | 500  | 500  | 500  | 500  | 500   | 500  |
|           | <ul> <li>CI</li> <li>0.714341</li> <li>0.224096</li> <li>0.5351851</li> <li>0.4648148</li> <li>1</li> <li>500</li> </ul> | CIBig Audit<br>Simm Y/N0.7143410.07860260.2240960.26970700.535185110.464814801111500500 | CIBig Audit<br>Firm Y/NNPR0.7143410.07860260.21465470.2240960.26970700.84826820.535185117.96918880.46481480-1.08116.8891888500500500 | CIBig Audit<br>Firm Y/NNPRTurnover<br>(Rs. Cr.)0.7143410.07860260.21465471368.66390.2240960.26970700.84826828052.90180.535185117.9691888109232.20.464814801.080.005251016.8891888109232.24500500500500 | CIBig Audit<br>Firm Y/NNPRTurnover<br>(Rs. Cr.)D/E Ratio0.7143410.07860260.21465471368.66394.97270.2240960.26970700.84826828052.901820.5020.535185110.79691888109232.2066.0120.464814801.080.005250.998116.8891888109232.2467.01500500500500500500 | CIBig Audit<br>Kirn Y/NNPRTurnover<br>Rs. Cr.D/E RatioFor Own0.7143410.07860260.21465471368.66394.97274.20160.2240960.26970700.84826828052.901820.5021.17110.53518511.027.9691888109232.266.0128.9290.46481480.01.080.005250.9980.21921.11.11.08109232.2467.018.7922.500500500500500500500 | C1Big Audit<br>Frm Y/NNPRTurnover<br>Rs. Cr.D/E RatioFor OwnForeign<br>Lsting0.7143410.07860260.21463471368.66394.97274.201600.0430.22409600.26970700.84826828052.901820.50211.71100.20400.535185110.0691888109232.2066.01287.920100.46481480-1.080.005250.998000110.8891888109232.4067.0187.92110500500500500500500500 | C1Big Audit<br>Fmm Y/NNPRTurnover<br>Rs. Cr.D/E RatioFor OwnForeign<br>ListingListing<br>Caegory0.7143410.7860200.2146547368.66394.972704.201600.043.00.59820.2240900.26970700.84826828052.901820.5021.71100.204.00.49130.35318511.027.9691888109232.26.0128.792.01.02.01.02.00.46481480.10.1-1.080.005250.998.00.10.20.10.10.10.11.1111.1110.818188109232.26.01.28.792.01.01.01.01.11.1111.1110.1110.818188109232.16.01.18.792.01.01.01.01.11.1111.1110.11110.11110.11111.11111.11111.11111.1110.11110.11110.11110.11111.11111.11111.1110.11110.11110.11110.11111.11111.1110.11110.11110.11111.11111.11111.1110.11110.11110.11110.11111.11111.1110.11110.11110.11110.11111.11111.11110.11110.11110.11110.11111.11111.11110.11110.11110.11110.11111.11111.11110.11110.11110.11110.11111.11111.11110.11110.11110.111110.111111.1111 |

# Multicollinearity diagnostics – VIF analysis

#### **Coefficients**<sup>a</sup>

|      |           | Collinearity<br>Statistics |       |  |
|------|-----------|----------------------------|-------|--|
| Mode | l         | Tolerance                  | VIF   |  |
| 1    | TURN      | .766                       | 1.305 |  |
|      | NPR       | .995                       | 1.005 |  |
|      | DE        | .962                       | 1.040 |  |
|      | AGE       | .939                       | 1.065 |  |
|      | AUDITFIRM | .759                       | 1.318 |  |
|      | FORLIST   | .879                       | 1.138 |  |
|      | FOROWN    | .896                       | 1.116 |  |
|      | LISTCATE  | .818                       | 1.222 |  |

a. Dependent Variable: CI



# **Results and Discussions** Level of Disclosure



# Mean and Range of Disclosure Scores

|       | Overall | Mfg.   | Service | Age<br>(Less     | Age<br>(Betwe   | Age<br>(More     | A<br>Group    | B<br>Group    | T<br>Group    |
|-------|---------|--------|---------|------------------|-----------------|------------------|---------------|---------------|---------------|
|       |         |        |         | Than <b>20</b> ) | en 20<br>to 50) | than <b>50</b> ) | Compa<br>nies | compa<br>nies | Compa<br>nies |
| Avg.  |         |        |         |                  |                 |                  |               |               |               |
|       | 0.7123  | 0.7322 | 0.6923  | 0.6903           | 0.7239          | 0.7226           | 0.9021        | 0.7201        | 0.5132        |
| Max.  |         |        |         |                  |                 |                  |               |               |               |
|       | 1       | 1      | 1       | 1                | 1               | 1                | 1             | 1             | 0.9868        |
| Min.  |         |        |         |                  |                 |                  |               |               |               |
|       | 0.4567  | 0.4567 | 0.4795  | 0.4638           | 0.4567          | 0.5263           | 0.7204        | 0.5012        | 0.4567        |
| Range |         |        |         |                  |                 |                  |               |               |               |
|       | 0.543   | 0.543  | 0.520   | 0.536            | 0.543           | 0.473            | 0.279         | 0.498         | 0.530         |







| Compliance<br>Score Range | No. of<br>Companies | % of Total |
|---------------------------|---------------------|------------|
| 40 to 50                  | 43                  | 8.60%      |
| 50 to 60                  | 152                 | 30.40%     |
| 60 to 70                  | 71                  | 14.20%     |
| 70 to 80                  | 48                  | 9.60%      |
| 80 to 90                  | 76                  | 15.20%     |
| 90 to 100                 | 110                 | 22.00%     |
|                           | 500                 | 100.00%    |



# Results and Discussions Effect of Corporate Attributes on Disclosures





Financial Reporting by Indian Companies: Compliance with Accounting Standards

## **Regression Results: All Companies - Model 1**

| <b>Regression Statistics</b> |        |
|------------------------------|--------|
| R Square                     | 0.0891 |
| Adjusted R Square            | 0.0751 |
| Observations                 | 500    |

|            | df  | F      | Significance F |
|------------|-----|--------|----------------|
| Regression | 7   | 6.3611 | 0              |
| Residual   | 492 |        |                |
| Total      | 499 |        |                |

|                  | Coefficients | t Stat  | P-value |
|------------------|--------------|---------|---------|
| Intercept        | 0.6816       | 15.9104 | 0       |
| Log (TURN)       | 0.0286       | 3.9812  | 0.0001  |
| NPR              | 0            | -0.1451 | 0.8847  |
| D/E              | 0            | 0.3262  | 0.7444  |
| Log(Age)         | 0.0142       | 0.4731  | 0.6364  |
| Big 4 Audit firm | 0.0629       | 2.5738  | 0.0104  |
| Foreign Listing  | 0.0684       | 1.971   | 0.0493  |
| For Own          | -0.0452      | -1.244  | 0.2141  |

### **Regression Results: All Companies - Model 2**

| <b>Regression Statistics</b> |        |
|------------------------------|--------|
|                              | 0.0827 |
| Adjusted                     | 0.0686 |
| Observations                 | 500    |

|            | df  | F      | Significance F |
|------------|-----|--------|----------------|
| Regression | 7   | 5.8584 | 0.0000         |
| Residual   | 492 |        |                |
| Total      | 499 |        |                |

|                  | Coefficients | t Stat  | P-value |
|------------------|--------------|---------|---------|
| Intercept        | 0.6647       | 14.9956 | 0.0000  |
| Listing Category | 0.0673       | 3.5402  | 0.0004  |
| NPR              | 0.0000       | 0.0552  | 0.9560  |
| D/E              | 0.0000       | 0.4147  | 0.6785  |
| Log(Age)         | 0.0361       | 1.2124  | 0.2260  |
| Big 4 Audit firm | 0.0644       | 2.6203  | 0.0091  |
| Foreign Listing  | 0.0770       | 2.2204  | 0.0269  |
| For Own          | -0.0387      | -1.0623 | 0.2887  |

## Regression Results: Manufacturing Companies - Model 1- Turnover

| <b>Regression Statistics</b> |        |
|------------------------------|--------|
|                              | 0.1382 |
| Adjusted                     | 0.1198 |
| Observations                 | 336    |

|            | df  | F      | Significance<br>F |
|------------|-----|--------|-------------------|
| Regression | 7   | 7.5152 | 0.0000            |
| Residual   | 328 |        |                   |
| Total      | 335 |        |                   |

|                  | Coefficients | t Stat  | P-value |
|------------------|--------------|---------|---------|
| Intercept        | 0.7112       | 14.8482 | 0.0000  |
| Log (TURN)       | 0.0261       | 3.4584  | 0.0006  |
| NPR              | 0.0150       | 1.4821  | 0.1393  |
| D/E              | -0.0001      | -0.2626 | 0.7930  |
| Log(Age)         | -0.0061      | -0.1903 | 0.8492  |
| Big 4 Audit firm | 0.0909       | 3.7395  | 0.0002  |
| Foreign Listing  | 0.0817       | 2.1447  | 0.0327  |
| For Own          | -0.0682      | -1.8586 | 0.0640  |

### Regression Results: Manufacturing Companies - Model 2- Total Assets

| Regression Statistics |        |
|-----------------------|--------|
|                       | 0.1436 |
| Adjusted              | 0.1165 |
| Observations          | 336    |

#### ANOVA

|            | df  | F      | Significance<br>F |
|------------|-----|--------|-------------------|
| Regression | 7   | 5.2930 | 0.0000            |
| Residual   | 328 |        |                   |
| Total      | 335 |        |                   |

|                    | <b>Coefficients</b> | t Stat  | P-value |
|--------------------|---------------------|---------|---------|
| Intercept          | 0.8727              | 36.6929 | 0.0000  |
| Log (Total Assets) | 0.0068              | 2.0208  | 0.0445  |
| NPR                | 0.0031              | 0.7044  | 0.4819  |
| D/E                | -0.0003             | -0.8481 | 0.3973  |
| Log(Age)           | -0.0128             | -0.8137 | 0.4167  |
| Big 4 Audit firm   | 0.0278              | 2.3237  | 0.0211  |
| Foreign Listing    | 0.0632              | 3.6710  | 0.0003  |
| For Own            | -0.0224             | -1.1361 | 0.2571  |

## Regression Results: Manufacturing Sector Companies -Model 3

| <b>Regression Statistics</b> |        |
|------------------------------|--------|
|                              | 0.1508 |
| Adjusted                     | 0.1327 |
| Observations                 | 336    |

#### ANOVA

|            | df  | F      | Significance<br>F |
|------------|-----|--------|-------------------|
| Regression | 7   | 8.3226 | 0.0000            |
| Residual   | 328 |        |                   |
| Total      | 335 |        |                   |

|                  | Coefficients | t Stat  | P-value |
|------------------|--------------|---------|---------|
| Intercept        | 0.6959       | 14.4821 | 0.0000  |
| Listing Category | 0.0804       | 4.1242  | 0.0000  |
| NPR              | 0.0125       | 1.2497  | 0.2123  |
| D/E              | -0.0002      | -0.3236 | 0.7465  |
| Log(Age)         | 0.0087       | 0.2720  | 0.7858  |
| Big 4 Audit firm | 0.0837       | 3.4401  | 0.0007  |
| Foreign Listing  | 0.0853       | 2.2684  | 0.0240  |
| For Own          | -0.0608      | -1.6720 | 0.0955  |

## Regression Results: Service Sector Companies - Model 1

| Regression        |        |
|-------------------|--------|
| <b>Statistics</b> |        |
|                   | 0.1985 |
| Adjusted          | 0.1626 |
| Observations      | 164    |

#### ANOVA

|            | df  | F      | Significance F |
|------------|-----|--------|----------------|
| Regression | 7   | 5.5204 | 0.0000         |
| Residual   | 156 |        |                |
| Total      | 163 |        |                |

|                    | Coefficient | Standard     |         |
|--------------------|-------------|--------------|---------|
|                    | S           | <b>Error</b> | t Stat  |
| Intercept          | 0.6786      | 0.0636       | 10.6765 |
| Log (TURN)         | 0.0516      | 0.0111       | 4.6620  |
| NPR                | 0.0000      | 0.0000       | -0.1144 |
| D/E                | 0.0000      | 0.0001       | -0.2512 |
| Log(Age)           | -0.0197     | 0.0475       | -0.4148 |
| <b>Big 4 Audit</b> |             |              |         |
| firm               | 0.1047      | 0.0466       | 2.2467  |
|                    |             |              |         |
| Foreign Listing    | -0.0023     | 0.0709       | -0.0317 |
| For Own            | 0.0135      | 0.0708       | 0.1904  |

## Regression Results: Service Sector Companies - Model 2

#### **Regression Statistics**

|              | 0.2028 |
|--------------|--------|
| Adjusted     | 0.1671 |
| Observations | 164    |

|            | df  | F      | Significance F |
|------------|-----|--------|----------------|
| Regression | 7   | 5.6708 | 0.0000         |
| Residual   | 156 |        |                |
| Total      | 163 |        |                |

|                  | Coefficients | t Stat  | P-value |
|------------------|--------------|---------|---------|
| Intercept        | 0.6423       | 9.9680  | 0.0000  |
| Listing Category | 0.1311       | 4.7640  | 0.0000  |
| NPR              | 0.0000       | -0.4477 | 0.6550  |
| D/E              | 0.0000       | -0.0505 | 0.9598  |
| Log(Age)         | 0.0164       | 0.3528  | 0.7247  |
| Big 4 Audit firm | 0.1179       | 2.5795  | 0.0108  |
| Foreign Listing  | 0.0154       | 0.2189  | 0.8270  |
| For Own          | 0.0027       | 0.0376  | 0.9701  |

## Regression Results: Age (Less than 20 Years) - Model 1

| Regression<br>Statistics |        |
|--------------------------|--------|
|                          | 0.1303 |
| Adjusted                 | 0.0999 |
| Observations             | 179    |

#### ANOVA

|            |     |        | Significance |
|------------|-----|--------|--------------|
|            | df  | F      | F            |
| Regression | 6   | 4.2932 | 0.0005       |
| Residual   | 172 |        |              |
| Total      | 178 |        |              |

|                  | ~ ~ ~ ~ ~    | ~       | _       |
|------------------|--------------|---------|---------|
|                  | Coefficients | t Stat  | P-value |
| Intercept        | 0.7020       | 31.8637 | 0.0000  |
| Log (TURN)       | 0.0204       | 2.1401  | 0.0338  |
| NPR              | 0.0000       | -0.0936 | 0.9255  |
| D/E              | 0.0016       | 0.8767  | 0.3818  |
| Big 4 Audit firm | 0.1737       | 3.7341  | 0.0003  |
| Foreign Listing  | -0.0599      | -0.6944 | 0.4884  |
| For Own          | -0.0241      | -0.3967 | 0.6921  |

## Regression Results: Age (Less than 20 Years) - Model 2

| Regression<br>Statistics |        |
|--------------------------|--------|
|                          | 0.1093 |
| Adjusted                 | 0.0783 |
| Observations             | 179    |

#### ANOVA

|            | df  | F      | Significance<br>F |
|------------|-----|--------|-------------------|
| Regression | 6   | 3.5192 | 0.0026            |
| Residual   | 172 |        |                   |
| Total      | 178 |        |                   |

|            |                      | Coefficients | t Stat  | P-value |
|------------|----------------------|--------------|---------|---------|
|            | Intercept            | 0.7263       | 32.8376 | 0.0000  |
|            | Listing Category     | 0.0188       | 0.6583  | 0.5112  |
|            | NPR                  | 0.0000       | -0.0457 | 0.9636  |
|            | D/E                  | 0.0020       | 1.0572  | 0.2919  |
|            | Big 4 Audit firm     | 0.1844       | 3.9213  | 0.0001  |
| <b>г</b> . | Foreign Listing      | -0.0660      | -0.7531 | 0.4523  |
| Finar      | For Own              | -0.0127      | -0.2074 | 0.8360  |
| with       | Accounting Standards |              |         |         |

## Regression Results: Age (20 to 50 Years) - Model 1

| Regression<br>Statistics |        |
|--------------------------|--------|
|                          | 0.1970 |
| Adjusted                 | 0.1756 |
| Observations             | 232    |

#### ANOVA

|            | df  | F      | Significance<br>F |
|------------|-----|--------|-------------------|
| Regression | 6   | 9.2022 | 0.0000            |
| Residual   | 225 |        |                   |
| Total      | 231 |        |                   |

|                    | Coefficients    | Standard<br>Error | t Stat  |
|--------------------|-----------------|-------------------|---------|
| Intercept          | 0.6429          | 0.0226            | 28.4552 |
| Log (TURN)         | 0.0497          | 0.0099            | 5.0367  |
| NPR                | 0.0469          | 0.0157            | 2.9866  |
| D/E                | 0.0000          | 0.0001            | 0.2934  |
| Big 4 Audit firm   | 0.0348          | 0.0342            | 1.0175  |
| Foreign Listing    | 0.1129          | 0.0408            | 2.7647  |
| For Own Indian Com | panies: 70,0358 | 0.0488 0.0488     | -0.7325 |

Financial Rep<mark>orting by Indian</mark>

with Accounting Standards

## Regression Results: Age (20 to 50 Years) - Model 2

| Regression Statistics |        |
|-----------------------|--------|
|                       | 0.2120 |
| Adjusted              | 0.1910 |
| Observations          | 232    |

#### ANOVA

|            | df  | F       | Significance F |
|------------|-----|---------|----------------|
| Regression | 6   | 10.0894 | 0.0000         |
| Residual   | 225 |         |                |
| Total      | 231 |         |                |

|                  |              | Standard |         |
|------------------|--------------|----------|---------|
|                  | Coefficients | Error    | t Stat  |
| Intercept        | 0.6605       | 0.0188   | 35.2247 |
| Listing Category | 0.1294       | 0.0236   | 5.4886  |
| NPR              | 0.0386       | 0.0154   | 2.5089  |
| D/E              | 0.0001       | 0.0001   | 0.6350  |
| Big 4 Audit firm | 0.0352       | 0.0337   | 1.0454  |
| Foreign Listing  | 0.1389       | 0.0400   | 3.4751  |
| For Own          | -0.0489      | 0.0484   | -1.0098 |

## Regression Results: Age (50 Years and above) - Model 1

| Regression<br>Statistics |        |
|--------------------------|--------|
|                          | 0.2256 |
| Adjusted                 | 0.1683 |
| Observations             | 88     |

#### ANOVA

|            | df | F      | Significance<br>F |
|------------|----|--------|-------------------|
| Regression | 6  | 3.9339 | 0.0017            |
| Residual   | 81 |        |                   |
| Total      | 87 |        |                   |

|                  | Coefficients | t Stat  | P-value |
|------------------|--------------|---------|---------|
| Intercept        | 0.8202       | 5.2147  | 0.0000  |
| Log (TURN)       | 0.0467       | 2.4517  | 0.0164  |
| NPR              | -0.0138      | -0.8305 | 0.4087  |
| D/E              | -0.0007      | -0.7600 | 0.4495  |
| Big 4 Audit firm | -0.0939      | -1.0797 | 0.2835  |
| Foreign Listing  | 0.0887       | 2.5387  | 0.0130  |
| For Own          | 0.0268       | 0.4996  | 0.6187  |

## Regression Results: Age (50 Years and above) - Model 2

| <b>Regression Statistics</b> |        |
|------------------------------|--------|
|                              | 0.2332 |
| Adjusted                     | 0.1764 |
| Observations                 | 88     |

|            |    | _      | Significance |
|------------|----|--------|--------------|
|            | df | F      | F            |
| Regression | 6  | 4.1059 | 0.0012       |
| Residual   | 81 |        |              |
| Total      | 87 |        |              |

|                  | Coefficients | t Stat  | P-value |
|------------------|--------------|---------|---------|
| Intercept        | 0.8793       | 5.7332  | 0.0000  |
| Listing Category | 0.1047       | 2.6209  | 0.0105  |
| NPR              | -0.0110      | -0.6680 | 0.5060  |
| D/E              | -0.0004      | -0.4645 | 0.6435  |
| Big 4 Audit firm | -0.0696      | -0.8066 | 0.4223  |
| Foreign Listing  | 0.0932       | 2.7339  | 0.0077  |
| For Own          | 0.0291       | 0.5481  | 0.5851  |

# **Regression Results: A Group Companies**

| <b>Regression Statistics</b> |        |
|------------------------------|--------|
|                              | 0.2715 |
| Adjusted                     | 0.1070 |
| Observations                 | 40     |

#### ANOVA

|            | df | F      | Significance F |
|------------|----|--------|----------------|
| Regression | 7  | 1.6504 | 0.1584         |
| Residual   | 32 |        |                |
| Total      | 39 |        |                |

|                  | Coefficients | t Stat  | P-value |
|------------------|--------------|---------|---------|
| Intercept        | 0.9255       | 11.5108 | 0.0000  |
| Log (TURN)       | -0.0234      | -1.0317 | 0.3102  |
| NPR              | -0.0589      | -1.0185 | 0.3163  |
| D/E              | 0.0000       | -0.1111 | 0.9123  |
| Log(Age)         | 0.0207       | 0.7192  | 0.4774  |
| Big 4 Audit firm | 0.0733       | 2.8621  | 0.0075  |
| Foreign Listing  | 0.0032       | 0.1178  | 0.9070  |
|                  |              |         |         |

## **Regression Results: B Group Companies**

| Regression Statistics |        |
|-----------------------|--------|
|                       | 0.1824 |
| Adjusted              | 0.1616 |
| Observations          | 283    |

#### ANOVA

|            | df  | F      | Significance F |
|------------|-----|--------|----------------|
| Regression | 7   | 8.7656 | 0.0000         |
| Residual   | 275 |        |                |
| Total      | 282 |        |                |

|                  | Coefficients | t Stat  | P-value |
|------------------|--------------|---------|---------|
| Intercept        | 0.6417       | 13.7269 | 0.0000  |
| Log (TURN)       | 0.0578       | 5.1794  | 0.0000  |
| NPR              | 0.0148       | 0.8183  | 0.4139  |
| D/E              | -0.0003      | -0.6390 | 0.5234  |
| Log(Age)         | -0.0001      | -0.0023 | 0.9981  |
| Big 4 Audit firm | 0.0990       | 3.9335  | 0.0001  |
| Foreign Listing  | -0.0287      | -0.7091 | 0.4789  |
| For Own          | 0.0207       | 0.5535  | 0.5804  |

## Regression Results: Other (T) Group Companies

| Regression<br>Statistics |        |
|--------------------------|--------|
|                          | 0.1127 |
| Adjusted                 | 0.0760 |
| Observations             | 177    |

#### ANOVA

|            |     |        | Significance |
|------------|-----|--------|--------------|
|            | df  | F      | F            |
| Regression | 7   | 3.0671 | 0.0046       |
| Residual   | 169 |        |              |
| Total      | 176 |        |              |

|                  | Coefficients | t Stat  | P-value |
|------------------|--------------|---------|---------|
| Intercept        | 0.6668       | 7.7239  | 0.0000  |
| Log (TURN)       | 0.0262       | 2.4655  | 0.0147  |
| NPR              | 0.0000       | 0.2127  | 0.8319  |
| D/E              | 0.0636       | 2.9942  | 0.0032  |
| Log(Age)         | -0.0262      | -0.4206 | 0.6746  |
| Big 4 Audit firm | 0.0093       | 0.1154  | 0.9082  |
| Foreign Listing  | 0.1803       | 1.5618  | 0.1202  |
| For Own          | 0.1007       | 0.9909  | 0.3232  |

# Factors leading to Better Disclosures

| Sample    | No. of    | Model     | Significant |
|-----------|-----------|-----------|-------------|
| Companies | samples   |           | Variable    |
|           | companies |           |             |
| Overall   | 500       | 1         | Size        |
| Sample    |           | (Turnover | (Turnover), |
|           |           | as Size)  | Big 4       |
|           |           |           | Audit firm, |
|           |           |           | Foreign     |
|           |           |           | Listing     |

# **Factors leading to Better Disclosures**

| Sample Companies                                   | No. of samples<br>companies   | Model  | Significant Variable  |
|--|-------------------------------|--|---|
|  |                               | 2 (Listing Status as Size)                       | Listing Category, Big<br>4 Audit firm, Foreign<br>Listing             |
| Manufacturing<br>Companies                         | 336                           | 1 (Turnover as Size)<br>1 (Total Assets as Size) | Size (Turnover/Total<br>Assets), Big 4 Audit<br>firm, Foreign listing |
|  |                               | 2 (Listing Status as Size)                       | Big 4 Audit firm,<br>Foreign Listing and<br>Listing Category          |
| Service Companies                                  | 164                           | 1 (Turnover as Size)                             | Size (Turnover), Big 4<br>Audit firm                                  |
|  |                               | 2 (Listing Status as Size)                       | Listing Category, Big<br>4 Audit firm                                 |
| Less than 20 years old                             | 179                           | 1 (Turnover as Size)                             | Size (Turnover), Big 4<br>Audit firm                                  |
|  |                               | 2 (Listing Status as Size)                       | Big 4 Audit firm  |
| 20 to 50 years old                                 | 232                           | 1 (Turnover as Size)                             | Size (Turnover), For<br>Listing,NPR                                   |
| Financial Reporting by I<br>with Accounting Standa | Indian Companies: Comp<br>rds | 2 (Listing Status as Size)                       | Listing Category and<br>Foreign Listing,<br>Listing Category          |
| More than 50 years                                 | 88                            | 1 (Turnover as Size)                             | Size (Turn) Foreign   |

# **Correlation Matrix - Model 1**

|                          | CI       | Big<br>Audit<br>Firm Y/N | NPR      | D/0<br>Ratio | Age      | For Own  | Foreign<br>Listing | Turnov0r<br>(Rs.<br>Cror0s) |
|--------------------------|----------|--------------------------|----------|--------------|----------|----------|--------------------|-----------------------------|
| CI                       | 1        |                          |          |              |          |          |                    |                             |
| Big Audit Firm Y/N       | 0.081238 | 1                        |          |              |          |          |                    |                             |
| NPR                      | 0.119685 | 0.256358                 | 1        |              |          |          |                    |                             |
| D/0 Ratio                | 0.07771  | -0.01412                 | -0.0458  | 1            |          |          |                    |                             |
| Age                      | 0.086902 | 0.154949                 | 0.036531 | 0.165268     | 1        |          |                    |                             |
| For Own                  | -0.01463 | 0.111044                 | -0.06552 | -0.06897     | 0.172851 | 1        |                    |                             |
| Foreign Listing          | 0.094688 | 0.334601                 | 0.293348 | 0.01846      | 0.050192 | 0.058302 | 1                  |                             |
| Turnov0r (Rs.<br>Cror0s) | 0.045677 | 0.122322                 | 0.003645 | -0.02182     | 0.031137 | 0.001135 | 0.069477           | 1                           |



# **Correlation Matrix - Model 2**

|                       | CI       | Big Audit<br>Firm Y/N | NPR      | D/0 Ratio | Age      | For Own  | Foreign<br>Listing | Listing<br>Category |
|-----------------------|----------|-----------------------|----------|-----------|----------|----------|--------------------|---------------------|
| CI                    | 1        |                       |          |           |          |          |                    |                     |
| Big Audit Firm<br>Y/N | 0.081238 | 1                     |          |           |          |          |                    |                     |
| NPR                   | 0.119685 | 0.256358              | 1        |           |          |          |                    |                     |
| D/0 Ratio             | 0.07771  | -0.01412              | -0.0458  | 1         |          |          |                    |                     |
| Age                   | 0.086902 | 0.154949              | 0.036531 | 0.165268  | 1        |          |                    |                     |
| For Own               | -0.01463 | 0.111044              | -0.06552 | -0.06897  | 0.172851 | 1        |                    |                     |
| Foreign Listing       | 0.094688 | 0.334601              | 0.293348 | 0.01846   | 0.050192 | 0.058302 | 1                  |                     |
| Listing<br>Category   | 0.17647  | 0.140053              | 0.071432 | 0.156306  | 0.007462 | 0.090432 | 0.131523           | 1                   |



# **Factors affecting Disclosure**

# Size

| Possible Reasons   | Past Evidence   |
|--|---|
| <ul> <li>This is supported by the notion that accumulation and dissemination of information is costly affair and hence large firm can easily afford it.</li> <li>Large firm also frequently raise funds from security market for financing and therefore it leads to disclosure by them to comply with different regulations.</li> <li>Large firm are also watched more by Government and other stakeholder who make them more compliant.</li> </ul> | Singhvi and Desai (1971), Belkaoui and Kahl<br>(1978), McNally <i>et al.</i> (1982), Cooke<br>(1992), Inchausti (1997), Dumontier and<br>Raffournier (1998), Joshi and Mudhahki<br>(2001) Karirn and Ahmed (2005) and Cerf<br>(1961). |

# Audit Firm

| Possible Reasons  | Past Evidence  |
|---|--|
| <ul> <li>This may be because they have better manpower, experience, training facilities and audit tools, which make them well-equipped for monitoring companies.</li> <li>Large audit firm also have a choice in the type of clients and work which they undertake unlike small firms.</li> </ul> | Street and Gray (2001), Glaum and Street<br>(2003), Signhvi and Desai(1971),<br>Raffournier(1995), Wallace and Naser(1995)<br>Inchausti(1997), Naser et al(2002) |

# Foreign Listing

| Possible Reasons   | Past Evidence  |
|--|--|
| <ul> <li>This may be because<br/>foreign listed firms are<br/>subject to broader range of<br/>regulatory compliances.</li> <li>They have to face diverse<br/>financiers and fulfil their<br/>demand of higher disclosure.</li> </ul> | •Cerf (1961) Glaum and Street (2003),<br>Owusu-Ansah (1998), Chow and Gray<br>(2002) and Malone et al(1993). |

# Leverage

- Leverage has been found significant for companies listed (Other than A and B Group) with BSE.
- This may be because Lenders put pressure on such companies to be more transparent.
- This has been found consistent with the previous studies like that of Malone et al (1993) Bujaki and McConomy (2002) Naser et al. (2002) Prencipe (2004).
# **Practical Implications**

- It would act as an alarm for standard setting bodies ICAI, ASB and NACASA as compliance level by many companies have been low.
- It would help regulatory authorities like SEBI, Stock exchanges and Ministry of Corporate Affairs (MCA) to frame appropriate policies to curb practices of lower level of compliance which may lead to frauds and malpractices.

- It may help in framing policies that may have appropriate targets (e.g. particular area of AS with lower compliance) to improve level of compliance.
- It may help Accounting professionals, corporate accounts department and auditors to be more careful.
- It can help lenders to take into account factors that are associated with low compliance. They may improve their review for weaker areas.
- It would help Portfolio Managers, Financial Analyst, and Investors to assess the level of compliance by companies before taking investment decision.

### Limitations of study

- While selecting samples some companies could not considered due to non-availability of annual report. Though this is a very serious non-compliance, it gets ignored in the study.
- The present study is restricted to listed companies only.
- The findings are from sample companies which represents only 10% of listed companies.
- The study has relied on the published report, assuming accuracy of information provided.

## **Further Research Directions**

- This study is related to mandatory disclosures. One can possibly study voluntary disclosure level of companies.
- This study is related to Indian companies. It can be extended to international level. It is possible to conduct comparative study of Indian companies with foreign companies.
- It is possible to conduct similar study for unlisted companies as well; however availability of data could be a cause of concern.
- Similar study can also be conducted for IFRS Compliance.

## **Publications**

### Textbook

• *"Financial Accounting - A Managerial Perspective"*, by Varadraj Bapat and Mehul Raithatha published by **Tata McGraw Hills Publishing**, Delhi. (ISBN: 9781259004889)

### Journals - International

### Published

- Raithatha Mehul and Bapat Varadraj (2013), "A Panel Data Analysis of Corporate Attributes and Stock Prices for Indian Manufacturing Sector", *Journal of Modern* Accounting and Auditing. (ISSN: 1548-6583). (Rated as "C" as per Australian Business Dean Council (ABDC))
- Raithatha Mehul and Bapat Varadraj (2013), "Corporate Disclosures in Financial Statements and its Determinants: An Empirical Study", *The journal, Academy of Taiwan Business Management Review, Vol 9, No 2, Aug 2013.* (ISSN is 1813-0534). (Rated as "B" as per Australian Business Dean Council (ABDC))
- Raithatha Mehul and Bapat Varadraj (2012), "Corporate Governance Compliance Practices of Indian Companies", *Research Journal of Finance and Accounting, Vol 3, No* 8, 2012. (ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online)) (IC Impact factor 6.26)



Financial Reporting by Indian Companies: Compliance with Accounting Standards

#### Journal – Indian

- Bapat Varadraj and Raithatha Mehul (2012), "Off Balance Sheet Disclosures: A Comparison between Indian and US Companies", *Indian Journal of Finance*, May. (ISSN 0973-8711) (*IC Impact factor* 5.09)
- Bapat Varadraj and Raithatha Mehul (2010), "An Empirical Study of Disclosure Practices in Listed Non-Financial Indian Companies", *Prabandhan- Indian Journal of Management*, June. (ISSN 0975-2854) (*IC Impact factor* 5.09)
- Bapat Varadraj and Raithatha Mehul (2010), "Corporate Transparency through Implementation of Indian Accounting Standards", *International Journal of Management Prudence*, March. (ISSN: 0975-6671)
- Bapat Varadraj and Raithatha Mehul (2010), "Corporate Governance Models and Practices: An International Cross Cultural Comparison," *IMS Management Journal*, January (ISSN- 0975-0800)

Financial Reporting by Indian Companies: Compliance with Accounting Standards