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**DISCLOSURE AND COMPLIANCE PRACTICES AND ASSOCIATED CORPORATE  
CHARACTERISTICS - A STUDY OF LISTED COMPANIES IN INDIA**

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of  
Philosophy in Business at Virginia Commonwealth University

by

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## LIST OF ABBREVIATIONS

AS	Accounting Standards
ASB	Accounting Standards Board of India
ASE	Amman Stock Exchange
BSE	Bombay Stock Exchange of India
CMIE	Center for Monitoring the Indian Economy
CSR	Corporate Social Responsibility
CSRC	Chinese Securities Regulatory Commission
DIP	Disclosure and Investor Protection
EU	European Union
EUFDCCI	European Union Fourth Directive Compliance and Disclosure Index
GAAP	Generally Accepted Accounting Principles
GCC	Gulf Co-Operation Council
IAS	International Accounting Standards
IASB	International Accounting Standards Board
IASC	International Accounting Standards Committee
ICAI	Institute of Chartered Accountants of India
ICT	Information, Communication and Technology
IFRS	International Financial Reporting Standards
INR	Indian National Rupee
MCA	Ministry of Corporate Affairs
NACAS	National Advisory Committee on Accounting Standards

NSE	National Stock Exchange of India
SEBI	Securities Exchange Board of India
UK	United Kingdom
US	United States of America
USD	United States Dollar
ZSE	Zimbabwe Stock Exchange

## ABSTRACT

### DISCLOSURE AND COMPLIANCE PRACTICES AND ASSOCIATED CORPORATE CHARACTERISTICS - A STUDY OF LISTED COMPANIES IN INDIA

by Meha Kohli

A dissertation proposal submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University

Virginia Commonwealth University, 2012

Major Director: Dr. Rasoul H. Tondkar  
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The present study empirically investigates the level of compliance by listed Indian firms with disclosure requirements of Indian Accounting Standards. India's Accounting Standards have been gradually converging with the International Financial Reporting Standards (IFRS) since 2001. India currently stands on the verge of adopting the International standards. Indian companies are working fervently towards adopting IFRS. This provides an extraordinary research environment to assess the level of compliance during this transitional time as well as lending an opportunity for a post adoption study. This study addresses two research questions developed to review annual reports of 156 listed Indian firms to determine (1) their current level of compliance with selected disclosure requirements of Indian Accounting Standards, and (2)

key corporate characteristics that affect their level of compliance. The data used for the study pertains to the financial year 2009-2010 and utilizes disclosure and compliance index methodology to calculate the level of disclosure.

Overall, the findings of this study indicate none of the companies in the sample was fully compliant with the mandatory requirements of the Indian Accounting Standards. On average, level of disclosure made by Indian companies based on selected mandatory disclosures is 70.91%. Nevertheless, the disclosure levels were on an average comparable to results from similar studies conducted in other developing countries. Moreover, results indicated a strong and positive association between level of disclosure and the size, profitability and timeliness of reporting of the sample companies.

## **CHAPTER I**

### **INTRODUCTION**

Over the past 40 years, rapid and persistent globalization of financial markets has created a demand for globally comparable financial reporting standards. Capital market regulators, professional accountants, and academics desire transparent and consistent reporting. Fueled by relentless calls of these groups it has been the primary objective of the International Accounting Standards Board (IASB), since its inception, to issue a series of reliable and comprehensive international financial reporting standards (IFRS). Since 2005, there has been widespread adoption of IASB standards either on a mandatory or voluntary basis which has led to much literary deliberation including a review of level of the mandatory disclosures and compliance and role of enforcement bodies in promoting compliance (Baker and Barbu, 2007). In a study on Australian Accounting Standards Board, Walker (1987) argued that regulation of financial reporting systems and construction of quality accounting standards setting is ineffective in the absence of compliance. Nearly 120 countries around the world require or permit the use of IFRS for domestic listed companies. Of those 120 countries, approximately 90 countries fully comply with IFRS as promulgated by the IASB and include a statutory declaration acknowledging compliance in their audit reports. Other countries that aspire to progress to IFRS in coming years are Canada and South Korea (year 2011); Mexico (year 2012); and Japan (approximate adoption year 2015 or 2016).<sup>1</sup>

While international accounting standards have benefited companies all over the globe, it has served companies in the developing countries more than those in developed countries.

Developing countries compete for foreign direct investment and the lack of credibility of reported financial information often adversely affects their ability to attract foreign investment. Adopting global accounting standards or the International Accounting Standards (IAS) is one way to attract foreign investment and obtain competitive capital by offering transparent financial information to the international investor market.

Countries such as India plan to converge their national accounting standards with IFRS; however, India is in the process of transitioning from Indian Generally Accepted Accounting Principles (GAAP) based on IFRS to formal adoption of IFRS. India is willing to adopt IFRS as its official accounting system. It has been working on converging with the international standards since 2001.<sup>2</sup> Currently, Indian companies follow Indian GAAP, which is some form of IFRS. According to Ding, Jeanjean and Stolowy (2005) variations between national GAAP and IFRS can differ in two ways: divergence and absence. While divergence means both national GAAP and IAS (IFRS) include a particular accounting issue but suggest different approaches, absence means that national GAAP does not include an accounting issue regulated by IFRS. The Indian GAAP is largely converged with IFRS; however, some standards are absent. The authorities intended to adopt IFRS in a phased manner over three years, tentatively starting in 2012. This period of transition is an opportune time for research on the current level of compliance (or divergence) with IFRS based Indian GAAP. In addition, this study provides insight into the expected level of compliance with IFRS in the future. Although an IFRS compliance investigation is pending, the present study is appropriate to assess the current level of compliance of specific listed Indian companies with converged Indian GAAP. Results of this study can provide insight into the level of compliance with IFRS, if and when, India formally adopts IFRS.

This study examines the compliance with disclosure requirements of the converged Indian GAAP in effect during fiscal year 2009-2010.

India is the 12<sup>th</sup> largest economy in the world and the third largest in Asia, following only Japan and China with total gross domestic product of about \$1.21 trillion in 2008.<sup>3</sup> According to the United States Department of State, statistics India was the fastest growing economy in the World at eight percent per annum in 2010.<sup>4</sup> For an emerging economy like India, the level of investment and economic activity hinges upon investor confidence in the prevailing investment environment. As the Indian economy has continued to grow, the essence of Indian corporate accounting has shifted from merely tracking “what the company did in the past” to “how it can use accounting information to extrapolate the company’s future”. The primary reason for renewed interest in corporate accounting systems is to build investor confidence. India at this time is an attractive destination for foreign investors and has a stock of the outward looking domestic enterprises that are entering, or are ready to enter international financial markets. The investment environment in India has undergone tremendous change in the past few decades. In the process of such change, knowledge of the extent of compliance is indispensable for both domestic and foreign investors.

### **Development of Capital Markets and Standard Setting in India**

As recognized in contemporary literature, accounting reporting and disclosure standards do not develop in a vacuum; they are a result of the environment in which they are developed (Adhikari and Tondkar, 1992). Due to the colonization of India in the 19<sup>th</sup> and 20<sup>th</sup> centuries by the British, the British accounting significantly influenced the Indian accounting system. The origins of the current Indian accounting system can be traced back to Act X of 1866 and the

Indian Company Act of 1882 both introduced by British colonizers. These laws made it mandatory for joint stock companies with limited liability to submit their financial statements in the prescribed format (Goswami, 2004). These Acts pioneered the enforcement of statutory law for the governance of joint stock companies in India. Until India gained independence from British rule in 1947, these Acts were reviewed and amended by the British according to the English Companies Act. Post-independence, the Indian government conducted extensive exploratory work on the revision of the Indian Companies Act of the British era. The result of this revision enacted on April 1, 1956 is now the Companies Act of 1956. The Act has been amended 24 times over the past 60 years. The latest amendment was in 2009.

Post-independence, India's trade regulation was amongst the most restrictive in Asia. During the development of international trade in the 1980s, the Indian government was compelled to open the Indian economy to international trade. Thus, the focus of India's growth strategy gradually shifted toward export-led growth, which led to the process of economic liberalization in India. Radical changes were introduced to the development policies in 1992, which laid the foundation of liberalization in India. Economic liberalization, which began in the early 1990s and has served to accelerate the country's progress, included industrial deregulation, privatization of state-owned enterprises and reduced controls on foreign trade and investment. Following liberalization, the investment environment in the country has changed vastly. The Indian government now allows foreign investors to operate in the Indian market provided they conform to certain restrictions. This increased foreign investment has driven India to an average growth of more than seven percent per annum since 1997.<sup>5</sup>

In order to raise the quality of financial reporting, and attract more foreign investments in India the convergence of Indian Accounting Standards with IFRS was inevitable. Since 2001, the



accounting standards in India have been gradually converged with IFRS.<sup>6</sup> The issuance of improved national standards was aimed at enhancing the transparency and usefulness of financial statements, boosting investor confidence in the credibility of Indian financial reporting, and increasing the amount of investment in the economy. The Central Government of India instituted the National Advisory Committee on Accounting Standards (NACAS) in 2001 with the intention of fully adopt IFRS by year 2011. In December 2006, NACAS made its first set of recommendations to improve the Indian accounting standards. These recommendations facilitated disclosure of company accounts in a transparent manner at par with widely accepted international practices.<sup>7</sup> However, converged Indian GAAP remains finely tuned to local state of affairs, including the legal and economic environment. The standards vary from IFRS on specific requirements to be consistent with the legal, regulatory and economic structure of India (D'Souza, Parikh, Spargo and Bansal, 2010). These deviations are kept to a minimum to ensure comparability of financial statements, along with, seamless consolidation.

### **Accounting Regulation for Listed Indian Firms**

The Companies Act of 1956, the stock market, and the accounting profession govern accounting regulation in India. The Institute of Chartered Accountants of India (ICAI) was instituted under the auspices of the aforementioned Companies Act of 1956, which allowed the Institute to become a statutory monopoly in auditing financial statements of most Indian companies. The ICAI is the premier accounting standard setting body in India, which issues and mandates compliance with Indian accounting standards. Being a member body of the International Accounting Standards Committee (IASC, the predecessor of the IASB), ICAI established the Accounting Standards Board (ASB) in India on April 21, 1977. The aim was to harmonize the

diverse accounting policies and practices in use in India. While formulating accounting standards, the ASB takes into consideration the applicable laws, customs, usages and business environment prevailing in the country.

Beginning April 1, 2011, Indian companies<sup>8</sup> with a net worth of Rs. 1,000 crores (equivalent to approximately 220 million US dollars) or more; companies, which are part of the two most followed stock indices of the Bombay Stock Exchange (BSE) and National Stock Exchange, (NSE); and companies listed in overseas exchanges were required to adopt IFRS. By April 2014, all listed companies were required to comply with IFRS. However, the Ministry of Corporate Affairs in India (MCA) postponed the full adoption of IFRS on February 26, 2011, for an indefinite period due to unrelenting lobbying by the corporate sector and unresolved taxation issues.<sup>9</sup> Such deferral has left the timeline of the convergence process in India ambiguous.

### **Objectives and Scope of the Study**

Currently, there is a void in international accounting literature on the level of compliance of listed Indian companies with certain Indian standards that had been converged with IFRS up to 2010 (these standards are discussed further in the study). The present study has two objectives. First, it intends to investigate compliance with mandatory disclosures by listed Indian firms. The Indian accounting system requires strict adherence with regulatory requirements and mandatory information disclosure by listed companies. This requirement enables investors to make informed decisions regarding investments. Second, it attempts to identify the corporate characteristics that influence disclosure practices of firms listed on Indian stock exchanges.

Hence, the main research questions of the study are:

- (1) What is the extent of compliance with disclosure requirements by listed companies in India?
- (2) What corporate characteristics influence the extent of the disclosure requirement by listed companies in India?

In international accounting research, many compliance studies have been conducted. Cairns (1999) documents nine categories of firm compliance with standards, ranging from full compliance to “unqualified description of differences.” Street, Gray and Bryant (1999) in their study reported significant noncompliance in many areas. The following year Street and Bryant (2000) reported that the overall level of compliance of sample firms was less than or equal to 75 percent for most of the standards they examined. Companies in India claim full compliance with Indian accounting standards, which have been converged. In the event of any departure from the applicable standards, the members of ICAI are expected to report them. While external auditors (members of ICAI) often argue that financial statements issued by companies comply with the mandatory disclosures requirements of the Indian Accounting standards, there is no research to support this contention. In emerging countries such as India, there are a number of reasons to comply with disclosure regulations, as well as different reasons for noncompliance. Two probable reasons for noncompliance are lack of effective enforcement mechanisms and ambiguity in application of standards. A World Bank report (2004) pertaining to Indian accounting standards documents evidence of noncompliance despite a significant overall improvement in the financial reporting practices in the country over the past decade. The World Bank report included a review of 50 sets of published annual reports of selected leading

enterprises. The report indicated noncompliance with certain accounting standards and applicable statutes. In addition to the sample review, the World Bank report cited interviews conducted with experienced senior corporate accountants, financial analysts, practicing auditors, academics, and regulators that revealed several instances of compliance gap. The study concluded that accounting standards, specifically those pertaining to segment reporting, earnings per share, calculation of profit for the purposes of determining director/management remuneration and value of investments, were not being followed adequately.

The ICAI is aware of some problem areas that impede successful compliance with accounting standards for listed Indian companies. ICAI specifically identifies ten topics in which different levels of compliance have been reported- methods of depreciation, depletion and amortization; treatment of expenditure during construction; conversion or translation of foreign currency items; valuation of inventories; treatment of goodwill; valuation of investments; treatment of retirement benefits; recognition of profit on long-term contracts; valuation of fixed assets; and treatment of contingent liabilities (Indian Accounting Standard 1). On similar lines, the 2004 World Bank report noted that the Indian stock market is lenient in its enforcement of disclosure policies and levies limited penalties for noncompliance. This lack of strict enforcement creates an element of choice in the level of mandatory disclosure by companies. In the absence of a robust arrangement for monitoring and enforcing compliance with these requirements, the possibility of significant noncompliance exists. In order to determine the level of compliance of companies with certain accounting standards, this study employs a comprehensive and unique disclosure framework suitable for India.

## Contributions to Literature

The present study contributes to the literature in three different ways. First, it attempts to develop a disclosure instrument. The study uses a disclosure instrument to determine the level of compliance by 156 listed Indian companies for fiscal year 2009-2010. Second, it investigates the degree of compliance with selective mandatory disclosure requirements including ten accounting standards that have been reported for noncompliance by listed companies in India.

Third, this study examines the impact of company specific variables such as size, industry type, type of auditor, ownership structure and overseas cross-listing status that affect the company's compliance with mandatory disclosure requirements. Multiple studies in the extant literature have already established the relationship between level of disclosure and corporate characteristics. Nevertheless, results of studies conducted in the Western countries and other developed countries cannot be extrapolated to suit the Indian context. According to Ahmed and Courtis (1999), country specific socio-economic and political environment influences corporate characteristics. Cooke (1992) emphasized that findings of one country cannot be applicable to the other because different countries have different and unique business environments as well as unique cultures. In general, according to Adhikari and Tondkar (1992) listed companies in developed markets tend to follow more mandatory disclosure requirements than their listed counterparts in developing markets. Considering that India is an emerging market, there is little evidence of how corporate characteristics may affect the level of compliance of Indian companies. Hence, absence of a study specific to India is indeed a void in the literature, which the present study intends to fill.

Findings of this study may provide an opportunity for researchers to corroborate the results of this study with findings of prior studies on other emerging economies. The present

study provides information on corporate characteristics that affect firm compliance practices in India, which should be of interest to international investors. The success of capital markets depends significantly on the effective flow of information between member companies and its stakeholders. The stakeholders use disclosure of information as a means to improve marketability of shares, enhance corporate image, and assist in reducing the cost of capital (Meek, Roberts and Gray, 1995). Better understanding of the fundamentals of the Indian stock market and factors influencing performance of the companies should provide both domestic and international investors an opportunity for investment. Possessing relevant information will allow investors to make reliable investment decisions that may in turn assist Indian companies to attract capital from a larger pool of investors. This may drive the cost of capital down and promote financial flows between Indian and other multinational companies.

Lastly, findings of the study may have public policy implications, which may be of interest to the Indian government, accounting standard setters, and regulators in India. In the wake of adopting IFRS in the near future, it would help authorities in India to understand the current level of compliance such that they can better prepare themselves to plan and promote successful implementation and application of the international standards.

## **Organization of the Study**

Remainder of this study is organized as follows: Chapter 2 reviews the literature pertaining to India, as well as compliance and corporate characteristics. Chapter 3 focuses on the methodology of the study, including identification of the independent and dependent variables, development of hypotheses, sample selection process, and the tools of data analysis. Chapter 4 discusses the results and Chapter 5 concludes the study.

## **CHAPTER II**

### **LITERATURE REVIEW AND THEORETICAL DEVELOPMENT**

Corporate disclosure is reporting of qualitative and quantitative firm information that is financial and non-financial in nature. Such information helps corporations communicate information about the functioning of their company to various interested parties such as investors, creditors and other stakeholders to aid their analysis and decision-making. Based on the type of information, corporate disclosures are either mandatory or voluntary. Mandatory disclosures refer to disclosures that a company is obligated to make under a regulatory regime. To the extent that such disclosures are applicable to a company, these mandatory disclosures include stock exchange requirements, pronouncements of the professional body, and applicable statutory laws. Wallace and Naser (1995); Owusu-Ansah (1998) and Akhtaruddin (2005) have defined mandatory disclosure as the presentation of a minimum amount of information that must be disclosed in company annual reports to allow stakeholders such as investors, suppliers, customers, creditors, government and other legal authorities to weigh the relative merits and risks associated with the company. It is difficult to quantify how much disclosure is adequate disclosure; in general, it is a function of quality and quantity of information (relevance), appropriate presentation (comparability) and timeliness. Conversely, voluntary disclosures are disclosures reported, in addition to the mandatory requirements, at the discretion of the management of a company to furnish information that they deem relevant. Voluntary disclosures often provide information specific to an industry or to exceptional economic conditions. Several studies have investigated voluntary corporate disclosure practices and have identified firm characteristics influencing such disclosures (Chow and Wong-Boren, 1987; Haniffa and Cooke,



2002; and Barako, Hancock and Izan, 2006). Study of voluntary disclosure practices is beyond the scope of this current study. The present study focuses only on mandatory disclosures and compliance with related disclosure requirements by listed Indian companies.

### **Compliance and Corporate Characteristics**

Managers of companies often decide whether to make disclosures based on a variety of factors. Prior research indicates that the size, industry, profitability, listing status, complexity of business, board composition, ownership, auditor type, analyst following, financial leverage, international operations and national culture among other factors, influence the management's decision to make disclosures (Cooke, 1989; Lang and Lundholm, 1993; Gray and Vint, 1995; El-Gazzar et al., 1999; Ho and Wong, 2001; Lobo and Zhou, 2001; Akhtaruddin, 2005). Theoretical arguments based on two disclosure theories; agency theory and political process theory suggest that companies' level of disclosure and compliance may vary based on their respective corporate characteristics (Curuk, 2009). Studies that have examined important corporate characteristics of companies and their influence on the extent of information disclosed by companies in various countries are Cooke (1989 and 1992); Lang and Lundholm (1993); Lobo and Zhou (2001); Gray and Vint (1995); Owusu-Ansah (1998); Wallace and Naser (1995); Hossain (2000); Inchausti (1997); and Akhtaruddin (2005). Other studies discussing company characteristics and disclosure and compliance include Adhikari and Tondkar (1992); Street et al. (1999); Gray, and Bryant (1999); Street and Bryant (2000); Street and Gray (2001 and 2002); Hodgdon, Tondkar, Harless and Adhikari (2008). The studies mentioned above investigated the relationship between corporate characteristics and disclosure levels. Specific mention needs to be made of studies conducted by Marston and Shrivs (1991 and 1995), Wallace, Naser and Mora (1994), and

Ahmed, and Curtis (1999). These studies reviewed the extant literature on disclosure index studies and summarized their results.

### **Disclosure and Compliance studies on Developed Economies**

The earliest studies on level of disclosure and compliance were conducted by Cerf (1961) and Singhvi and Desai (1971). Beginning with these studies, the analysis of financial reports to discern the level of disclosure and compliance has been an endless topic of accounting enquiry. In his study, Cerf (1961) examined annual reports of 527 firms including 258 firms listed on the New York Stock Exchange (NYSE), 113 firms listed on other exchanges and 156 unlisted firms for years 1956-57. Regression analyses performed on 31 weighted items revealed a positive relation between disclosure and: (1) asset size, (2) number of stockholders, and (3) profitability. In a follow up study, Singhvi and Desai (1971) retested the findings by Cerf. In addition, they tested the relationship between the quality of disclosure and several variables. Their sample included 100 companies listed on NYSE and 55 over-the-counter firms for the years 1965-1966. They used all the weighted items included in Cerf's study as well as three additional items, and concluded that a low level of disclosure is associated with smaller firms, which were free from listing requirements, audited by small CPA firms, and were less profitable. Additionally, these firms had comparatively more volatile stock prices.

Subsequently, Cooke (1989) conducted more studies on disclosure practices. The author investigated the association among corporate characteristics and extent of disclosures of Swedish companies. The study concluded that disclosure varies among companies. Cooke also concluded that size and listing status (unlisted, listed on one exchange, or multiple stock exchange listings) of the company influences its extent of disclosure. In another study, Cooke (1992) investigated

the association between the extent of aggregate disclosure (including both mandatory and voluntary items) and (1) size, (2) stock market listing, and (3) industry type of 35 listed Japanese corporations. Cooke's study concluded that companies with multiple listing and larger corporations disclosed more information. Moreover, manufacturing corporations disclosed more information compared to corporations in other industries. In a subsequent study, Cooke (1993) investigated disclosure levels in Japanese corporations' annual reports, specifically the difference between corporations following the traditional Commercial code requirements versus those following the Securities and Exchange law requirements. The study concluded that firms following different regulations made different levels of disclosures.

Marston and Shrives (1991) reviewed studies on disclosure practices prior to 1986 and concluded that most studies sought to establish a relation between disclosure level and corporate size, listing status, financial leverage, profitability and size of audit firms. The study concluded that there was a significant and positive relation between corporate size and listing status and disclosure. Relationships with the other variables were inconclusive. In a subsequent study, in 1995, Marston and Shrives reviewed 32 more studies and concluded that the relationship between disclosure levels and leverage, profitability and size of audit firm was inconclusive.

Lang and Lundholm (1993) reviewed annual reports of 751 firms. These firms were rated at least once in the Financial Analysts Federation Reports between years 1985 and 1989. The authors used regression analysis on analyst ratings of disclosure categories. The study concluded that disclosure scores were higher for firms: (1) that performed well, (2) that were larger, and (3) that had a weak relationship between annual stock returns and earnings. The study predicted that structural variables of the study - firm size and correlation between annual earnings and annual market adjusted return influenced the level of disclosure in the annual reports.

In an attempt to establish a relation between accounting values popularized by Gray (1988) and corporate characteristics of Hong Kong companies, Wallace and Naser (1995) conducted an investigation into the corporate reporting practices of 80 Hong Kong listed firms. Results of their regression analysis suggested that total assets, profit margin, type of independent auditor, and nature of business influenced the extent of disclosure. Market capitalization, liquidity ratios, earnings return on equity and outside shareholders' interests were less influential in determining the extent of disclosure.

In a study of reporting practices of Spanish firms, Inchausti (1997) examined the influence of seven corporate characteristics (size, listing status, profitability, leverage, type of auditing firm, type of industry and dividend payout policy) on the extent of disclosure. Results indicated that larger firms, listed on multiple stock exchanges, and those audited by then Big 6 audit firms disclosed more information. In addition, the study concluded that variables such as profitability, leverage, dividends, and industry did not influence the level of disclosure.

In 1999, Ahmed and Courtis published a meta-analysis of the association between corporate characteristics and disclosure level in Annual reports. Their study analyzed several monographs and published articles in professional and refereed journals, between 1968 and 1997. Besides including pioneering studies such as Singhvi and Desai, 1971, it included 28 other studies. The meta-analysis indicated that the association between disclosure levels and size of the firm, profitability, listing status, leverage and size of audit firm and industry type were generally inconclusive. The authors attributed the inconclusiveness of their study to multiple factors. Variation in results of association between company size and disclosure levels may exist due to variation in stock exchange listing requirements regarding size of a company. Moreover, results regarding the type of industry may differ based on varying definitions of industry classifications.

Other variations in results may occur due to cultural characteristics of the country considered in the study, differences in proxies utilized, influence of moderating variables and sampling error.

Other studies that were conducted in the 1990s on disclosure practices of firms included Gray et al., 1994; Raffournier, 1995; and Schadewitz and Blevins, 1996. These studies investigated firms listed on various stock exchanges around the world and drew conclusions that there were significant differences in disclosure practices of firms. The result showed differences between firms listed internationally and those listed domestically (Gray et al., 1994). Moreover, there were differences in level of disclosure in relation to size and degree of internationalization of a firm (Raffournier, 1995). Schadewitz and Blevins (1996) also noted that differences existed between levels of disclosure and (1) corporate governance, (2) business risk, (3) growth of the company, (4) growth potential, (5) size of the company and (6) regulation.

Several other studies (Street et al., 1999; Glaum and Street, 2003; Street and Bryant, 2000; Street and Gray, 2001) document significant non-disclosure that leads to noncompliance with the disclosure requirements of IAS. Street et al. (1999) studied the reporting practices of 49 major companies from 12 countries in 1996. Their results revealed significant noncompliance with IAS finding only 41 percent of companies in the sample complied with all IAS. Some companies claiming compliance in their accounting policy, financial statement footnotes and audit opinion, were in fact noncompliant. The four areas in which substantial noncompliance was encountered were revenue (IAS 18), valuation of inventory (IAS 2), net profit or loss for the period (IAS 8) and violation of guidelines on extraordinary items (IAS 8). Other areas of the noncompliance were research and development costs, capitalization of development costs, property, plant and equipment, retirement benefit costs, effects of changes in foreign exchange rates and business combinations. The study concluded that claims of compliance by companies

lacked certainty because the level of compliance varied despite claims of full compliance. Evidence from the studies mentioned above suggested that there was a distinction between the willingness to claim compliance with standards and the willingness to meet the requirements. Actual compliance varied across companies.

Street and Bryant (2000) studied the level of disclosure and compliance of companies with differential listing status. The three categories studied were companies with (1) U.S. listings, (2) U.S. filings, and (3) without U.S. listings or filings<sup>10</sup>. A sample of 83 global companies was examined for level of disclosure and compliance and the impact of various corporate characteristics (such as company size, listing status, profitability, type of industry), manner in which companies refer to the use of IAS in the accounting policies footnote and audit opinion on annual report disclosures. Findings revealed that compliance with IAS is greater for companies with U.S. listings or filings and companies that specifically stated in their accounting policies footnote that IAS were followed to prepare the financial statements.

A study by Street and Gray (2002) investigated the application of IFRS around the globe and company compliance with IFRS. The study examined the extent of compliance and the factors associated with such compliance. The study included 279 annual reports of global companies for the year 1999. It investigated the association of the degree of compliance with IAS disclosures and measurement/presentation requirements with key company characteristics. These characteristics included listing status, company size, profitability, industry affiliation, type of auditor, type of accounting standards used by the company as stated in their audit report and type of audit standards adhered to as stated in their audit report. Other characteristics include country of domicile, extent of multi-nationality, size of the home stock market and manner in which the companies referred to IAS in the accounting policies footnote. The study had two

separate indices to assess disclosure and measurement/presentation practices. The findings of the study confirmed significant and positive association between listing status of a firm and (1) firms operating in commerce and transport industry, (2) firms audited by the Big 5 + 2 firms, and (3) firms domiciled in China or Switzerland. Firms having US listing/filing and/or a non-regional listing had a negative association with firms domiciled in France, Germany or other western European countries. Similarly, IAS measurement and presentation practices had a significant and positive association with exclusive reference to the use of IAS, with firms domiciled in China. In addition, IAS management and presentation practices had a significant and negative association with firms domiciled in France and Africa. The research findings also suggested the need for IASB to encourage auditors other than Big 5 + 2 to enforce compliance when the companies make reference to IAS. In conclusion, the study confirmed that significant noncompliance existed, especially with respect to IAS disclosures and that there are key factors associated with levels of compliance.

Chatham (2008) examined the level of compliance and characteristics of sample firms from Switzerland, France and Sweden. Compliance with IFRS disclosure ranged between 70.25 percent and 95.31 percent. Swiss companies had the highest average compliance score of 85.3 percent and Swedish firms had the lowest compliance average of 75.8 percent. The study concluded that country of origin contributed to the level of variation with IAS compliance despite the fact that all sample companies belonged to the same geographical region and followed the same set of standards. Chatham concluded close relationship between analyst following and firm size. Moreover, it had a significant and positive relation with the extent of compliance. However, trading volume and earnings per share variability had no relation with IFRS compliance. Instead, having a large analyst following as well as relatively greater firm size

(as measured by market capitalization and number of employees) was associated with greater levels of IFRS compliance.

### **Disclosure and Compliance studies on Emerging Economies**

Most studies on financial reporting practices have examined practices of developed countries such as United States and United Kingdom for the reason that these countries affect the development of accounting theory and practices around the globe. Other studies such as Nair and Frank (1980) and Street et al. (2002) drew comparisons between disclosure practices in developed economies versus emerging economies. These studies aimed at obtaining a comprehensive understanding of level of disclosure and compliance by companies in developing countries. Several studies have examined the history of disclosure practices and compliance of firms listed on the stock exchanges of emerging economies such as China (Xiao, 1999; Tondkar, Peng and Hodgdon, 2003; Peng, Tondkar, Smith and Harless, 2008; Green, Morris and Tang, 2010), Russia (Morris, Voronina and Gray, 2006 and Preobrazhenskaya and McGee, 2003) and Spain (Wallace et al., 1994 and Inchausti, 1997).

A study on China conducted by Xiao in 1999 investigated corporate disclosure and compliance practices of 13 Chinese listed companies on Shanghai and Shenzhen Stock Exchanges. Tondkar et al. (2003) extended the study by Xiao and discussed the regulatory scenario in China. First, they investigated the establishment of the Chinese Securities Regulatory Commission (CSRC) that was established to regulate the emerging capital markets in China. Second, they reported the progress made by CSRC in its endeavor. Recent studies by Peng et al. (2008) and Green et al. (2010) have investigated the convergence of Chinese Accounting Standards with IFRS and the disclosure practices of the largest listed firms on the Chinese stock



exchanges. Green et al. (2010) concluded that with the reform of the Chinese Accounting Standards in 2005, firms' mandatory and voluntary disclosures improved compared to their pre-reform reports.

Russia is another emerging economy that is working towards addressing global market pressures to enhance the quality of financial reporting. Preobrazhenskaya and McGee (2003) found that the poor disclosure quality allegedly slowed equity market development and the level of international investments in Russia. Morris et al. (2006) conducted an empirical study of the determinants of corporate financial transparency and degree of compliance with IFRS by 102 Russian listed public companies. Their study concluded that corporate financial transparency and degree of compliance in Russia was positively and strongly associated with various factors, which include type of auditor, international listing, company size, percentage of government shareholdings, independence of company executives and the independence of chairperson of Board of Directors. However, overall transparency levels in Russia were below international benchmark levels set by the IASB (Morris et al., 2006).

Other studies focused on compliance with accounting standards applicable to a sample of domestic companies in emerging economies such as Malaysia, Bangladesh, Zimbabwe, Turkey, and Jordan. Al-Shammari, Brown and Tarca (2008) investigated the extent of compliance of companies with IFRS in the Gulf Co-Operation Council (GCC) countries including Bahrain, Oman, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. They concluded that there was significant association between country variation in compliance of 137 sample companies based on size, leverage, internationality, and industry.

In a study of 63 non-financial listed Bangladesh companies, Ahmed and Nicholls (1994) studied the degree of disclosure and compliance of companies impacted by size, influence of a

multinational company, total debt, professional qualification of the company's chief financial officer, and type of audit firm on the degree of disclosure and compliance. The study concluded that the level of compliance of the sample firms was low, and none of them disclosed all mandatory information. Regression analysis revealed that the degree of disclosure and compliance was significantly associated with being subsidiaries of multinational companies, and association with large audit firms. Moreover, a company audited by a large firm, influenced by a multinational company and managed by a qualified accountant had an estimated compliance of 88.5 percent.

Similarly, Owusu-Ansah (1998) studied 49 firms listed on the Zimbabwe Stock Exchange (ZSE). The author used a disclosure index consisting of 214 mandatory information items to investigate the extent of mandatory disclosure and reporting practices. The study also examined the influence of corporate attributes on mandatory disclosure. Attributes found positively and significantly associated with mandatory disclosure were company's age, profitability, multinational company affiliation, company size and ownership structure. In addition, audit quality, industry-type, and liquidity variables had no significant impact on mandatory disclosure practices of the sampled companies. Prior studies (including Wallace and Naser, 1995 and Cooke, 1992, 1993) had reported that companies with majority insider holding disclose less information in their annual reports. However, this study by Owusu-Ansah reported otherwise.

Akhtaruddin (2005) examined the relationship between mandatory disclosure and four corporate characteristics: size of the company, profitability, age of the company and industry type. The sample for this study included 94 companies listed on the Dhaka Stock Exchange as well as the Chittagong Stock Exchange, both in Bangladesh. The study concluded that an overall disclosure by companies was 43.53 percent that indicated low compliance. However, the

disclosure level was better than the findings of Hossain and Taylor (1998), where level of disclosure was only 29.33 percent. Age of the company and industry type had no bearing on disclosure. A similar study on Bangladesh by Karim and Ahmed (2005) examined only the Dhaka Stock Exchange and concluded that disclosure levels were positively associated with (1) the size of the firm, (2) the size of audit firms in terms of the number of qualified accountants, (3) companies with an international association, (4) the existence of a multinational holding company, (5) the company's profitability, and (6) whether or not the company was in the financial services sector.

Curuk (2009) is one of the recent studies that examined annual reports of listed companies in Turkey for extent of disclosure and level of compliance with the European Union (EU) requirements for five consecutive years between 1986 and 1995. The objective of the study was twofold. First, it examined the level of compliance and change in level of compliance with EU disclosure requirements over the years. Second, it investigated the influence of various corporate characteristics (size, listing status, and industry type) on their compliance with the EU disclosure requirements. The study concluded that listing status of the company was a major influence on the level of compliance for Turkish firms under EU disclosure requirements. The results did not provide any evidence to conclude that disclosure was a function of company size. However, the industry type influenced disclosure and compliance with requirements for listed Turkish companies. The study also revealed that the level of compliance with requirements had increased with time; however, the current level of compliance was within the range of 30-85 percent.

Omar and Simon (2011) conducted one of the latest studies investigating level of disclosure and compliance. The aim of this study was to evaluate the extent of aggregate

mandatory and voluntary disclosure practices of Jordanian companies listed on the Amman Stock Exchange (ASE). They also investigated influence of financial and non-financial corporate characteristics on such disclosures. Analysis concluded that company characteristics such as size, leverage, profitability, number of shareholders, listing status, industry type, audit firm size, and listing age were significantly associated with the extent of aggregate disclosures. The authors used four proxies for the size variable: total assets, sales, equity securities, and net income. The profitability variable consisted of three proxies: rates of return on assets, earnings margin, and return on equity. Multivariate analysis of 121 companies included an aggregate disclosure index consisting of 331 items of which 278 were mandatory and 53 were voluntary. Size variables of the study, such as total assets and sales, were the most powerful explanatory factors of disclosure. Other variables of significance were profitability, listing status, industry type, and audit firm size. Due to multiple proxies, there were some multicollinearity issues in analysis of the profitability variable.

Various studies in the past have revealed different relationships between corporate characteristics and level of disclosure and compliance that renders the results of these studies inconclusive. In a comprehensive study of annual reports, Wallace et al. (1994) explained that inconclusiveness of results are attributable to variation in sample size, differences in statistical techniques used, differences in research settings, use of different indices, and co-variation between firm characteristics. Moreover, there is no general theory for selection of corporate characteristics for investigating the extent of disclosure (Wallace and Naser, 1995). The number of variables and their respective proxies has differed from one research to the other. The selection of variables has depended on the focus of the study, availability of data and information on variables. These factors can separately or collectively influence results. Similar research on

India has not been forthcoming despite the fact that India is the second largest emerging economy in the world.<sup>11</sup>

### **Indian Accounting System**

Several studies have investigated varied financial reporting issues in the Indian capital market. For example, studies by Hossain and Reaz (2007) and Chipalkatti (2002, 2005) investigated disclosure practices of the Indian Banking sector. Chipalkatti (2002) examined the association between the type and quality of annual report disclosures by 17 Indian banks. He also studied the impact of the information on the behavior of the market participants. Chipalkatti (2005) examined attempts made by the Central Bank of India to improve the discipline in the capital market by mandating better quality disclosures and concluded that these attempts were received positively by investors. A related study by Metha (2003) examined the Corporate Social Responsibility (CSR) of 50 companies listed on the National Stock Exchange of India (NSE).<sup>12</sup>

Hossain and Reaz (2007) investigated the determinants and characteristics of voluntary disclosures made by banking companies in India. It examined disclosures relating to general corporate information of the bank, corporate strategy, corporate governance, financial performance, risk management, accounting policy review, key non-financial statistics, and corporate social disclosure. It also examined other disclosures such as online banking facilities and information on credit card business and corporate characteristics (such as size, age of the company, listing status, complexity of business, board composition and assets-in-place). The variable size of the company was significantly and positively associated with level of voluntary disclosure. However, other variables (age, multiple listing, complexity of business and board composition) were not significant. The relation of assets-in-place, as predicted, was significantly

and negatively associated with voluntary disclosure. The authors concluded that Indian Banks were more compliant with mandatory disclosures in comparison to voluntary disclosures. In another recent study on Indian banks, Firoz et al. (2011) analyzed the potential impact of IFRS implementation on the Indian banking sector. The study concluded that mandatory IFRS implementation (scheduled for April 1, 2011) would affect practices relating to loans and advances, recognition and measurement of financial instruments, accounting for investments, and investment related to modernization of information technology systems.

Kamath (2008) investigated intellectual disclosure practices of 30 companies listed in the information, communication and technology (ICT) sector in India. The study concluded that companies in the ICT sector made negligible disclosures regarding their intellectual capital. Another study by Garg and Verma (2010) examined the application of internet for corporate reporting in India. The study focused on disclosure of financial and non-financial information provided by 200 listed Indian companies via their official websites. The study also examined the relationship between internet-based disclosures and their relationship with various company characteristics. The characteristics they studied were size, profitability, company age, association with family owned businesses, type of industry, liquidity, ownership spread and leverage. Results of the study indicated that type of industry, size of the company, and association with family owned businesses positively affect the extent of information disclosure on company websites.

Researchers have also conducted studies on corporate governance in India. Based on responses from a 2006 survey of 370 Indian public companies, Balasubramanian, Black and Khanna (2010) identified several strengths and weaknesses of corporate governance. They examined the cross-sectional relationship between measures of governance and firm

performance. Khanna (2009) reviewed the development of corporate governance norms in India in the period extending between independence from British colonization to the present. Mohanty (2003) found that institutional investors own a higher percentage of the shares of better-governed Indian firms.

Zattoni, Pederson and Kumar (2009) investigated the impact of evolution of institutional environment on performance of firms in an affiliation group. The study concluded that (1) performance benefits of group affiliation decrease over time, (2) older group-affiliated firms perform better compared to younger group-affiliated firms, and (3) group affiliated service firms outperform group affiliated manufacturing firms. Singh and Gaur (2009) examined the association between business group membership and performance. They concluded that group affiliated firms performed worse than unaffiliated firms. In another study, Jackling and Johl (2009) studied the association between board structure and firm performance in large Indian firms and found an association between board size and firm value (Tobin's q). Other studies pertaining to corporate governance in India include Selarka (2005), Kumar (2006), Pattanayak (2007), Sapovadia (2007a and 2007b), Pattanayak (2008), Gopinath (2008), Haribhakti (2008), Afsharipour (2009) and Daga and Koufopoulos (2010). These studies reported results similar to the aforementioned studies.

The NSE Research Initiative, which is the research branch of the NSE, reviews research proposals on issues that have a bearing on the securities market in India. Research areas include market microstructure and design, market efficiency, derivatives, fixed income and government securities market, investor protection, risk measurement and management. There is no research on the mandatory disclosures and compliance practices of Indian listed companies on the Bombay Stock Exchange (BSE). Based on ongoing growth and standing of the Indian capital

market, this study proposes an investigation into the disclosure and compliance practices of the publicly listed firms in India. There is a void in the international accounting literature investigating the listed firms' disclosure and compliance with current Indian GAAP.

## **Hypotheses Development**

Many researchers in the extant literature have taken an interest in corporate characteristics such as company size, leverage, profitability, type of industry and the type of auditor that may be used to predict the level of disclosure and compliance of a firm. The results of these studies have shown consistent association between these variables and level of disclosure and compliance of a firm. Various studies acknowledge that a wide variation in results exists in prior research on disclosure and compliance (Ahmed and Courtis, 1999; Street et al., 2000). Similarly, a wide variation exists in the proxies used to measure compliance. Cooke (1992) argues that there is no overwhelming theoretical reason to choose any one proxy to another. Each proxy has advantages and disadvantages, as discussed below.

### **Corporate Size**

Prior studies have suggested that larger companies make more disclosures and are therefore more compliant (Cerf, 1961; Singhvi and Desai, 1971; Stanga, 1974; Buzby, 1975; Belkaoui and Kahl, 1978; Courtis, 1979; Chow and Wong-Boren, 1987; McNally, Eng and Hasseldine, 1982; Cooke, 1989a, 1989b, 1992; Tai, Au-Yueng, Kwok and Lau, 1990; Ng and Koh, 1993; Wallace et al., 1994; Inchausti, 1997; Ahmed and Nicholls, 1994; Hossain, Tan and Adams, 1994; Wallace and Naser, 1995; Marston and Robson, 1997). Consistent with prior studies the present study contends that there will be a positive relationship between firm size and its extent of disclosure



and compliance. Larger companies have better access to resources, have larger clientele, and greater market presence. They are likely to comply with mandatory requirements and make more disclosures to maintain their competitive advantage and to improve chances of acquiring better financing. Therefore, the present study hypothesizes a positive relationship between company size and level of compliance.

*H1: Larger Indian companies will be more compliant with converged Indian GAAP.*

Corporate size has been measured in numerous ways in the past and there is no specific reason to use one measure instead of another (Cooke, 1991). Some of these measures include total annual sales, total assets, fixed assets, paid-up capital, log of total assets, market capitalization, net margin, and market value of the firm. Some studies have also used a combination of one or more measures for their study (see Akhtaruddin, 2005 and Inchausti, 1997). A study by Karim and Ahmed (2005) analyzed multiple measures and observed that variables were often non-normally distributed and highly correlated with each other. These authors concluded that correlation coefficients between sales and disclosure were better than those between assets and disclosure. Hence, the present study will adopt the proxy used by Karim and Ahmed (2005) and use the log of sales as the size variable (SIZE). Since, the study sample included companies of various sizes, which resulted in a wide range of sales figures; log of total sales was taken as proxy for the variable.

### **Leverage**

Previous studies have found a positive relationship between leverage and the level of disclosure and compliance of a firm (Jensen and Meckling, 1976; Myers, 1977; Schipper, 1981; Robbins

and Austin, 1986; Chow and Wong-Boren, 1987; Courtis, 1979; Malone, Fries and Jones, 1993; Hossain et al., 1994; Wallace et al., 1994; Ahmed and Courtis, 1999; Al-Shammari et al., 2008; and Omar and Simon, 2011). According to Jensen and Meckling (1976), firms that are highly leveraged incur high monitoring costs. By disclosing more information in annual reports, they seek to reduce these costs. Similarly, Ahmed and Courtis (1999) contend that companies that are highly leveraged and own fixed interest securities (such as bonds and debentures) are more likely to make required disclosures compared to those that raise capital through equity. Some studies have supported this conjecture while others found no relationship (Chow and Wong-Boren, 1987; Ahmed and Nicholls, 1994; Wallace et al., 1994; Wallace and Naser, 1995; Hossain et al., 1995; Raffournier, 1995). An earlier study by Belkaoui and Kahl (1978) observed a significant negative relationship between the two variables. Hence, empirical evidence regarding the relationship between disclosure and leverage has been inconclusive. The present study asserts that due to growing interest in corporate governance, Indian companies are likely to be more compliant if they have higher leverage. Companies will prefer to make greater information disclosures to stakeholders to affirm that they are capable of meeting their debt obligations, to mitigate the effect of risk associated with the investment and to indicate the future cash flow. Hence,

*H2: Indian companies with higher leverage will be more compliant with converged Indian GAAP.*

Debt-equity ratio is a measure of a company's financial leverage, and is calculated by dividing its total liabilities by stockholders' equity. The ratio indicates the proportion of assets of a company financed by equity versus debt. This ratio has shown to be highly correlated with

disclosure in multiple studies in the past including Wallace et al, 1994; Wallace and Naser, 1995; Karim and Ahmed, 2005; and Ali, Chen and Radhakrishnana, 2007. The present study used debt-equity ratio as a proxy for leverage.

## **Industry**

The association between firm level disclosure and compliance and type of industry has been inconclusive in prior studies. Cooke (1989) reported that manufacturing companies disclosed more information than other types of companies; however, Inchausti (1997) and Owusu-Ansah (1998) did not uphold the results. Inchausti (2007) argued that firms in one industry might disclose more information than required which indicates diverse disclosure policies across industries.

Akhtaruddin (2005) used a different classification of the variable by identifying companies in Bangladesh as either traditional or modern. He argued that companies made disclosures depending upon their type of industry. Based on the argument presented by Akhtaruddin (2005) the present study categorizes sample companies that are technology based such as telecommunication, information technology, pharmaceuticals and engineering as modern companies and classifies all other companies as traditional. India is increasingly attracting substantial international business and foreign investment into modern industries due to cost efficiency and relative advancement. Companies in the modern industries constantly compete with each other to gain greater market share. According to Suwaidan (1997), one reason for variation in level of disclosure and compliance among the different industries is a company's reluctance to disclose accounting information to preclude competition. In a competitive industry, selective disclosures may allow a company to avoid revealing firm operations and best practices

to competitors. Hence, the present study contends that level of disclosure and compliance will be lower in high technology companies as compared to low technology companies. Thus,

*H3: High technology Indian companies will be less compliant relative to low technology companies.*

A company is classified a high or low technology based on the classification used by Akhtaruddin (2005). This variable is a dummy variable; one if it belongs to a high technology industry and zero if it belongs to a low technology industry.

### **Profitability**

Previous studies have investigated the relation of profitability and level of disclosure and compliance (Cerf, 1961; Singhvi, 1967; Singhvi and Desai, 1971; Belkaoui and Kahl, 1978; McNally et al., 1982; Wallace et al., 1994; Meek et al., 1995; Wallace and Naser, 1995; Inchausti, 1997; Dumontier and Raffournier, 1998; Owusu-Ansah, 1998; Hossain, 2000; Street and Bryant, 2000; Street and Gray, 2001; Street and Gray, 2002; Akhtaruddin, 2005; and Karim and Ahmed, 2005). Empirical results from the research are mixed. Findings of Cerf (1961); Singhvi (1967); Singhvi and Desai (1971); Wallace et al. (1994); Owusu-Ansah (1998); and Karim and Ahmed (2005) suggest that companies with higher profitability disclose more information than those with lower profitability. Conversely, Belkaoui and Kahl (1978) and Wallace and Naser (1995) found a negative association between profitability and level of disclosure and compliance. Other studies such as McNally et al. (1982); Meek et al. (1995); Inchausti (1997); Dumontier and Raffournier (1998); Street and Bryant (2000); and Street and Gray (2001) found no association between profitability and level of disclosure and compliance.

Profitability refers to the ability of a business to generate profit that is a measure of the efficiency of the company management and executives. Therefore, management of companies that have higher profitability is more likely to disclose information and comply with mandatory requirements to demonstrate their professional competence (Wang, Sewan and Claiborne, 2008). Higher disclosure also allows management to achieve personal advantages such as continuance of their position, and justifiable claims over managerial compensation (Wallace et al., 1994, Inchausti, 1997 and Haniffa and Cooke, 2002). Conversely, companies that are less profitable would prefer to disclose information in order to avoid tarnishing the reputation of their company above and beyond the damage caused by reduction in profitability. The following hypothesis tests this association.

*H4: Indian companies with greater profitability will be more compliant with converged Indian GAAP.*

In the past, research has employed market-based measures (price-earnings ratio and earnings margin); dividend based measures and equity based measures (return on equity and return on capital employed). In a recent study by Karim and Ahmed (2005) and subsequent study by Omar and Simon (2011) of all the measures tested in their respective studies, return on equity showed highest correlation with disclosure and compliance. Hence, the present study utilizes return on net worth as measure of profitability of a company.

### **Multinational listing**

According to Licht (2001), financial advancement is often the most important reason for foreign (dual) listing. Biddle and Saudagaran (1991) and El-Gazzar et al. (1999) concluded that firms tend to adopt an accounting system which allows for greater accounting disclosure in order to

enhance their exposure in the foreign markets, improve customer recognition, secure foreign capital, and reduce political costs of doing business abroad. Moreover, Zarzeski (1999) argued that firms that are competing for foreign resources such as international clientele and external capital for growth and expansion increase accounting disclosures to reduce the resource providers' uncertainty about the business credibility of the firm. Increased credibility allows for better bonding with the resource providers and enables the firm to obtain resources at a lower cost. Owing to chances of greater scrutiny, management as well as independent auditors would be inclined to present transparent accounting reports and abide by standards closely. Thus, in a competitive international market it should benefit Indian companies that are not yet fully IFRS compliant, to be more compliant to the converged Indian accounting standards. The following hypothesis tests this concept:

*H5: Indian companies that are cross-listed on an international stock exchange are more likely to be compliant with converged Indian GAAP relative to Indian companies that are listed on domestic stock exchanges only.*

Other studies that showed a positive association between companies with multinational listing and level of disclosure are Cooke (1989 and 1992), Glaum and Street (1992), Ahmed and Nicholls (1994), Hossain et al. (1994) and recently, Omar and Simon (2011). The multinational listing variable is operationalized by a dummy variable labeled MOPS. A value of one is assigned if a company is only domestically listed and a value of zero if it is cross-listed in a foreign stock exchange as well.

## **Type of Audit firm**

Although annual reports are management's responsibility, an external audit firm can significantly influence the amount of information disclosed in these reports. Craswell and Taylor (1992) suggest that a firm's choice of auditor reflects its willingness to disclose more or less information. Big 4 audit firms have a greater reputation to defend and desire a presence in the Indian market. Audit firms tend to influence the amount of information their clients disclose and encourage compliance. Titman and Truman (1986) suggest that the selection of a quality auditor is a signal to the market that the information disclosures of the firm are high quality. Other disclosure studies have examined the potential association between the type of auditor and extent of disclosure and compliance. The results of previous studies are not consistent. Singhvi and Desai (1971), Craswell and Taylor (1992) and Inchausti (2007) confirm the positive relationship between being audited by (then) Big 6 firms and higher disclosure, but Wallace et al. (1994) did not find any relation. Domestic Indian auditing firms such as A. F. Ferguson and Co., S. B. Billimoria and Co., S. R. Batliboi and Co., B. S. R and Co., Lodha and Co., and Lovelock and Lewes have dominated the Indian corporate market until the recent arrival of the Big 4 audit firms. Based on prior research, Indian firms that are audited by Big 4 firms are likely to make more disclosures and be more compliant compared to firms audited by domestic Indian auditing firms. This premise is tested with the following hypothesis:

*H6: Indian companies that are audited by Big 4 auditors will be more compliant with converged Indian GAAP relative to Indian companies that are audited by domestic audit firms.*

The audit firm variable is operationalized by means of a dummy variable labeled as AUD. A value of one is assigned if a company has a domestic external auditor and a value of zero if it has a Big 4 external auditor.

### **Ownership**

Indian society is highly family oriented and family ties and traditions are very deeply rooted in family firms. The founding families control a majority of the top 30 companies on the BSE Sensex.<sup>13</sup> Often, only family members are trusted with all important and significant operations (Bhattacharya, 2007). Majority of the family owned companies operate like extended family units and decisions are centralized and made behind closed doors. In a closely held company where majority shareholding lies with family members and decisions are made internally, the likelihood that disclosures and compliance is expected to be relatively low. Other studies (Zingales, 1995; Shleifer and Vishny, 1997 and Anderson and Reeb, 2004) have also emphasized that founders of family firms and their heirs can control the board of directors and influence company decisions due to their long-term affiliation with the firm.

In Indian context, ownership in companies is organized in two categories, namely, promoter and promoter group shareholding and public shareholding. The term “Promoter” does not have legal significance; however, it is used extensively in business vernacular. The Securities Exchange Board of India (SEBI) is responsible for regulation of the securities market in India. The Disclosure and Investor Protection (DIP) guidelines issued by the SEBI describe the concept of promoter. A promoter is a person who exercises substantial control over the company or a person who undertakes all necessary steps in the floatation of the company. The “promoter group” constitutes of an immediate relative of the promoter or a subsidiary or holding company.



Clause 6.8.3.2 of chapter VI of the DIP Guidelines provides a detailed definition of the terms “promoter” and “promoter group”. Promoter and promoter group being the primary and dominant shareholders of the company often occupy significant management positions and wield significant control over the management of the company (Kumar, 2012). The present study contends that companies with dominant promoter and promoter group shareholding will have lower level of disclosure and compliance. Therefore,

*H7: Company with higher promoter and promoter group owner is expected to be less compliant with converged Indian GAAP.*

This variable is operationalized using promoter and promoter group shareholding (OWN) information available in the annual report of sample companies.

### **Company Age**

The liberalization of the Indian economy as discussed in Chapter 1 is an important landmark in the growth of economy and companies in India. The present study conjectures that duration for which the company has existed, (irrespective of the industry to which the company belongs) is a critical factor in determining level of disclosure and compliance. Owusu-Ansah (1998) studied and found support for the contention that older, well-established companies were more compliant than younger companies. The study concluded that relative cost of gathering information and disclosure of certain information might be significant deterrents for younger companies to comply with requirements. Another study by Akhtaruddin (2005) did not support the association between company age and level of compliance. In Indian context, companies incorporated before liberalization that have a longer history are likely to disclose more information in their annual reports. Older companies with more experience are likely to include more information in their

annual reports because they intend to maintain their strong reputation and image in the market. Owusu-Ansah (1998) used the learning curve theory to explain that older firms by virtue of being in the market for a longer period acquire the skill and understanding to fulfill mandatory reporting requirements over time. To the contrary, newer companies would disclose less due to sheer lack of experience and related financial burden instead of lack of willingness to comply with standards. Thus,

*H8: Older Indian companies are expected to be more compliant with the converged Indian GAAP than younger companies.*

Age of the company is number of years since incorporation of the company, as of year 2010.

### **Timeliness of Reporting**

Technological development has made timely corporate financial reporting almost inevitable and an integral part of a well-functioning capital market. Timely reporting enhances decision-making, reduces information asymmetry, and improves the efficiency of a capital market. Consequently, professional and regulatory bodies of dominant capital markets are making all efforts to reduce lead-time between company's financial year-end and the date it releases its financial statements. In Indian context, 'lead time' may be defined as the time lag between the end of a financial year (March 31) and the last day to file annual report (September 30) for the year. This variable has not been explored in the disclosure and compliance literature; however, some support is available for this notion. According to Whittred and Zimmer (1984), it can be argued that management of a company that has met the disclosure requirements and is confident

of its compliance will surely file its report with authorities sooner than those companies who are less confident.

Moreover, according to the signaling theory certain decisions such as prompt issuance of annual reports may be indicative of the companies' confidence in its financial reporting. From an auditing standpoint, the lesser a company discloses the longer it takes to perform audit and hence longer the length of time to report. In addition, Tower, Hancock and Taplin (1999) provided support to the contention that there is a negative relationship between the number of days between the end of a financial period and the issuance of financial statements and level of IAS compliance. Thus:

*H9: The number of days a company takes to issue their annual report is negatively associated to the level of compliance with converged Indian GAAP.*

Based on prior research, Owusu-Ansah et al. (2006) defined 'timeliness' as 'the number of days between a company's financial year-end and the day on which the company publicly releases its audited financial statements'. In similar vein, the present study defines 'timeliness' as the number of days between a company's financial year-end and the day on which the company filed its annual report with the MCA. The variable is operationalized by means of a discrete variable measured in number of days.

## **CHAPTER III**

### **DATA AND METHODOLOGY**

The present study explores the disclosure practices of a sample of firms listed on the most important stock exchange in India, the Bombay Stock Exchange (BSE). The BSE was established as “The Native Share and Stock Brokers' Association” in 1875 and is the oldest stock exchange in Asia. The BSE is also the largest stock exchange in the world in terms of the number of listed companies.<sup>14</sup> It had 5,092 listed companies as on September 30, 2011. It also claims to be the world's fifth most active stock exchange in terms of the number of transactions handled through its electronic trading system.<sup>15</sup> Market capitalization of the listed companies in BSE was approximately 1.2<sup>16</sup> trillion US dollars as of September 30, 2011.<sup>17</sup> Based on market capitalization, the BSE is one the top ten of global exchanges in the world. Further, foreign investors follow the BSE sensitive index (SENSEX) actively.<sup>18</sup>

#### **Methodology**

The sample of firms for the present study was extracted from the more than 5000 public companies listed on the BSE. The sample excluded banking companies and insurance companies. In India, the Banking Regulation Act of 1949 and Reserve Bank of India Act, 1934<sup>19</sup> regulate banking companies; whereas the Insurance Regulation and Development Authority Act of 1999 governs the insurance sector.<sup>20</sup> Hence, these companies are beyond the scope of the present study.

To ensure homogeneity of accounting standards used by sample companies, this study examines the financial year starting April 1, 2009 through March 31, 2010.<sup>21</sup> The study looked at year 2009-2010 to facilitate inclusion of the most recent homogeneous data submitted to the Ministry of Corporate Affairs (MCA) by September 30, 2010. MCA is the Indian government ministry in charge of administering the Companies Act of 1956 that regulates the functioning of the corporate sector in India. Listed companies are required to submit their audited annual reports of the fiscal year ending March 31 to the ministry by September 30 of the year.

Study of mandatory disclosures is an enquiry into the extent to which companies divulge information that they are obligated to disclose under a regulatory regime. “Compliance” is defined as conformity with the mandatory disclosure requirements that is measured on a continuous scale. A company that fulfills all mandatory disclosure requirements is fully compliant and the company that fails to comply with all requirements would be non-compliant. Prior literature uses the terms “mandatory disclosure” and “compliance” interchangeably and sometimes collectively. For instance, Akhtaruddin (2005) and Chatham (2008) have used the term “mandatory disclosure” while Al-Shammari et al. (2008) and Curuk (2009) have used the term “compliance” to study similar research questions. Other authors such as Yeoh (2005) and Al-Akra et al. (2010) have used the term “mandatory disclosure compliance”.

Companies make corporate disclosures subject to regulation by authorities in their annual reports through the financial statements or accompanying notes. Annual reports and other firm level data for the study were obtained from individual company websites. In addition, data was also obtained from corporate databases such as Business Beacon<sup>22</sup>, maintained by the Center for Monitoring the Indian Economy (CMIE) and Capitaline Plus<sup>23</sup>. All data used in the study were hand collected and compiled from the sources discussed above. Studies based on Asian

corporate sector such as Jahur and Nazneen (2005) and Gupta (1999) have been criticized for using a limited sample of 28 and 32 companies, respectively, (Parua and Gupta, 2009). This study uses a sample of 156 listed Indian companies as detailed below in Table 3.1.

**Table 3.1 Summary of Sample Selection Criteria**

<i>Description of Companies</i>	<i>Number of Listed Companies</i>
Companies listed on Bombay Stock Exchange as part of the BSE 100 index as on October 31, 2011	100
<i>Less:</i> Banking and Insurance companies	14
Companies not following March-April financial year	8
<b>Sub-total</b>	78
<i>Add:</i> Random sample of non-BSE-100 companies <i>except Banking and Insurance companies, companies not following March-April financial year and companies suspended from trading on BSE due to penal reasons</i>	78
<b>Total</b>	<u>156</u>

The BSE-100 index accounted for 71.01 percent of the total market capitalization of the BSE as on October 24, 2011.<sup>24</sup> BSE-100 companies are also a balanced representation of all companies listed on the BSE.<sup>25</sup> However, BSE-100 represents the larger companies of the country. After excluding the Banking and Insurance companies, the sample reduced to 78 companies. In order to ensure sufficient representation of relatively smaller companies the study sample included a matching number of non-BSE 100 companies. First, the BSE 100 companies were excluded from the total population of 5074 companies listed on BSE as on October 31, 2011. Second, companies that belonged to the banking and insurance sector and companies that

were suspended from trading on BSE during the period, due to penal reasons were not included in the sample. The remaining companies were randomized using a computer program. Subsequently, 78 companies were randomly selected from the remaining population. In addition, companies that did not follow the March-April financial year were excluded. This brought the total sample of the study to 156 companies.

**Table 3.2 Distribution of Sample by Industry**

<i>Industry</i>	<i>Number of Listed Companies</i>
Agro Chemicals	2
Alcoholic Beverages	1
Auto Ancillaries	2
Automobile	6
Cables	2
Capital Goods - Electrical Equipment	5
Capital Goods-Non Electrical Equipment	3
Castings, Forgings & Fasteners	3
Cement	2
Chemicals	5
Construction	2
Crude Oil & Natural Gas	2
Diamond, Gems and Jewelry	1
Edible Oil	2
Entertainment	5
Fertilizers	2
Finance	15
FMCG	3
Gas Distribution	1
Healthcare	1

Infrastructure Developers & Operators	3
IT – Software	7
Logistics	2
Mining & Mineral products	4
Miscellaneous	5
Non Ferrous Metals	4
Paints/Varnish	2
Paper	3
Pharmaceuticals	8
Plantation & Plantation Products	1
Plastic products	3
Power Generation & Distribution	7
Realty	7
Refineries	5
Steel	4
Stock/ Commodity Brokers	2
Telecommunication Equipment & Infrastructure Services	1
Telecomm-Service	6
Textiles	9
Tobacco Products	2
Trading	6
<b>Total</b>	<b>156</b>

The first research question of this study investigates firm level compliance with selected accounting standards issued by ICAI, approved by the governing authorities and applicable to year 2009-2010. The list of disclosure items was derived from standards that require mandatory disclosure in either the financial reports, notes to financial statements, or the management



discussion and analysis report for the companies in fiscal year 2009-2010 (See Appendix III for the list of standards and disclosure items included in the compliance index).

Prior studies (Street et al., 1999; Cairns 1999; Street and Bryant 2000) have examined firm compliance with accounting standards and have discovered significant noncompliance in many areas, including disclosures regarding property plant and equipment, violations of the strict definition of extra-ordinary items, net profit or loss for the period, leases, employee benefits, borrowing costs and earnings per share. The research checklist developed for this study incorporates some of these problematic accounting areas as well.

### **Compliance index - Construction and application**

The present study uses a compliance index framework to assess the level of disclosure and compliance. There is extensive use of compliance indices in the accounting literature that started with its first application in Cerf (1961). Some of the other studies that utilized the compliance index framework are mentioned in Table 3.3.

**Table 3.3 - Other Studies that used Compliance Indices**

<i>Period</i>	<i>Studies</i>
1970-1979	Singhvi and Desai (1971), Choi (1973), Buzby (1974) and (1975), Firth (1979)
1980-1989	Chow and Wong-Boren (1987), Firth (1984), Cooke (1989)
1990-1999	Cooke (1991) and (1992), Wallace, Naser and Mora (1994), Meek, Roberts and Gray (1995), Inchausti (1997), Botosan (1997)
2000-2009	Depoers (2000), Street and Bryant (2000), Street and Gray (2001), Hope (2003a) and (2003b); Glaum and Street (2003), Abd-Elsalam and Weetman (2003) and (2007), Naser and Nuseibeh (2003), Ali, Ahmed and Henry (2004), Coy and Dixon (2004), Hassan, Romilly, Giorgioni and Power (2009)

In developing a compliance index, this study draws from prior literature. This study specifically uses a compliance index framework advocated by Copeland and Fredericks (1968) and modified by Cooke (1989) to measure firm disclosure and compliance. This approach uses a dichotomous procedure in which an item scores one if it is disclosed and zero if it is not disclosed. The approach has been extensively and consistently used in the disclosure and compliance studies through the past decades including Cooke (1991 and 1992); Street and Bryant (2000); Street and Gray (2001); Glaum and Street (2003). The disclosure and compliance index for this study comprises of 142 significant disclosure requirements. This list was developed by reviewing the selective Indian Accounting standards applicable in India during year 2009-2010. Each salient disclosure was coded as 1 if disclosed, 0 (zero) if not disclosed or NA if not applicable, for the sample of 156 firms.

Following Hodgdon et al. (2008), the present study uses an un-weighted score. Compliance score for each firm in each year is defined as the number of mandatory disclosures actually provided by a firm in year 2009-2010 divided by the required number of mandatory disclosures by the firm in the year. Algebraically:

$$TD = \sum_{i=1}^n d_{i,j}$$

where, TD is the absolute un-weighted disclosure and compliance score for firm j in year 2009;  $d_{i,j}$  indicates the disclosure of item i by firm j, in year 2009-2010 with  $d_{i,j} = 1$  if item i is disclosed by firm j, and  $d_{i,j} = 0$  if the item is applicable and not disclosed. The un-weighted approach is consistent with Street and Bryant (2000), and Street and Gray (2001). Hodgdon et al. (2008) also computed a weighted compliance score for firm j in year t and used an alternative disclosure index, the “Saidin” index based on a study by Spetz and Baker (1999). It should be

noted that Robbins and Austin (1986), Chow and Wong-Boren (1987), Priebjrvat (1992), and Vasal (2006) have suggested that weighted and un-weighted disclosure indexes are interchangeable because their effects are equivalent. Therefore, the present study only computed an un-weighted compliance score.

### **Dependent variable**

The compliance index of a firm was calculated by dividing the number of mandatory disclosures provided by the number of applicable mandatory disclosures. The index can be represented as follows:

$$\text{Firm's compliance index (Indi\_C}_{j, 2009}) = \frac{\text{TD}}{\text{Number of applicable disclosures}}$$

The index ranged between one and zero where a value of one indicated total compliance and zero indicated total divergence or total noncompliance. The extent of disclosure of a firm in percentage was calculated by multiplying the index by 100.

In order to answer the second research question the study proposes to conduct ordinary least square (OLS) regression with the disclosure and compliance index as the dependent variable and firm specific characteristics as the independent variables. The following ordinary least square (OLS) regression model is to be fitted to the data in order to assess the effect of each variable on the disclosure level:

$$\text{Indi\_C}_{j, 2009} = \beta_0 + \beta_1 \text{SIZE}_j + \beta_2 \text{LEV}_j + \beta_3 \text{IND}_j + \beta_4 \text{PRF}_j + \beta_5 \text{MOPS}_j + \beta_6 \text{AUD}_j + \beta_7 \text{OWN}_j + \beta_8 \text{AGE}_j + \beta_9 \text{TIME}_j + \varepsilon_j \dots \quad (1)$$

where,

- Indi\_C<sub>j, 2009</sub> = compliance score for firm j in year 2009;
- $\beta_{0-9}$  = regression coefficients;
- SIZE<sub>j</sub> = company size, measured by log of net sales for the company in terms of ten million Indian National Rupee (INR);
- LEV<sub>j</sub> = leverage of company, measured by debt-equity ratio calculated by dividing total debt by sum of stock capital and reserves;
- IND<sub>j</sub> = type of industry dummy variable, equal to 1 if the company belongs to computers, engineering, information, pharmaceuticals or telecommunication industry, and equal to zero otherwise;
- PRF<sub>j</sub> = profitability of company, measured by return on net worth;
- MOPS<sub>j</sub> = multinational listing dummy variable, equal to 1 if the company is listed on a domestic stock exchange only, and equal to zero if the company is cross listed in a foreign stock exchange as well as BSE;
- AUD<sub>j</sub> = type of audit firm dummy variable, equal to 1 if the company has a domestic audit firm, and equal to zero if the company has a Big 4 audit firm or an affiliate of the Big 4 firms;
- OWN<sub>j</sub> = ownership variable, measured by percent of stock held by the promoters and promoter group;
- AGE<sub>j</sub> = age of the company, measured in terms of number of years since incorporation of the company;
- TIME<sub>j</sub> = timeliness of reporting variable, measured in terms of number of days between a company's financial year-end, that is, March 31, and the last day of filing audited annual reports with the MCA, that is, September 30;
- $\epsilon_j$  = error term.

The Table 3.4 summarizes the hypothesized direction of the relationship between the independent variables and the level of disclosure and compliance.

**Table 3.4 - Summary of Expected Results**

<i>Variable</i>	<i>Predicted relationship with dependent variable</i>
Company Size (SIZE)	+
Leverage (LEV)	+
Industry (IND)	-
Profitability (PRF)	+
Multinational listing (MOPS)	+
Type of audit firm (AUD)	-
Ownership (OWN)	-
Company age (AGE)	+
Timeliness of reporting (TIME)	-

## CHAPTER IV

### PRESENTATION AND ANALYSIS OF FINDINGS

This chapter presents and analyzes the findings of the study. This chapter consists of two sections. Section 1 presents the results of the study of level of disclosure and compliance with mandatory disclosure requirements by listed Indian companies. Section 2 presents results of the study of corporate characteristics associated with the level of disclosure and compliance. Both sections describe the data first and then with presentation and analysis of the findings.

#### **Section 1 - Findings on Level of Disclosure and Compliance in India**

A disclosure score was calculated for each company based on compliance and disclosure index described previously. The index assigned equal weights to all the disclosure items required by the accounting standards selected for the study. The study assumes that since the disclosures were mandatory in nature all of them carried equal importance. However, not all mandatory disclosures are applicable to all companies in the sample. During data collection, it was observed that companies were often not required to make certain disclosures. A critical issue in disclosure research is to consider whether to penalize a firm for not disclosing information when it is not required to do so. Sometimes certain disclosures may not be relevant to the firm. Raffournier (1995) contended that a company does not disclose some items because they are not relevant to its operation. In order to deal with the issue, a judgment about the utility of a disclosure can be made after reading the entire annual report (Cooke, 1992). Caution was taken by reviewing the entire annual report of a company and making a judgment about the applicability of a disclosure

to a particular company. If an item was not disclosed in the annual report and no reference to its relevance and applicability was made, it was assumed that the item was not relevant to the company in that year (Cooke, 1989).

### Data Description and Analysis

The firm's compliance index ( $Indi\_C_j$ ) was calculated by taking the sum of all disclosures and dividing it by the total number of disclosures applicable to the firm where,  $0 \leq Indi\_C_j \leq 1$ .

**Table 4.1 - Descriptive Statistics for the Disclosure scores**  
(In percentage)

	<i>Total sample</i>	<i>BSE -100 companies</i>	<i>Non BSE -100 companies</i>
Mean	70.91	75.68	66.14
Std. Deviation	12.38	7.76	14.22
Median	73.86	77.45	69.37
Percentiles			
	5	43.90	60.60
	95	86.04	86.14
Minimum	31.43	52.73	31.43
Maximum	92.31	89.39	92.31
N	156	78	78

Table 4.1 reports descriptive statistics for the disclosure scores and Table 4.2 reports the distribution of disclosure scores. On average, level of disclosure made by Indian companies based on selected mandatory disclosures is 70.91%. The highest level of disclosure is 92.31%,

and the lowest level of disclosure is 31.43%. The median value is 73.86% with a standard deviation of 12.38%.

Moreover, companies listed on the BSE 100 index made disclosures at the rate of 75%, which is approximately 10% more than companies that are not a part of the BSE 100 index. Of the companies belonging to the BSE 100 index, Asian Paints Ltd. made the largest disclosure at the rate of 89.39%. A pharmaceutical company, Cipla Ltd. made the lowest number of disclosures at 52.73%. In the group consisting of companies that are not a part of the BSE 100 index, Shree Ajit Pulp and Paper Ltd., a paper manufacturing company disclosed information at the rate of 92.31%. Balurghat Technologies Ltd., which is a transportation company, reported the lowest disclosure at 31.43%.

**Table 4.2 - Distribution of Sample Companies by Disclosure Level**

<i>% of Applicable Disclosure</i>	<i>No. of Firms</i>	<i>% of the sample</i>	<i>Cumulative %</i>
30.01 - 40.00	4	2.6	2.6
40.01 - 50.00	10	6.4	9.0
50.01 - 60.00	13	8.3	17.3
60.01 - 70.00	32	20.5	37.8
70.01 - 80.00	61	39.1	76.9
80.01 - 90.00	34	21.8	98.7
Over 90.01%	2	1.3	100.0
Total	156	100.0	

Based on the data analysis, the study concluded that none of the companies in the sample was fully compliant with the mandatory requirements of the Indian Accounting Standards.



However, the disclosure levels were on an average comparable to results from similar studies conducted in other developing countries. Omar and Simon (2011) studied the mandatory disclosure practices of Jordan and concluded that the mean mandatory disclosure score of their sample of 121 companies was 83.12% with a standard deviation of 5.63%. The maximum disclosure percentage reported by the authors was 93.75, and the minimum was 63.87. For year 1995, Curuk (2009) studied Turkish Companies and reported a mean score of 72.71% on the European Union Fourth Directive Compliance and Disclosure Index (EUFDCDI). Akhtaruddin (2005) examined the relationship between mandatory disclosure and corporate characteristics in a study of companies domiciled in Bangladesh and concluded that an overall disclosure by companies was 43.53 percent, which indicated low compliance. Nonetheless, Akhtaruddin's study reported better findings than the study conducted by Hossain and Taylor (1998) on Bangladesh, where level of disclosure was only 29.33 percent.

Morris et al. (2006) conducted an empirical study of the level and determinants of corporate financial transparency for a sample of 102 listed Russian public companies for year 2001. They reported 76.5% compliance with mandatory disclosure requirements ranging between 56.3% and 94.2%. On a different note, Chatham (2008) examined the level of compliance of developed countries like Switzerland, France and Sweden and reported that the companies disclosed between 70.25 percent and 95.31 percent of the required disclosures. Additionally, other studies that have investigated disclosure and compliance levels of developing countries include Ahmed and Nicholls (1994), Owusu-Ansah (1998) and Preobragenskaya and McGee (2003).

The results of this section must, however, be considered with caution since this study examines only selected accounting standards applicable in India. The ICAI and World Bank

(2004) have examined the standards included in this study in the past. Results of these studies concluded that the select accounting standards in this study have been recognized as problematic in regards with compliance in the past. Together with lack enforcement and efficient monitoring, incidence of noncompliance with these specific standards may be high.

### **Summary of Results for Compliance with Selected Accounting Standards**

During data collection, notations were made regarding the company level compliance with individual disclosure items. This assisted in establishing which disclosures the companies made more often versus those disclosed less frequently. Appendix III provides details of the disclosure checklist. A discussion of results of compliance with specific disclosure follows.

#### ***Valuation of Inventories***

Of the sample of 156 companies, 135 companies reported inventory. The study scrutinized the annual report for a broad disclosure of accounting policy regarding valuation of inventory as well as the cost formula used for 1) determination of cost of goods sold, 2) total carrying amount of inventory (and its classification) and 3) determination of ending inventory. Analysis showed that 95.56% of the companies disclosed the accounting policies they adopted for measuring inventories. However, only 79.26% of these companies disclosed the procedure utilized for determination of cost of goods sold. Percentages for disclosure of total carrying amount of inventory and determination of ending inventory were 96.2 and 92.6, respectively.

### ***Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies***

All of the companies listed on the Bombay Stock Exchange are actively trading on that stock exchange. Therefore, sample companies were required to report profit or loss in their annual report. All BSE sample companies except one company, Sowbhagya Media Ltd., met this requirement. This company did not report any information about its profit or loss. In general, 99.36% companies in the sample disclosed required information regarding net profit or loss for the period. Companies disclosing information about their extraordinary/exceptional items was only 65.8%. Only 25 out of the 38 companies that mentioned having extraordinary items actually listed them on the profit and loss account. Percent of companies that reported their prior period items were 86.4%. Twenty companies in the sample reported change in their accounting policies during year 2009-2010. As required, 90% of these companies reported instances where the effect of policy change was not ascertainable. Likewise, all companies that changed their accounting policy consequent to the adoption of a new accounting standard accounted for the changes in accordance with the specific transitional provisions of the new standard.

### ***Revenue Recognition***

Similar to net profit or loss for the period, it was expected that most companies would explicitly report all significant policies they adopted in regards to recognition of revenues. For transactions involving the sale of goods and/or rendering of services no more than 73.72% companies disclosed the policies they adopted. Even a smaller percentage, 35% disclosed whether their performance was measured under the “Completed Service Contract method” or the “Proportionate Completion method” as specified by the standard.

### ***Fixed Assets***

The standard regarding fixed assets required companies to report gross and net book values of fixed assets at the beginning and end of every accounting period showing additions, disposals, acquisitions and other movements in the value of the fixed assets. 98% of the companies met this requirement. The study observed that although most companies disclosed movement in their fixed assets a much lower percentage (36.5%) disclosed the expenditures they incurred for construction or acquisition of these assets. Likewise, annual reports of 20 companies stated fixed assets at revalued amounts. On one hand, 18 of them disclosed year of the appraisal, while on the other hand, only seven of them disclosed the method adopted to compute the revalued amounts.

### ***Depreciation***

Depreciation is one of the accounting standards that the ICAI mentioned in the preface to Indian Accounting Standards as challenging as far as disclosure was concerned. Results of this study, however, found that 98% of the companies in the sample meet the requirements of the standard. Not only do the companies specify the depreciation method, they also report the total depreciation for the period for each class of assets, the historical cost, the depreciation rates, and depreciable assets that are disposed of.

### ***Segment Reporting***

The accounting standard for segment reporting required that the companies classify their revenue into 1) segment revenue from sales to external customers and 2) segment revenue from transactions with other segments. Only 70% companies with business segments made this disclosure. Majority of companies with segments preferred to report segment results instead of

segment revenue. On average, 80% of companies reported their segment assets and liabilities, cost incurred to acquire segment assets, total expenses and significant non-cash expenses. These results are impressive considering that the World Bank (2004) report concluded several instances of compliance gap pertaining to segment reporting.

### ***Provisions and Contingent Liabilities***

Indian Accounting Standard 29 requires that, for each class of provisions, a company must disclose carrying amount at the beginning and end of every period. Almost 93% of companies in the sample disclosed this information in their reports. However, other requirements of the standard are not disclosed as much. For instance, for each class of provisions, companies are also required to report the carrying amount of the provision at the beginning and end of the period; additional provisions made during the period; amounts used and unused amounts reversed during the period; nature of the obligation and the expected timing of any resulting outflows of economic benefits; and the amount of any expected reimbursement, which were not disclosed. Only 16.09% sample companies disclosed the preceding required information.

A closer examination of the data collected during this study revealed that while Indian companies report broad disclosure information they tend to limit details about disclosure requirements. For instance, in the case of contingent liabilities, companies disclose an estimate of the financial effect of contingent liabilities almost 97% of time. However, an indication of the uncertainties of any outflow is furnished only 57.85% of time. Furthermore, analysis revealed that the likelihood of any reimbursement was disclosed merely by 22.45% sample companies. Similar patterns can be discerned in disclosures made under other accounting standards such as those discussed earlier, for example, net profit or loss, fixed assets and provisions.

## **Section 2 - Findings on Corporate Characteristics Associated with Disclosure and Compliance Practices**

As discussed previously in chapter 3, this study used OLS regression to examine the effects of specific corporate characteristics on a firm's level of disclosure. The dependent variable for the regression is the disclosure index discussed earlier. Data pertaining to the independent variables for the sample firms was collected from the Capitaline Plus database for financial year 2009-2010. A complete description of these variables is provided in Chapter 3. The independent variables SIZE, LEV, IND, PRF, MOPS, AUD, OWN, AGE and TIME are used to examine the influence of corporate characteristics of the sample firms on their level of disclosure and compliance.

### **Data Description and Analysis**

As reported in Table 4.1, the sample consisted of 156 companies for the year 2009-2010. The average level of disclosure made by Indian companies based on selected mandatory disclosures is 70.91% with a median value of 73.86% and standard deviation of 12.38%. Descriptive statistics for the independent variables of the study are reported in Table 4.3. To show the range of variability of the data, descriptive statistics on untransformed independent variables are presented. As shown in the table, SIZE variable is measured in terms of net sales. The values reported in the table are in ten million Indian National Rupees (INR), where, 45 INR is an equivalent of 1 USD (as of March 31, 2010). The mean size of the firm is 9994.13 showing that the firms in the sample are not small by Indian standards. The mean leverage (debt-equity ratio) of the sample firms is 0.81.<sup>26</sup> IND is a dummy variable that reports whether a company was

classified as high technology or low technology. Companies belonging to telecommunication, information technology, pharmaceuticals and engineering industries are classified as high technology and assigned a value of 1. Mean value 0.15 reported in the table signifies that the sample had more low technology companies versus high technology companies. Return on net worth that measured the profitability of sample companies had a mean of 10.77. Dummy variable, MOPS is equal to 1 if the company is listed on a domestic stock exchange only. Since, the mean value of the variable is 0.82 it is evident that the sample consisted primarily of domestically listed companies. Likewise, dummy variable AUD has a mean value of 0.79, which indicates that the sample predominantly consisted of companies that were audited by domestic audit firms. The values for the ownership variable (OWN) ranged from zero to 90 percent with an average of 48.23 percent promoter and promoter group holding. The AGE variable had a wide range indicating that the youngest company in the sample was 2 years old and the oldest was 103 years. The mean value for AGE in the sample was 31.96 years. Finally, the TIME variable data suggests that typically the sample companies filed their annual reports with the MCA in mid-June, i.e., approximately 75 days after the financial year-end on March 31, 2009. The earliest report was filed in early April. However, at least one company submitted its annual report 56 days after the submission deadline of September 30, 2010.

**Table 4.3 - Descriptive Statistics for the Independent Variables**

	<i>Mean</i>	<i>Standard Deviation</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Percentiles</i>		
					<i>50</i>	<i>5</i>	<i>95</i>
<b>Size</b> ( <i>in ten million INR*</i> )	9994.13	30261.11	0.00	269366.00	1336.00	0.00	37798.30
<b>Leverage</b> ( <i>Debt-Equity ratio</i> )	0.81	1.42	0.00	10.70	0.33	0.00	4.00
<b>Industry</b> ( <i>Industry Dummy</i> )	.15	.362	0	1	-	-	-
<b>Profitability</b> ( <i>Return on Net Worth</i> )	10.77	40.03	-407.81	94.84	10.73	-3.52	42.03
<b>MTNL** Listing</b> ( <i>Cross-listing Dummy</i> )	.82	0.38	0	1	-	-	-
<b>Auditor</b> ( <i>Audit Firm Dummy</i> )	.79	.410	0	1	-	-	-
<b>Ownership</b> ( <i>Percent of Promoter Holding</i> )	48.23	21.581	0	90	49.50	.00	84.15
<b>Age</b> ( <i>Company Age, years</i> )	31.96	21.37	2.00	103.00	25.00	10.00	79.30
<b>Timeliness</b> ( <i>Timeliness of Reporting, days</i> )	74.46	46.52	12	238	57	21.85	153.15

\* 1 USD = 45 INR (approximately), as in March 2010

\*\*MTNL = Multinational



## Correlation Analysis

Table 4.4 presents the correlation matrix. An examination of the correlation matrix shows significant correlation between size, profitability, age and timeliness of reporting and the dependent variable. The strongest relationship was observed between size and the dependent variable, level of disclosure. As summarized in Table 3.4, the study hypothesized a positive relationship between the size of a company and its level of disclosure. Results indicated a strong and positive correlation ( $r = 0.510$ ,  $p < 0.01$ ), between size and disclosure level. Similarly, the hypothesized association of PRF with level of disclosure was consistent with the results of the correlation analysis.

## Analysis of Multicollinearity

In studies involving archival data, inter-correlated data or multicollinearity of data is often a concern. Table 4.4 presents correlation coefficients between independent variables. However, an examination of these correlations in Table 4.4 shows that these correlations are not high enough to cause major concerns about multicollinearity. Table 4.5 reports the tolerance and variance inflation factors (VIFs) that were calculated as a formal test of multicollinearity. Tolerance values that are low (less than  $1 - R^2$ ) indicate a high probability of encountering multicollinearity. However, the statistics in Table 4.5 suggest high tolerance ranging between 0.519 and 0.886 and hence multicollinearity is not a concern. Similarly, VIF measures the strength of the relationship of an independent variable with all the other independent variables. Collinearity is a concern only when VIF exceeds 10 (Street & Bryant, 2000). For the current study, the factors range from 1.927 to 1.129. Both collinearity diagnostic statistics i.e. tolerance values and VIFs suggest that multicollinearity is not an issue in the regression analyses.

**Table 4.4 - Correlation Analysis**

	<i>Indi_Cj</i>	<i>SIZE</i>	<i>LEVERAGE</i>	<i>INDUSTRY</i>	<i>AUDITOR</i>	<i>PROFITABILITY</i>	<i>MNTL<sup>#</sup></i>	<i>OWNERSHIP</i>	<i>AGE</i>	<i>TIMELINESS</i>
<b>Indi_Cj</b>	1									
<b>SIZE</b>	<b>.510**</b>	1								
	.000									
<b>LEVERAGE</b>	.118	.232**	1							
	.142	.004								
<b>INDUSTRY</b>	.084	.121	-.117	1						
	.298	.133	.145							
<b>AUDITOR</b>	-.123	-.367**	-.041	.047	1					
	.127	.000	.615	.561						
<b>PROFITABILITY</b>	<b>.343**</b>	.348**	.069	.060	-.167*	1				
	.000	.000	.395	.457	.037					
<b>MNTL<sup>#</sup></b>	<b>-.230**</b>	-.391**	-.105	-.125	.126	-.037	1			
	.004	.000	.194	.121	.117	.644				
<b>OWNERSHIP</b>	<b>.223**</b>	.131	-.030	-.019	.113	.106	.132	1		
	.005	.103	.710	.810	.161	.190	.102			
<b>AGE</b>	<b>.238**</b>	.382**	-.043	-.143	-.271**	.162*	-.194*	-.044	1	
	.003	.000	.593	.076	.001	.044	.015	.589		
<b>TIMELINESS</b>	<b>.420**</b>	.424**	.175*	.073	-.336**	.297**	-.191*	.179*	.176*	1
	.000	.000	.029	.368	.000	.000	.017	.025	.028	

<sup>#</sup>MTNL = Multinational Listing

\*\* Correlation is significant at the 0.01 level.

\* Correlation is significant at the 0.05 level.

p-values are provided below the coefficients

**Table 4.5 - Collinearity Statistics**

	<i>Tolerance</i>	<i>Variance Inflation Factor</i>
Size	0.519	1.927
Leverage - Debt to equity ratio	0.868	1.152
Industry	0.886	1.129
Profitability - Return on Net Worth	0.837	1.195
Auditor Type	0.759	1.318
Multinational Listing	0.788	1.269
Ownership	0.858	1.165
Age	0.764	1.308
Timeliness of Reporting	0.717	1.394

## Regression Analysis

The results of regression analyses are presented in Table 4.6; for each explanatory variable, regression coefficients and t-statistics are reported.

**Table 4.6 - Results of OLS Regression \***

**Model estimated:**  $Indi\_C_{j, 2009} = \beta_0 + \beta_1 SIZE + \beta_2 LEV + \beta_3 IND + \beta_4 PRF + \beta_5 MOPS + \beta_6 AUD + \beta_7 OWN + \beta_8 AGE + \beta_9 TIME + \varepsilon_j$

<i>Variable</i>	<i>Coefficient</i>	<i>t</i>	<i>Sig.</i>
(Constant)	51.707	11.047	0.000
SIZE	1.312	3.808	0.000***
LEV	-0.103	-0.164	0.870
IND	0.398	0.163	0.871
PRF	0.048	2.132	0.035**
MOPS	-1.527	-0.627	0.531
AUD	4.156	1.824	0.070*
OWN	0.761	0.422	0.674
AGE	0.039	0.863	0.390
TIME	0.065	3.100	0.000***

Number of observations = 156  
Adj. R<sup>2</sup> = 0.311

\* Dependent Variable: Indi\_Cj

\*\*\*, \*\*, \* Significant at the 0.01, 0.05, 0.10 level, respectively

Overall, the model seems to have reasonable explanatory power with adj.  $R^2$  of 0.311. Examining individual coefficients, the most robust relationship was observed between size and the dependent variable, level of disclosure. The study hypothesized a positive relationship between the size of a company and its level of disclosure in H1. As predicted, there was a statistically significant relationship between the variables. Larger Indian companies with better access to resources, which have larger clientele, and greater market presence make more disclosures. They prefer to comply with disclosure requirements, perhaps, in order to maintain their competitive advantage and to reduce cost of capital.

H2 predicted a positive relationship between leverage and disclosure levels. The coefficient of LEV is not significant at conventional levels, showing that H2 is not supported. Other studies that found no relationship between leverage and level of disclosure include Chow and Wong-Boren (1987); Ahmed and Nicholls (1994); Wallace et al. (1994); Wallace and Naser (1995); Hossain et al. (1995) and Raffournier (1995). Similarly, H3 theorized that high technology Indian companies would make fewer disclosures compared to low technology companies. The analysis did not find statistical support for this hypothesis. One explanation may be that other factors such as size may be more important in determining disclosure levels rather than leverage and industry.

There was a significant relationship between firm profitability and level of disclosure, which confirmed H4. Indian companies with greater profitability disclosed more information than companies that were less profitable. Empirical results from past research have reported mixed results. This study, nonetheless, lends support to past studies that looked into this relationship in the context of other developing countries (Wallace et al., 1994; Inchausti, 1997;

Owusu-Ansah, 1998; Haniffa and Cooke, 2002; Karim and Ahmed, 2005; Wang et al., 2008; and Al-Akra, 2010).

H5 hypothesized that Indian multinational firms were more likely to be compliant with converged Indian GAAP relative to Indian firms that only operate in India. The regression results did not support this hypothesis, since the coefficient of MOPS was not significant at conventional levels. As discussed in chapter 1, Indian companies listed on the BSE follow Indian GAAP that is grounded in the IFRS. All companies listed on the BSE irrespective of their listing status indirectly follow the IFRS. This may be one plausible explanation for multinational listing not being a factor explaining level of disclosure.

H6 stated that companies with traditional audit firms such as S. B. Billimoria and Co., S. R. Batliboi and Co., B. S. R and Co. and Lodha and Co., would disclose less information compared to companies audited by the Big 4 audit firms. This hypothesis was not statistically supported. In fact, the coefficient of the AUD variable is positive and significant with  $p=0.070$ . This shows that firms audited by domestic Indian auditors provide greater disclosure than firms audited by the Big 4. It must, however, be taken into consideration that the international auditing firms like the Big 4 have recently entered the Indian market and may lack proficiency in the Indian GAAP and disclosure requirements. Conversely, the domestic auditors are more familiar with the Indian GAAP, the operating environment of the companies and may have better rapport with the companies. The Big 4 audit firms may take some time before they can build up a relationship with the Indian companies and understand their clientele's reporting systems.

H7 pertaining to ownership of business hypothesized that businesses with higher promoter and promoter group ownership would disclose less mandatory accounting information compared to companies that have lower promoter and promoter group ownership. It was

expected that internalization of business operations would render disclosure of business information unnecessary. This hypothesis was not supported and lends credibility to the notion that concentration of ownership does not influence the level of disclosure in Indian companies.

According to H8, older Indian companies would disclose more information than younger companies. This hypothesis was also not supported by regression analysis. This variable has not been studied extensively in accounting literature. Past studies by Owusu-Ansah (1998) and Akhtaruddin (2005) did not reach identical conclusions. While Owusu-Ansah (1998) found some support for his study, the study by Akhtaruddin (2005) did not find any support for the premise.

Finally, H9 asserted that number of days a company takes to issue their annual report would be negatively associated with their level of disclosure and compliance. The analysis conversely showed a strong, positive relation between the number of days to report and level of disclosure. As discussed in chapter 2, timely reporting of financial results enhances decision-making, reduces information asymmetry and improves the efficiency of a capital market. The results suggest that Indian companies that spend more time to release financial information provide more disclosures.

As discussed above, the study employed multiple linear regression analysis to develop a model for predicting the level of disclosure and compliance with their corporate characteristics including size of the company, financial leverage, age of the company and profitability among other characteristics. Of the nine independent variables entered into the regression model, three variables had a significant correlation with level of disclosure in the expected direction. The Adj.  $R^2$  of the model was 0.311. This indicated that the combination of predictors indeed successfully calculated level of disclosure and compliance of Indian companies.

### **Additional analysis<sup>27</sup> - Stepwise Regression**

Stepwise regression is a sophisticated form of regression. In this method, each independent variable of the baseline model is entered into the model in sequence, and its value is assessed. If adding the variable contributes to the predictive power of the model then it is retained. If a variable no longer contributes significantly to the model, it is removed. All variables in the model are scrutinized individually to ascertain their contribution to the efficiency of the model. Consequently, stepwise regression ensures that eventually the smallest possible set of predictor variables is included in the resultant model.

Table 4.7 reports the result of stepwise regression. The Adj.  $R^2$  for this model was 0.317. The variables that were significant in this analysis were SIZE, TIME and PRF. Specifically; the stepwise regression model determined that together size, timeliness and profitability variables explained 31.7% of the variance in the dependent variable, Indi\_C<sub>j</sub>. As shown in the table, the first variable entered into the model was SIZE that explained 26% of the variability in level of disclosure. Successively, the TIME and PRF variables were added to the regression equation. The model is significant at 0.01 level of significance.

It is important to mention that the order in which the variables are entered into and removed from the model. The variance explained solely by any one variable is entirely dependent upon the presence of others. Therefore, it can be concluded that in the present study size of the company explains the most variance in the dependent variable followed by the timeliness of reporting and profitability of a company. As in the case of the baseline model, relationship between the independent variables and the dependent variable was moderate since the Adj.  $R^2$  was 0.317.



**Table 4.7 - Results of Stepwise Regression \***

**Model estimated:**  $Indi\_C_{j,2009} = \beta_0 + \beta_1 SIZE + \beta_2 LEV + \beta_3 IND + \beta_4 PRF + \beta_5 MOPS + \beta_6 AUD + \beta_7 OWN + \beta_8 AGE + \beta_9 TIME + \varepsilon_j$

<i>Variable</i>	<i>Coefficient</i>	<i>t</i>	<i>Sig.</i>
(Constant)	59.346	33.179	0.000
SIZE	1.878	7.361	0.000***
(Constant)	54.619	24.469	0.000
SIZE	1.490	5.461	0.000***
TIME	0.066	3.357	0.001***
(Constant)	55.825	24.467	0.000
SIZE	1.340	4.799	0.000***
TIME	0.059	2.973	0.003***
PRF	0.047	2.095	0.038**
Number of observations = 156			
Adj. R <sup>2</sup> = 0.317			

\* Dependent Variable: Indi\_Cj

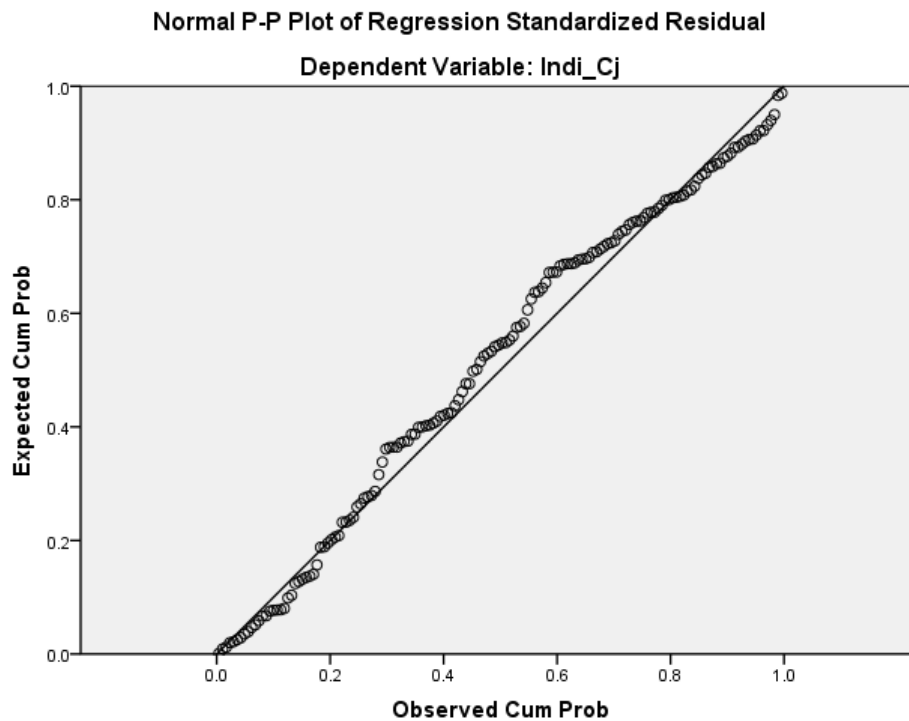
\*\*\*, \*\*, \* Significant at the 0.01, 0.05, 0.10 level, respectively

Based on the analysis above, it can also be concluded that variables other than SIZE, TIME and PRF do not contribute significantly towards explaining the level of disclosure and compliance of an Indian company at significance level 0.05, at least. Statistical program used for stepwise regression ensures that the process of adding more variables stops when all of the available variables have been included; or when it is not possible to make a statistically significant improvement in Adj. R<sup>2</sup> using any of the variables not yet included.

## Analysis of Residuals

The regression models described earlier investigated the relationship between level of disclosure and compliance with corporate characteristics of companies in India. In order to test for violation of assumptions of OLS regression, the residuals from the regression model were plotted. Fig 4.1 shows the plot of residuals. An examination of the residual plot shows that regression assumptions were not violated.

**Figure 4.1 - Normal P-P Plot of Regression Standardized Residual**



## Summary of Regression Analyses

The study concludes that three variables, namely company size, profitability and timeliness of reporting are positively associated with the level of disclosure. Size of the company is the most important corporate characteristic explaining the variability in the level of disclosure of company. Multiple studies in the past have investigated this relationship in varied research settings and found a positive relationship between the variables. The studies that have investigated the size relationship include those by Cerf (1961), Singhvi and Desai (1971), Buzby (1975) Belkaoui and Kahl (1978), Courtis (1979), Cooke (1989 and 1992), Wallace et al. (1994), Ahmed and Nicholls (1994), Wallace and Naser (1995), Inchausti (1997), Akhtaruddin (2005), Barako et al. (2006) and Omar and Simon (2011). The finding of this study corroborates the results from the previous studies. Relationship between profitability and disclosure level has also been studied considerably in past literature; however, the results have been diverse. This study predicted a positive relationship between profitability and disclosure level and the finding is consistent with the results by Cerf (1961); Singhvi (1967); Singhvi and Desai (1971); Wallace et al. (1994); Owusu-Ansah (1998); and Karim and Ahmed (2005). The timeliness construct has not been studied extensively in the past.

This study shows Indian companies that spend more time in preparing their annual reports provide more disclosure. The results regarding the type of audit firm employed and disclosure show that firms that employ domestic audit firms provide more disclosure. Domestic audit firms may be more efficient in prompting disclosures due to their familiarity with both the Indian GAAP and the practicalities of Indian business operations. Other corporate characteristics included in the study, namely leverage, type of industry, multinational listing, ownership and age did not find statistical support in the analyses.

Result of the multiple regression analyses concluded that the size of a company, profitability and timeliness of reporting together explain 31.1% of the variability in the level of disclosure made by the sample Indian companies. Size is the singular most important explanatory variable and contributes towards 26% of the variability in the dependent variable. Other variables that influence the level of disclosure are profitability and timeliness of reporting. A summary of the results of the hypotheses regarding the corporate characteristics that influence level of disclosure is presented in Table 4.8.

**Table 4.8 - Summary of Results**

<b>Variable</b>	<b>Predicted Sign</b>	<b>Result</b>
SIZE	+	As Expected
LEV	+	No Relation
IND	-	No Relation
PRF	+	As Expected
MOPS	+	No Relation
AUD	-	Contrary to Expectation
OWN	-	No Relation
AGE	+	No Relation
TIME	-	Contrary to Expectation

## CHAPTER V

### SUMMARY, CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter presents a brief summary and conclusions of the study. It also discusses the limitations of the current study. Finally, it provides recommendations for future research and deliberation on the subject matter.

#### Summary and Conclusions

Various studies in the past have investigated the evolution of accounting standards in different countries to better understand the nature of disclosure and reporting practices at an international level. It is widely accepted in international accounting literature that companies in different countries across the globe have varying disclosure practices due to diversity in factors specific to a country. This study examined the disclosure and reporting practices of India. The objective of the study was two-fold. Primarily, the study investigated the level of disclosure and compliance of a sample of companies in India. Secondly, the study analyzed the corporate characteristics that influence the level of disclosure and compliance of Indian companies.

The sample of the study comprised of companies listed on Bombay Stock exchange in Mumbai, India. Based on selected Indian accounting standards, a comprehensive list of required disclosures was developed. Subsequently, a disclosure index calibrated to suit Indian context to examine the level of disclosure was created. Annual reports from 156 sample companies were scrutinized for the required disclosures. The data collected was then analyzed to obtain

individual disclosure scores for each company (first research question). The disclosure scores obtained were used as the dependent variable in regression models to address the second research question.

In regards to research question one; the study reported that the average level of disclosure for Indian companies in year 2009-2010 was 70.91 percent. As discussed in the previous chapter, this level of disclosure is largely comparable to disclosure studies in other emerging economies. The analysis also reported that larger companies on the Bombay Stock Exchange disclosed more information in their annual reports compared to their smaller counterparts. In the process of analyzing the data, it was also discerned that in their attempt to follow Indian Accounting standards, companies were disclosing general information pertaining to standards without divulging specific information. For instance, majority of the companies in the sample explicitly reported all significant accounting policies they adopted in the preparation and recognition of revenues. However, only half of those companies actually reported the specific method that they adopted to measure their revenues.

In order to address research question two, the study examined past literature to obtain a list of corporate characteristics that influence the disclosure practices of a company. Based on the review of literature, the study prepared a list of probable independent variables. Subsequently, independent variables that could be operationalized and were considered important in the Indian context were included in the study. Eventually, the study identified nine independent variables that capture both financial and non-financial attributes of Indian companies. The independent variables of interest were size, leverage, type of industry, profitability, multinational listing, type of audit firm, ownership, age and timeliness of reporting.

The study observed a positive relationship between level of disclosure and size, profitability and timeliness of reporting<sup>28</sup>. The size of a company is positively related to the level of disclosure a company makes through its annual reports. Relationship between size of the company and disclosure has been extensively examined in disclosure studies. Findings of this study are consistent with past results. As hypothesized larger firms are likely to comply with mandatory requirements and disclose more information about their company to maintain their competitive advantage and to acquire better financing which is essential for larger companies that often operate at the international level.

The profitability of a company is positively related to the level of disclosure a company makes via its annual reports. This variable is often considered in disclosure studies but the results of the relationship have been varied. Positive relationship with level of disclosure provides empirical support for postulated influence of profitability on extent of information disclosed by larger firms. As discussed in Chapter 3, this result supports the conclusion drawn by other studies that examined developing countries like India.

In regards to the timeliness of releasing annual reports, the result indicated that there was a strong and positive relationship between number of days it takes to report a financial report and level of disclosure. This finding is contrary to prior expectation of the study. That is as discussed in chapter 2 it was expected that the shorter time a company takes to report annual reports would result in higher level of disclosure. However, results indicate that Indian companies that spend more time to release financial information provide higher level of disclosure.

Regression analysis of the data indicated that the corporate characteristics included in the study account for a third of variability in the level of disclosure. The major characteristics influencing the information disclosed in the annual reports were size, profitability, and timeliness

of reporting. Multinational listing, ownership and age of the company, which were moderately associated with level of disclosure in correlation analysis, were not significant in the multiple regression analysis. Size of the company variable, however, individually provided useful information in explaining the variation in level of disclosure. This suggested that size of a company is in fact the most important contributory factor in magnitude of information disclosed by Indian companies.

Contrary to prior expectation, companies that were audited by domestic auditors disclosed more information than companies that were audited by the Big 4 auditors. A probable justification for this result may be the fact that the international auditing firms have recently entered the Indian market and may lack proficiency in the Indian GAAP and disclosure requirements as well as working rapport with their clientele. The Big 4 audit firms will take some time before they can build up a relationship with the Indian companies and understand their clienteles' reporting systems. The study observed that leverage, type of industry association, multinational listing, ownership, and company age did not have any bearing on the level of disclosure of a company.

In summary, the current study presents the structure of Indian disclosure and reporting practices. The study concluded that the levels of disclosure and compliance practices of India are comparable with the disclosure practices prevalent in other developing countries. Compared to the assessments made by the ICAI and the World Bank (2004) report, the results of this study are more encouraging and optimistic. This indicates that the accounting practices of Indian companies may have improved over years as the country moves towards formal adoption of IFRS in the near future. Indian companies seem to be willing to comply with the Indian accounting standards based on the IFRS. Although total compliance with applicable accounting



standards is lacking, most companies follow the standards with the exception of disclosing exhaustive details. Improvement of level of disclosure may require the regulatory authorities to meticulously monitor and strictly enforce existing accounting standards.

## **Limitations**

As with any empirical study, this study has its own limitations. The results of this study must be interpreted cautiously. It can be argued that use of data from single financial year to understand the structure of corporate reporting and practices in India may be inadequate for drawing conclusions. Nevertheless, this study provides a point-in-time depiction of corporate reporting in India that provides the foundation for further research. It would be interesting to follow the trends in corporate reporting in India over time considering that India is still deliberating on whether or not to adopt the IFRS. Given the status of reporting, Indian GAAP may continue to converge with the IFRS without formally adopting IFRS.

Another limitation of the study may be relatively small size of sample (156 companies) taking into account that the BSE has more than 5000 listed companies. It can be argued that while the sample size is sufficient to perform statistical analysis, it is a disproportionate representation of companies listed on the BSE. Sample size of this study was severely restricted by availability of disclosure data. Nonetheless, as discussed earlier in the chapter, results of the study are comparable with the results of studies in similar realm of research.

Moreover, this study was restricted to the study of mandatory disclosure practices, thus study of voluntary disclosure is beyond the scope of this study. Not taking voluntary disclosure in account may have influenced the result of the multinational listing variable. Multinational

companies, which are essentially larger companies that seek finances beyond domestic borders, may not be targeting domestic investors. Indian companies listed on foreign stock exchanges may prefer to make voluntary disclosures to communicate with foreign investors instead of strictly following mandatory disclosure required by the Indian GAAP.

Finally, it should also be borne in mind that this study has investigated selected accounting standards and the checklist of mandatory disclosures is not exhaustive by any means. A subsequent study including a more comprehensive list of mandatory requirements may modify the results of the current study.

## **Recommendations**

Based on research by Robbins and Austin (1986), Chow and Wong-Boren (1987), Priebjriyat (1992), Vasal (2006) and Hodgdon et al. (2008) this study anticipated that results of both weighted and un-weighted disclosure indexes are interchangeable and utilized an un-weighted disclosure index only. However, a later study can use a weight disclosure index. Relative weight of each information item can be determined based on information gathered through questionnaire survey of auditors, analysts and other individuals representing the investors. Experienced stakeholders could be engaged in assigning weights to disclosure items that they deem important for the benefit of the investors.

The result of this study concluded that the corporate characteristics examined in this study account for only a third of variability in the level of disclosure. In addition to the variables studied, future research might examine the impact of other corporate characteristics on the level of disclosure such as analyst following, diversification of company portfolio, level of education

of the company executives, corporate governance, and most importantly organizational culture. Corporate governance is a constant area of research in India; however, no studies have tested the relationship between the level of disclosure and corporate governance.

Studies can also examine the enforcement environment in India and study the influence of a regulatory organization like the Security Exchange Board of India (SEBI) on the level of disclosure. Future studies may also utilize a larger sample and study the progressive level of disclosure over years subsequent to formal adoption of IFRS in India. This study is intended to offer a foundation for more research on the Indian accounting system, financial reporting and practices.

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## APPENDIX I

### List of All Companies in the Sample

Adani Enterprises Limited	Crompton Greaves Limited
Adani Power Limited	Cummins India Limited
Amit Spinning Industries Limited	Dabur India Limited
Arex Industries Limited	Divi's Laboratories Limited
Ashok Leyland Limited	DLF Limited
Asian Paints Limited	Dr Reddy's Laboratories Limited
Auto Pins (India) Limited	Dutron Polymers Limited
Bajaj Auto Limited	Electrosteel Castings Limited
Balurghat Technologies Limited	Emami Infrastructure Limited
Berger Paints India Limited	Emmessar Biotech and Nutrition Limited
Bhagyanagar India Limited	Emporis Projects Limited
Bharat Forge Limited	Essar Oil Limited
Bharat Heavy Electricals Limited	Exide Industries Co. Limited
Bharat Petroleum Corporation Limited	Flora Textiles Limited
Bharti Airtel Limited	Gail (India) Limited
Birla Corporation Limited	Gemini Communication Limited
Cairn India Limited	Glenmark Pharmaceuticals Limited
Cipla Limited	GMR Infrastructure Limited
Coal India Limited	Golden Carpets Limited
Comfort Intech Limited	Grasim Industries Limited
Container Corporation Of India Limited	Haryana Leather Chemicals Limited

Coromandel Agro Products and Oils Limited  
Hathway Bhawani Cabletel and Datacom Limited  
Hindalco Industries Limited  
Lupin Limited  
Hindustan Petroleum Corp Limited  
Magnum Limited  
Hindustan Unilever Limited  
Mahindra and Mahindra Limited  
Hira Ferro Alloys Limited  
Maruti Suzuki India Limited  
Housing Dev and Infrastructure Limited  
Meghmani Organics Limited  
Housing Development Finance Corporation Limited  
Mobile Telecommunications Limited  
Idea Cellular Limited  
Mundra Port and Special Economic Zone  
Indiabulls Financial Services Limited  
National Aluminum Co. Limited  
Indian Oil Corporation Limited  
National Plywood Industries. Limited  
Indus Finance Corporation Limited  
NHPC Limited  
Infosys Limited  
Nila Infrastructures Limited  
Infrastructure Development Finance Corporation Limited  
NMDC Limited  
Inventure Growth and Securities Limited  
NTPC Limited  
ITC Limited  
ONGC Corporation  
J D Orgochem Limited  
Orient Beverages Limited  
Jaiprakash Associates Limited  
Pan India Corporation Limited  
Jindal Steel and Powers Limited  
Patel Engineering Limited  
JSW Steel Limited  
Peacock Industries Limited  
Ken Financial Services Limited  
Pet Plastics Limited  
Khandwala Securities Limited  
Phillips Carbon Black Limited  
Larsen and Toubro Limited  
Polar Pharma India Limited  
Liberty Phosphate Limited  
Power Finance Corporation Limited



LIC Housing Finance Limited  
Lincoln Pharmaceuticals Limited  
Lotus Eye Care Hospital Limited  
Pudumjee Industries Limited  
R G N Securities and Holding Limited  
Reliance Infrastructure Limited  
Reliance Power Limited  
Rural Electrification Corp. Limited  
S and S Power Switchgear Limited  
S S Forgings and Engineering Limited  
S T I India Limited  
Sai Industries Limited  
Sakuma Exports Limited  
Sarang Chemicals Limited  
Satra Properties (India) Limited  
Saven Technologies Limited  
Sesa Goa Limited  
Shikhar Consultants Limited  
Shree Ajit Pulp and Paper Limited  
Shriram Transport Fin Co. Limited  
Sicagen India Limited  
Siddha Ventures Limited  
Sinnar Bidi Udyog Limited  
Sowbhagya Media Limited  
Power Grid Corporation  
Prithvi Information Solutions Limited  
Pritish Nandy Communications Limited  
Sterlite Industries  
Stone India Limited  
Suzlon Energy Limited  
Taparia Tools Limited  
Tata Chemicals Limited  
Tata Communication Limited  
Tata Consultancy Services Limited  
Tata Global Beverages Limited  
Tata Motors Limited  
Tata Power Co. Limited  
Tata Steel Limited  
Tatia Global Venture Limited  
Titan Industries Limited  
Tivoli Construction Limited  
Transwarranty Finance Limited  
Tulip Telecom Limited  
U V Boards Limited  
Ultratech Cement Limited  
Uniphos Enterprises Limited  
Unitech International Limited  
Unitech Limited

Steel Authority Of India Limited

Sumeru Industries Limited

Sun Pharmaceutical Industries Limited

Sun T V Network Limited

Vinati Organics Limited

Virinchi Technologies Limited

Vulcan Engineers Limited

United Phosphorus Limited

United Spirits Limited

Uniworth Textiles Limited

Vimal Oil and Foods Limited

Wipro Limited

Yuken India Limited

Zee Entertainment Enterprises Limited

## APPENDIX II

### Disclosure Scores for All Sample Companies

<i>BSE Company Code</i>	<i>Name of the Company</i>	<i>Percent of Disclosure</i>
512599	Adani Enterprises Limited	70.69%
533096	Adani Power Limited	54.90%
521076	Amit Spinning Industries Limited	57.78%
526851	Arex Industries Limited	52.94%
500477	Ashok Leyland Limited	76.56%
500820	Asian Paints Limited	89.39%
531994	Auto Pins (India) Limited	41.38%
532977	Bajaj Auto Limited	67.14%
520127	Balurghat Tech Limited	31.43%
509480	Berger Paints India Limited	81.25%
512296	Bhagyanagar India Limited	62.50%
500493	Bharat Forge Limited	78.57%
500103	Bharat Heavy Electricals Limited	85.92%
500547	Bharat Petroleum Corporation Limited	80.49%
532454	Bharti Airtel Limited	78.57%
500335	Birla Corporation Limited	83.78%
532792	Cairn India Limited	73.81%
500087	Cipla Limited	52.73%
533278	Coal India Limited	83.67%
531216	Comfort Intech Limited	73.33%
531344	Container Corporation. Of India Limited	75.76%

507543	Coromandel Agro Products and Oils Limited	58.33%
500093	Crompton Greaves Limited	83.64%
500480	Cummins India Limited	72.13%
500096	Dabur India Limited	62.82%
532488	Divi's Laboratories Limited	64.86%
532868	DLF Limited	70.00%
500124	Dr. Reddy's Laboratories Limited	78.18%
517437	Dutron Polymers Limited	69.70%
500128	Electrosteel Castings Limited	73.91%
533218	Emami Infrastructure Limited	47.37%
524768	Emmessar Biotech and Nutrition Limited	60.61%
531470	Emporis Projects Limited	62.50%
500134	Essar Oil Limited	74.14%
500086	Exide Industries Co. Limited	79.49%
530705	Flora Textiles Limited	76.19%
532155	GAIL (India) Limited	74.47%
532318	Gemini Communication Limited	79.49%
532296	Glenmark Pharmaceuticals Limited	77.55%
532754	GMR Infrastructure Limited	85.37%
531928	Golden Carpets Limited	43.33%
500300	Grasim Industries Limited	69.01%
524080	Haryana Leather Chemicals	75.86%
509073	Hathway Bhawani Cabletel and Datacom Limited	77.50%
531531	Hatsun Agro Products Limited	86.79%

500182	Hero Motocorp Limited	73.81%
500440	Hindalco Industries Limited	83.10%
500104	Hindustan Petroleum Corporation Limited	61.40%
500696	Hindustan Unilever Limited	68.63%
533256	Hira Ferro Alloys Limited	73.68%
532873	Housing Development and Infrastructure Limited	70.00%
500010	Housing Development Finance Corporation Limited	60.71%
532822	Idea Cellular Limited	71.62%
532544	Indiabulls Financial Services Limited	80.00%
530965	Indian Oil Corporation Limited	76.25%
531841	Indus Finance Corporation Limited	53.33%
500209	Infosys Limited	30.95%
532659	Infrastructure Development Finance Company Limited	66.67%
533506	Inventure Growth and Securities Limited	70.97%
500875	ITC Limited	69.09%
524592	J D Orgochem Limited	63.33%
532532	Jaiprakash Associates Limited	69.44%
532286	Jindal Steel and Powers Limited	85.96%
500228	JSW Steel Limited	67.65%
530547	Ken Financial Services Limited	50.00%
531892	Khandwala Securities Limited	46.51%
500510	Larsen and Toubro Limited	87.14%
530273	Liberty Phosphate Limited	65.63%

500253	LIC Housing Finance Limited	81.58%
531633	Lincoln Pharma Limited	53.85%
532998	Lotus Eye Care Hospital Limited	60.53%
500257	Lupin Limited	80.39%
530347	Magnum Limited	73.33%
500520	Mahindra and Mahindra Limited	58.49%
532500	Maruti Suzuki India Limited	77.36%
532865	Meghmani Organics Limited	85.42%
532127	Mobile Telecomm Limited	76.67%
532921	Mundra Port and Special Economic Zone	81.82%
532234	National Aluminium Co. Limited	79.59%
516062	National Plywood Industries Limited	46.88%
533098	NHPC Limited	80.39%
530377	Nila Infrastructures Limited	76.47%
526371	NMDC Limited	71.19%
532555	NTPC Limited	79.66%
500312	ONGC Corporation	84.48%
507690	Orient Beverages Limited	75.00%
531120	Patel Engineering Limited	79.41%
500327	Peacock Industries Limited	52.00%
524046	Pet Plastics Limited	44.00%
506590	Phillips Carbon Black Limited	91.67%
523333	Polar Pharma India Limited	72.41%
532810	Power Finance Corporation	78.05%

532898	Power Grid Corporation	81.03%
532675	Prithvi Information Solutions Limited	72.41%
532387	Pritish Nandy Communication Limited	59.62%
516092	Pudumjee Industries Limited	71.88%
531211	R G N Securities and Holding Limited	42.86%
500111	Reliance Capital Limited	61.90%
532712	Reliance Communications Limited	74.51%
500325	Reliance Industries Limited	80.65%
500390	Reliance Infrastructure Limited	77.59%
532939	Reliance Power Limited	73.68%
532955	Rural Electrification Corporation Limited	74.00%
517273	S and S Power Switchgear Limited	69.05%
522296	S S Forgings and Engineering Limited	60.00%
513151	S T I India Limited	65.00%
530905	Sai Industries Limited	75.00%
532713	Sakuma Exports Limited	75.68%
516096	Sangal Papers Limited	65.52%
532031	Sarang Chemicals Limited	37.50%
508996	Satra Properties (India) Limited	83.33%
532404	Saven Technologies Limited	51.72%
500295	Sesa Goa Limited	80.95%
526883	Shikhar Consultants Limited	66.67%
590058	Shree Ajit Pulp and Paper Limited	92.31%
511218	Shriram Transport Fin Co. Limited	70.97%

533014	Sicagen India Limited	65.12%
509887	Sinnar Bidi Udyog Limited	59.46%
532025	Sowbhagya Media Limited	36.36%
500113	Steel Authority Of India Limited	77.59%
500900	Sterlite Industries	86.27%
522085	Stone India Limited	83.33%
530445	Sumeru Industries Limited	72.41%
524715	Sun Pharmaceutical Industries Limited	80.95%
532733	Sun T V Network Limited	82.98%
532667	Suzlon Energy Limited	83.02%
505685	Taparia Tools Limited	72.73%
500770	Tata Chemicals Limited	66.67%
500483	Tata Communication Limited	76.56%
532540	Tata Consultancy Services Limited	79.03%
500800	Tata Global Beverages Limited	78.72%
500570	Tata Motors Limited	78.33%
500400	Tata Power Co. Limited	72.31%
500470	Tata Steel Limited	81.82%
521228	Tatia Global Venture Limited	50.00%
504966	Tinplate Company of India	76.09%
500114	Titan Industries Limited	85.96%
511096	Tivoli Construction Limited	64.29%
532812	Transwarranty Finance Limited	76.67%
532691	Tulip Telecom Limited	78.57%



526957	U V Boards Limited	78.57%
532538	Ultratech Cement Limited	75.56%
500429	Uniphos Enterprises Limited	88.89%
531867	Unitech International Limited	60.87%
507878	Unitech Limited	77.08%
512070	United Phosphorous Limited	74.29%
532432	United Spirits Limited	86.00%
500138	Uniworth Textiles Limited.	61.54%
519373	Vimal Oil and Foods Limited	76.32%
524200	Vinati Organics Limited	80.65%
517015	Vindhya Telelinks Limited	63.04%
532372	Virinchi Technologies Limited	40.00%
522080	Vulcan Engineers Limited	69.77%
507685	Wipro Limited	85.45%
522108	Yuken India Limited	50.00%
505537	Zee Entertainment Enterprises Limited	73.13%

## APPENDIX III

### Disclosure Checklist based on Indian Accounting Standards Financial Year April 30, 2009 to March 31, 2010 (1=Yes, 0=No, NA=Not Applicable)

	Discl. No.
<b>AS 2 - Valuation of Inventories</b>	
- Accounting policies adopted in measuring inventories, including the cost formula used for determination of	1
- Cost of goods sold (Specific Identification, FIFO or weighted average)	2
- Total carrying amount of inventories and its classification appropriate to the enterprise.	3
- Determination of ending inventory (Lower of cost and net realizable value)	4
<b>AS 4 - Contingencies and Events occurring after the Balance Sheet date</b>	
<b>Contingencies (material events only occurring after the Balance Sheet Date)</b>	
<b>Contingent loss</b> - Mentioned in the financial statement and provided for in the P/L ac	5
- Nature of the contingency	6
- Uncertainty which may affect the future outcome.	7
- An estimate of the financial effect or a statement that such estimate cannot be made.	8
<b>Events Occurring after the Balance Sheet Date</b>	
- Nature of event	9
- Effect of the event on financial position of the company	10
- An estimate of the financial effect or a statement that such estimate cannot be made.	11
- Adjustment of dividends for the period covered by the financial statements proposed or declared after the balance sheet date but before approval of the financial statements.	12
- Events occurring after the balance sheet date that represent material changes and commitments affecting the financial position of the enterprise.	13
<b>AS 5 - Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies</b>	
<b>Net Profit or Loss for the Period - in the Statement of profit and loss:</b>	
- Profit or loss from ordinary activities	14
- Extraordinary (exceptional) items	15
- All items of income and expense recognized in a period should be included in the determination of net profit or loss for the period <i>unless an Accounting Standard requires or permits otherwise.</i>	16
- When items in Profit or Loss from Ordinary Activities are of such size, nature or incidence that their disclosure is relevant to explain the performance of the enterprise for the period, the nature and amount of such items should be disclosed separately; <i>sometimes made in the notes to the financial statements.</i>	17
- Nature and amount of <b>prior period items</b> should be separately disclosed in the statement of profit and loss in a manner that their impact on the current profit or loss can be perceived.	18

<b><i>Changes in Accounting estimates - in the Statement of profit and loss:</i></b>	
- The nature and amount of a change in an accounting estimate which has a material effect in the current period, or which is expected to have a material effect in subsequent periods. If it is impracticable to quantify the amount, this fact should be disclosed.	19
- The effect of a change in an accounting estimate should be included in the determination of net profit or loss in the period of the change, if the change affects the period only	20
- The effect of a change in an accounting estimate should be included in the determination of net profit or loss in the period of the change and future periods, if the change affects both.	21
<b><i>Changes in Accounting policies - in the financial statement of the period</i></b>	
- Changes in Accounting policies: where the effect of such change is not ascertainable, wholly or in part, the fact should be indicated.	22
- Change in accounting policy consequent upon the adoption of an Accounting Standard should be accounted for in accordance with the <i>specific transitional provisions</i> , if any, contained in that Accounting Standard.	23
<b>AS 6 – Depreciation</b>	
- Depreciation methods used	24
- Total depreciation for the period for each class of assets	25
- Historical cost or other amount substituted for historical cost of each class of depreciable assets	26
- Gross amount of each class of depreciable assets and the related accumulated depreciation.	27
- Depreciation rates or the useful lives of the assets, if they are different from the principal rates specified in the statute governing the enterprise.	28
- Where depreciable assets are disposed of, discarded, demolished or destroyed, the net surplus or deficiency, if material, is disclosed separately.	29
- In case of change in the method of depreciation, depreciation should be recalculated in accordance with the new method from the date of the asset coming into use. The deficiency or surplus arising from such re-computation of depreciation should be adjusted in the accounts in the year in which the method of depreciation is changed.	30
<b>AS 9 - Revenue Recognition</b>	
- In a transaction involving <b>the sale of goods</b> and/or <b>rendering of services</b> and/or <b>from the use by others of enterprise resources</b> yielding interest, royalties and dividends, all significant policies adopted in the preparation and recognition of revenues should be disclosed.	31
- Performance should be measured either under the	32
a) <i>Completed service contract method</i> which recognizes revenue in the statement of profit and loss only when the transaction under a contract is completed or substantially completed.	
b) <i>Proportionate completion method</i> which recognizes revenue in the statement of profit and loss proportionately with the degree of completion of transaction under a contract.	
- An enterprise should also disclose the circumstances in which revenue recognition has been postponed pending the resolution of significant uncertainties.	33

<b>AS 10 - Fixed Assets</b>	
- Gross and net book values of fixed assets at the beginning and end of an accounting period showing additions, disposals, acquisitions and other movements	34
- Expenditure incurred on account of fixed assets in the course of construction or acquisition	35
In case where fixed assets are stated at revalued amounts	
<b>Include</b>	
- the method adopted to compute the revalued amounts	36
- the nature of indices used	37
- the year of any appraisal made	38
- whether an external evaluator was involved	39
<b>AS 16 - Borrowing Costs</b>	
- Accounting policy adopted for borrowing costs	40
- Amount of borrowing costs capitalized during the period	41
<b>AS 17 - Segment Reporting</b>	
<b>Segment revenue</b>	
- Classified into segment revenue from sales to external customers and segment revenue from transactions with other segments	42
<b>Segment result</b>	
- Total carrying amount of segment assets	43
- Total amount of segment liabilities	44
- Total cost incurred during the period to acquire segment (tangible & intangible fixed) assets that are expected to be used during more than one period	45
- Total amount of expense included in the segment result for depreciation and amortization in respect of segment assets for the period	46
- Total amount of significant non-cash expenses	47
- <i>Reconciliation between the information disclosed for reportable segments and the aggregated information in the enterprise financial statements.</i> In presenting the reconciliation, segment revenue should be reconciled to enterprise revenue; segment result should be reconciled to enterprise net profit or loss; segment assets should be reconciled to enterprise assets; and segment liabilities should be reconciled to enterprise liabilities.	48
<b>AS 18 - Related Party Disclosure</b>	
- Name of the related party and nature of the related party relationship where control exists; <i>irrespective of whether or not there have been transactions</i> between the related parties.	49
<b><i>In case of transactions between related parties</i></b> , during the existence of a related party relationship, the reporting enterprise should disclose the following:	
- Name of the transacting related party	50
- Description of the relationship between the parties	51
- Description of the nature of transactions	52
- Volume of the transactions either as an amount or as an appropriate proportion	53
- Any other elements of the related party transactions necessary for an understanding of the financial statements	54

- Amounts or appropriate proportions of outstanding items pertaining to related parties at the balance sheet date and provisions for doubtful debts due from such parties at that date 55
- Amounts written off or written back in the period in respect of debts due from or to related parties. 56

## **AS 19 – Leases**

### ***For finance leases by Lessee***

#### ***The lessee should make the following disclosures for finance leases:***

- Assets acquired under finance lease as segregated from the assets owned 57
- Net carrying amount at the balance sheet date for each class of assets 58
- Reconciliation between the total of minimum lease payments at the balance sheet date and their present value. 59

#### ***Total of minimum lease payments at the balance sheet date, and their present value, for each of the following periods:***

- Not later than one year 60
- Later than one year and not later than five years 61
- Later than five years 62
- Contingent rents recognized as expense in the statement of profit and loss for the period 63
- Total of future minimum sublease payments expected to be received under non-cancellable subleases at the balance sheet date 64
- General description of the lessee's significant leasing arrangements. 65

### ***For operating leases by the Lessee***

#### ***Total of future minimum lease payments under non cancellable operating leases for each of the following periods:***

- Not later than one year 66
- Later than one year and not later than five years 67
- Later than five years 68
- Total of future minimum sublease payments expected to be received under non-cancellable subleases at the balance sheet date; 69
- Lease payments recognized in the statement of profit and loss for the period, with separate amounts for minimum lease payments and contingent rents; 70
- Sub-lease payments received (or receivable) recognized in the statement of profit and loss for the period; 71
- General description of the lessee's significant leasing arrangements including 72
- Basis on which contingent rent payments are determined; 73
- Existence and terms of renewal or purchase options and escalation clauses; and 74
- Restrictions imposed by lease arrangements, such as those concerning dividends, additional debt, and further leasing. 75

### ***For finance leases by the Lessor***

- Reconciliation between the total gross investment in the lease at the balance sheet date, and the present value of minimum lease payments receivable at the balance sheet date. 76

<b><i>Total gross investment in the lease and the present value of minimum lease payments receivable at the balance sheet date, for each of the following periods:</i></b>	
- Not later than one year	77
- Later than one year and not later than five years	78
- Later than five years	79
- Unearned finance income	80
- Unguaranteed residual values accruing to the benefit of the lessor	81
- Accumulated provision for uncollectible minimum lease payments receivable	82
- Contingent rents recognized in the statement of profit and loss for the period	83
- General description of the significant leasing arrangements of the lessor	84
- Accounting policy adopted in respect of initial direct costs.	85
<b><i>For operating leases by the Lessor</i></b>	
- For each class of assets, the gross carrying amount, the accumulated depreciation and accumulated impairment losses at the balance sheet date, and	86
- Depreciation recognized in the statement of profit and loss for the period	87
- Impairment losses recognized in the statement of profit and loss for the period	88
- Impairment losses reversed	89
<b><i>Future minimum lease payments under non-cancellable operating leases in the aggregate and for each of the following periods:</i></b>	
- Not later than one year	90
- Later than one year and not later than five years	91
- Later than five years	92
- Total contingent rents recognized as income in the statement of profit and loss for the period	93
- General description of the lessor's significant leasing arrangements	94
- Accounting policy adopted in respect of initial direct costs.	95
<b>AS 22 - Accounting for Taxes on Income</b>	
- Deferred tax assets and liabilities disclosed under a separate heading in the balance sheet of the enterprise, separately from current assets and current liabilities.	96
- The break-up of deferred tax assets and deferred tax liabilities into major components of the respective balances in the notes to accounts.	97
- Nature of the evidence supporting the recognition of deferred tax assets, if an enterprise has unabsorbed depreciation or carry forward of losses under tax laws.	98
<b>AS 26 - Intangible Assets</b>	
- For each class of intangible assets, distinguishing between internally generated intangible assets and other intangible assets:	99
- The useful lives or the amortization rates used;	100
- The amortization methods used;	101
- The gross carrying amount and the accumulated amortization (aggregated with accumulated impairment losses) at the beginning and end of the period;	102
<b><i>Reconciliation of the carrying amount at the beginning and end of the period showing:</i></b>	
- Additions, indicating separately those from internal development and through amalgamation	103
- Retirements and disposals	104
- Impairment losses recognized in the statement of profit and loss during the period	105

- Impairment losses reversed in the statement of profit and loss during the period	106
- Amortization recognized during the period; and	107
- Other changes in the carrying amount during the period.	108
- Where an intangible asset is amortized over more than ten years, the reasons why it is presumed that the useful life of an intangible asset will exceed ten years from the date when the asset is available for use. In giving these reasons, the enterprise should describe the factor(s) that played a significant role in determining the useful life of the asset;	109
- Description, the carrying amount and remaining amortization period of any individual intangible asset that is material to the financial statements of the enterprise as a whole;	110
- Existence and carrying amounts of intangible assets whose title is restricted and the carrying amounts of intangible assets pledged as security for liabilities; and	111
- Amount of commitments for the acquisition of intangible assets.	112
- The financial statements should disclose the aggregate amount of research and development expenditure recognized as an expense during the period.	113

## **AS 28 - Impairment of Assets**

For each class of assets:

- The amount of impairment losses recognized in the statement of profit and loss during the period and the line item(s) of the statement of profit and loss in which those impairment losses are included	114
- The amount of reversals of impairment losses recognized in the statement of profit and loss during the period and the line item(s) of the statement of profit and loss in which those impairment losses are reversed;	115
- The amount of impairment losses recognized directly against revaluation surplus during the period; and	116
- The amount of reversals of impairment losses recognized directly in revaluation surplus during the period.	117

***An enterprise it should disclose the following for each reportable segment based on an enterprise's primary format:***

- The amount of impairment losses recognized in the statement of profit and loss and directly against revaluation surplus during the period.	118
- The amount of reversals of impairment losses recognized in the statement of profit and loss and directly in revaluation surplus during the period.	119

***Where impairment loss for an individual asset or a cash-generating unit is recognized or reversed during the period and is material to the financial statements of the reporting enterprise as a whole, an enterprise should disclose:***

- the events and circumstances that led to the recognition or reversal of the impairment loss	120
- the amount of the impairment loss recognized or reversed	121
For an individual asset:	
- the nature of the asset	122
- the reportable segment to which the asset belongs, based on the enterprise's primary format	123
For a cash-generating unit:	
- a description of the cash-generating unit	124

- the amount of the impairment loss recognized or reversed by class of assets and by reportable segment based on the enterprise's primary format; and	125
- if the aggregation of assets for identifying the cash generating unit has changed since the previous estimate of the cash-generating unit's recoverable amount (if any), the enterprise should describe the current and former way of aggregating assets and the reasons for changing the way the cash-generating unit is identified;	126
- whether the recoverable amount of the asset (cash-generating unit) is its net selling price or its value in use;	127
- if recoverable amount is net selling price, the basis used to determine net selling price (such as whether selling price was determined by reference to an active market or in some other way)	128
- if recoverable amount is value in use, the discount rate(s) used in the current estimate and previous estimate (if any) of value in use	129
<b><i>If impairment losses recognized (reversed) during the period are material in aggregate to the financial statements of the reporting enterprise as a whole, an enterprise should disclose a brief description of the following:</i></b>	130
- Main classes of assets affected by impairment loss (reversals of impairment losses) for which no information is disclosed, elsewhere.	131
- Main events and circumstances that led to the recognition (reversal) of these impairment losses for which no information is disclosed, elsewhere.	132

## **AS 29 - Provisions, Contingent Liabilities and Contingent Assets**

### ***For each class of provision, an enterprise should disclose:***

- Carrying amount at the beginning and end of the period	133
- Additional provisions made in the period, including increases to existing provisions	134
- Amounts used (i.e. incurred and charged against the provision) during the period	135
- Unused amounts reversed during the period	136
- A brief description of the nature of the obligation and the expected timing of any resulting outflows of economic benefits	137
- An indication of the uncertainties about those outflows where necessary to provide adequate information, an enterprise should disclose the major assumptions made concerning future events	138
- The amount of any expected reimbursement, stating the amount of any asset that has been recognized for that expected reimbursement.	139

### ***For each class of contingent liability at the balance sheet date a brief description of the nature of the contingent liability:***

- An estimate of its financial effect	140
- An indication of the uncertainties relating to any outflow	141
- The possibility of any reimbursement	142



## Endnotes

<sup>1</sup> American Institute of Certified Public Accountants (AICPA) sponsored website. Retrieved from [http://www.ifrs.com/updates/aicpa/ifrs\\_faq.html#q3](http://www.ifrs.com/updates/aicpa/ifrs_faq.html#q3)

<sup>2</sup> Beginning April 1<sup>st</sup>, 2011 Indian companies with net worth of Rs. 1,000 crores (equivalent to approximately USD 220 million) or more, companies that are part of the two most followed stock indices of the Bombay Stock Exchange (BSE) and National Stock Exchange (NSE) and companies listed in overseas exchanges were required to adopt IFRS. By April, 2014 all listed companies were required to comply with IFRS. However, due to persistent lobbying by the corporate sector and unresolved taxation issues, the Ministry of Corporate Affairs in India (MCA) postponed the convergence of Indian GAAP with the international standards on February 26<sup>th</sup>, 2011. Indian corporate sector was concerned that across industry, profitability and revenue recognition would significantly change should the International standards be adopted in year 2011.

<sup>3</sup> United States Department of State Official website. Retrieved from <http://www.state.gov/r/pa/ei/bgn/3454.htm#econ>

<sup>4</sup> United States Department of State Official website. Retrieved from <http://www.state.gov/r/pa/ei/bgn/3454.htm#econ>

<sup>5</sup> Central Intelligence Agency Official website. The World Factbook. Retrieved from <https://www.cia.gov/library/publications/the-world-factbook/geos/in.html>

<sup>6</sup> The Institute of Chartered Accountants of India Official website. Preface to the Statements of Accounting Standards (revised 2004). Retrieved from [http://www.icaai.org/post.html?post\\_id=2805&dc\\_id=221](http://www.icaai.org/post.html?post_id=2805&dc_id=221)

<sup>7</sup> Ministry of Corporate Affairs website of the Government of India: Accounting Standards and their convergence with IFRS [http://www.mca.gov.in/Ministry/pdf/Accounting\\_Standards.pdf](http://www.mca.gov.in/Ministry/pdf/Accounting_Standards.pdf)

<sup>8</sup> An Indian Company means a company formed and registered under the Indian Companies Act of 1956. The Act defines a company as “a company formed and registered under the Indian Companies Act or an existing company”.

<sup>9</sup> Indian Express Official website. 2011, February 26. India Inc has its way, IFRS put off. *Indian Express*. Retrieved from <http://www.indianexpress.com/news/india-inc-has-its-way-ifrs-put-off/755079/>

<sup>10</sup> Street and Bryant defined U.S. listings as NYSE or NASDAQ listings (file form 20-F) and; U.S. filings as 12g3-2(b) exempt, 144A, and OTC filings.

<sup>11</sup> United Kingdom Trade and Investment website Doing Business in India. [www.ukti.gov.uk/export/countries/asiapacific/southasia/india/doingbusiness.html](http://www.ukti.gov.uk/export/countries/asiapacific/southasia/india/doingbusiness.html)

<sup>12</sup> The National Stock Exchange is located in Mumbai, India and is India’s largest stock market by market capitalization.

<sup>13</sup> Reuters Official website. Chandran, Rina and Tripathy, Devidutta. (Jan 7, 2009) Satyam takes shine off India's family-run corporates. Retrieved from <http://in.reuters.com/article/2009/01/07/idINIndia-37328320090107>

<sup>14</sup> Bombay Stock Exchange Official website. Retrieved from <http://www.bseindia.com/about/introbse.asp>

<sup>15</sup> Bombay Stock Exchange official website. Retrieved from <http://www.bseindia.com/about/introbse.asp>

<sup>16</sup> World Federation of Exchanges Official website. Retrieved from <http://www.world-exchanges.org/statistics/ytd-monthly> on October 21, 2011.

<sup>17</sup> World Federation of Exchanges Official website. Retrieved from <http://www.world-exchanges.org/statistics/ytd-monthly> on October 21, 2011.

<sup>18</sup> Forbes Official website. Retrieved from <http://www.forbes.com/2010/01/07/india-economy-inflation-entrepreneurs-wharton.html>

<sup>19</sup> These Acts supervise and regulate the financial sector in India, comprising commercial banks, financial institutions and non-banking finance companies. Reserve Bank of India Official website. Retrieved from <http://www.rbi.org.in/scripts/AboutusDisplay.aspx#MF>

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<sup>20</sup> This Act regulates, promotes and ensures orderly growth of the insurance and re-insurance business. Insurance Regulatory and Development Authority of India Official website. Retrieved from [http://www.irda.gov.in/ADMINCMS/cms/NormalData\\_Layout.aspx?page=PageNo101andmid=1.2](http://www.irda.gov.in/ADMINCMS/cms/NormalData_Layout.aspx?page=PageNo101andmid=1.2)

<sup>21</sup> For the financial year 2010-2011, specific listed Indian companies were required to follow the modified Indian accounting standards that are a variation of IFRS. This requirement was expected to facilitate gradual transition from domestic GAAP to IFRS. Hence, in 2010-2011 certain listed Indian companies followed different accounting standards than the others.

<sup>22</sup> The Centre for Monitoring Indian Economy is an independent economic research organization. Its resources include corporate databases like Business Beacon, Prowess and CapEx; services including Industry Analysis and Economic Intelligence; and research reports on the financial performance of individual companies and the Indian economy.

<sup>23</sup> Capitaline Plus database provides fundamental and market data on listed and unlisted Indian companies, catalogued under more than 300 industries. The database contains extensive data and analysis on company profile and management, financial statements, quarterly results, ownership pattern, share price data, business news, corporate events, etc. Capitaline Databases Official website. Retrieved from <http://www.capitaline.com/new/plus.asp>

<sup>24</sup> Bombay Stock Exchange Official website. Retrieved from [http://www.bseindia.com/mktlive/indices\\_highlights.asp](http://www.bseindia.com/mktlive/indices_highlights.asp)

<sup>25</sup> Bombay Stock Exchange Official website. Retrieved from <http://www.bseindia.com/about/abindices/bse100.asp>

<sup>26</sup> Some companies did not report any profit in year 2009-2010. Where values for calculating leverage and net profitability were not reported it was assumed that the firm had no debt and zero profitability. Sensitivity analyses were carried out excluding these observations (12 companies). Result of the analysis remained unchanged from the results reported herein.

<sup>27</sup> Multiple regression analysis assumes that the relationship between the dependent and independent variables is linear. In order to confirm, linearity of the relationship between variables exploratory analysis included a “lack of fit test”. The only independent variable, which had a mildly significant quadratic relationship with the dependent variable, was the timeliness (TIME) variable. This relationship was documented and later used to explain the variability in the regression model. All other dependent-independent variables showed linear relationship.

<sup>28</sup> Some sensitivity analysis regarding the timeliness variable was conducted and it was observed that the variable had a peculiar relationship with level of disclosure. Indian companies are required submit their annual reports to the Ministry of Corporate Affairs between April 1, and September 30, of a financial year. It was observed that compared to companies that released their reports towards the average time permitted under the regulations, disclosed more information than those that released their reports too early or too late during the permitted time duration.

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## VITA

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Meha Kohli was born on December 16, 1981, in Ludhiana, India. She is an Indian citizen. She graduated from the Lucknow University in Lucknow, India with a Bachelor of Commerce degree in 2002 and with Master of Commerce (Accounting) degree from the same University in 2004. She came to the United States in 2005. She graduated with Master of Science in Global Marketing Management from Virginia Commonwealth University in 2007.