Governance Through Disclosing Risk - Impact on Cost of Equity

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ABSTRACT

This research work examines the literature on corporate risk disclosure and extends this further by undertaking an empirical investigation into the corporate risk disclosure practices of Indian companies and the economic benefits of risk disclosures. The content analysis was done on the annual reports (2014 – 2015) of all the companies with the help of a risk disclosure index developed, to measure the levels of risk disclosures. It is found that the Indian companies enjoy economic benefit in the form of reduced cost of equity, by reducing the information asymmetry. The firms which have higher levels of risk disclosures have lower cost of equity.

Introduction

Business world has become a borderless arena to compete as a result of globalization. By higher competition, cross border transactions and broad spectrum of operations, firms automatically fall into a more vulnerable position to risks, which cannot be predicted with hundred percent accuracy. The best possible solution to reduce the level of uncertainty is to report the known risks in as complete and accurate way as possible. The reporting of risk will help to disseminate information about risk to outside shareholders who are not in a position to access information from internal sources. Risk information reduces the classic issue of asymmetric information and it enhances the quality of decisions taken by the stakeholders, especially the fund providers (Healey and Palepu, 2001). In a deeper level, greater benefit from risk disclosures could be reduction in the cost of funds as the investors will have greater confidence in the firm by knowing more about its operations (Beretta and Bozzolan, 2004).

Quality risk reporting practices will provide confidence for general investors and prevent creation of overvalued and undervalued stock that could harm company's value in the long run. Nevertheless, in reality, the management may hardly be willing to disclose all the information about risks of the company, either it will impair the company's image or secrets will be made public to competitors (Leuz and Verrechia, 2000). By this reason, actual practice of risk reporting will vary across companies and industries. Corporate risk reporting is relatively an emerging issue and it is gaining popularity gradually, during the last few decades. For better corporate governance, risk disclosure is very

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important both for the management and stakeholders of the company. This research examines the literature on corporate risk disclosure and extends this further by undertaking an empirical investigation into the corporate risk disclosure practices of Indian companies and the economic benefits of risk disclosures. The remainder of this paper is organised as follows. The introduction section is followed by review of related literature, and discussions on methodology. Analysis is explained in the next section followed by the conclusion.

Literature Review

The 'information' problem arises from informational asymmetries and conflicting incentives between investors and entrepreneurs. It can interrupt the smooth functioning of the capital market (Akerlof, 1970). If the investors cannot differentiate between 'good' and 'bad' investment opportunities, then managers with 'bad' investment opportunities may claim that their ideas are as valuable as the 'good' ideas (Healy and Palepu, 2001). The non-availability of information or the information asymmetry can create costs by introducing adverse selection into

transactions between the investors and the sellers of investment opportunities (Welker, 1995). An investor wants to provide capital with confidence, after understanding and comparing the risks and returns associated with that project. (Fama,1980). Because an investor provides capital to a risky business opportunity, he expects a risk-adjusted required return on the capital. The risk adjusted required return is henceforth called the cost of the capital (Fama and French, 1999; Merton, 1987). If the information asymmetry is high, Investors will discount investment opportunities offered on capital markets at an additional risk premium (Welker, 1995).

Firms can choose along the spectrum between no and full disclosure while dealing with information symmetry. An increase in firm disclosure leads to reduced information asymmetry thereby causing investors to reduce the expected required return. This results in the reduction of cost of capital and increases market efficiency (Clement et al., 2003; Gelb and Zarowin, 2002). The term disclosure, in broad sense, includes the revelation of any kind of information about a company. The word disclosure has been defined by Kohler's Dictionary of Accountants as an explanation or exhibit, attached to a financial statement, or embodied in a report containing a fact, opinion or detail required or helpful in interpretation of the statement or report. There are several theories which explain the reason for disclosure of information by firms, which include, agency theory, stakeholder theory, political cost theory, proprietary cost theory, signaling theory and capital need theory.

Several academic studies and professional reports worldwide (e. g., ICAS, 1988; ICAEW, 1997,1999a, 1999b, 1999c, 2002; ICAS, 1988; IASB, 2005; CICA, 2002) highlighted the drawbacks of the present financial reporting model and called for a more comprehensive disclosure to satisfy the needs of corporate report users. Firm's disclosure strategy depends on the benefits and costs believed by the firm's management to be associated disclosure (Gibbins et al., 1990). Corporate disclosure literature provides theoretical and practical evidence on the potential benefits that disclosing firms can reap from revealing more information to the users in the market (e. g., O'Shea et al., 2008; Healy et al.,

1999; Healy and Palepu, 2001; Botosan, 1997; Hail, 2002; Gray and Roberts, 1989). It has been argued that voluntary disclosures reduce agency costs (e. g., Jensen and Meckling, 1976; Chow and Wong-Boren, 1987), lower information asymmetry among informed and non-informed market participants (e. g., Petersen and Plenborg, 2006; Leuz and Verrecchia, 2000; Healy et al., 1999; Diamond and Verrecchia, 1991), reduce a company's cost of capital (e. g., ICAEW, 1997, 1999b; Botosan, 1997; Hail, 2002) and improve the market price of securities (e. g., Gray and Roberts, 1989).

In spite of increasing regulations (created by company law, accounting standards, and stock exchange requirements) that require companies to disclose information, the current rules allow firms to decide on their disclosure strategies which may result in variation in the disclosure levels across companies. Companies may choose to disclose information exceeding the level mandated by regulation or in advance of compliance date (i. e., voluntarily). The accounting bodies and professional institutes all over the world have recognized financial reports as one of the major disclosure media accepted by the varied user groups. Most proposals that required companies to enhance their risk reporting have recommended the annual report as the vehicle for improved risk disclosure (e. g., ICAEW, 1997, 1999, 2002; ASB, 1998, 2003, 2005). It can be observed that most of the pioneering efforts to improve the financial reporting practices through regulations have been made in western countries, especially USA and UK. In India, in addition to the policies framed by different regulatory bodies namely ICAI, SEBI and various stock exchanges, several committees were constituted from time to time, to suggest improvements on the reporting practices. The major committees which emphasized the need for improved corporate disclosure practices are Confederation of Indian Industry (1998), Kumaramangalam Birla Committee (2000), Naresh Chandra Committee (2002), Narayana Murthy Committee (2002), SEBI committee (2003) and Committee under the leadership of Adi Godrej (2012).

Despite the perceived importance of risk information to investors in making equity and debt investment decisions, empirical studies continue to find that the risk information disclosed in corporate annual reports remains inadequate (Beretta &Bozzolan, 2004). Under the principle of prudence, accounting had adopted a concept of risk predominantly associated to the probability of losses (downside risk) (Boritz 1990). But, currently, in an economy characterized by new veracities (Lajili and Zéghal 2005), risk is seen both as the probability of losses (downside risk) and probability of gains (upside risk) (Solomon, Solomon et al. 2000; Dobler 2008; Linsley and Shrives 2006). In fact, not many pragmatic studies have been done by academic researchers on risk disclosure issue. Most of the literature comes from various regulatory / professional bodies e.g. ICAEW (1997, 1999, 2002), CICA (2002) and so on.

Linsley et al. (2006) pointed out that risk disclosure has received little academic attention and is almost exclusively focused on banking sector, as a result of major plummet of financial institutions across the world. Lajili and Zeghal (2005), and Linsley and Lawrence (2007) analysed risk disclosures in the annual reports of corporations in Germany, Canada, and the United Kingdom respectively, and had arrived at conclusions similar to studies done on risk disclosures of financial institutions. Lajili and Zeghal (2005) had adopted content analysis as the method to understand the risk disclosures. Linsley and Lawrence (2007) found that risk disclosures were difficult or very difficult to read, but they could not find any evidence that directors deliberately conceal bad news. Deumes (2008), analysed

risk disclosure in annual reports and prospectuses and investigated whether such disclosures are associated with future earnings, shareholder returns, and volatility of future stock prices. Dia and Zeghal (2008) transformed qualitative descriptions of risk disclosures into quantitative numbers and tested their association with traditional financial and accounting measures of risk and return. There had been studies in the past which investigated the relationship between the extent of risk disclosure and corporate characteristics such as size, risk, and profitability.

The association between corporate disclosure and cost of equity is a matter of considerable interest in today's economic environment. The implications of corporate disclosures on the cost of funds will help companies in formulating their disclosure and reporting strategies in such a way as to get maximum economic benefit. Economic theory and anecdotal evidence suggest a negative relationship between corporate disclosures and cost of equity. Corporate disclosure literature provides evidence on the benefits that firms can reap by revealing more information to the users in the market (O'Shea et.al, 2008; Healy et.al., 1999; Botosan, 1997; Hail, 2002; Gray & Roberts, 1989). It has been concluded that higher disclosure reduces agency cost (Wong 1988), lowers information asymmetry (Diamond &Verrecchia 1991; Healy et.al., 1999; Leuz&Verrecchia, 2000) lowers cost of capital (ICAEW, 1997, 1999; Botosan, 1997; Hail, 2002) and improves the market price of the shares (Gray & Roberts, 1989). The association between disclosure and cost of equity is an interesting topic to the business reporting community (Hail, 2002).

Botosan (1997) attempted to establish a direct empirical connection between disclosure level (measured by self – constructed disclosure index) and cost of equity capital. Botosan and Plumlee (2000) extended the work done by Botosan (1997) and found that the relationship between cost of equity and disclosure depends on the type of disclosure. Contrary to expectation, Richardson and Welker (2001) found a positive association between cost of equity and social disclosures. Kothari and Short (2003) found evidence that favourable disclosure reduce cost of equity while unfavorable disclosures increases cost of equity. Prior literature suggests that evidence on the direction of the relationship between two variables is mixed. This could be due to the fact that different research studies dealt with different experimental units – in terms of the countries selected, time period, sample size and measurement methods used.

Research Methodology

In this research, the first objective is to explore the level of risk disclosure in the annual reports of Indian companies, the types of risks disclosed in the annual reports and the differences, if there be any, in the extent of risk disclosures and types of risks disclosed across different industries. Risk disclosure practices of a firm will be affected by several internal factors of the firm. The association between disclosure and firm characteristics has been of interest to accounting researchers for quite a long time. The findings of previous research do provide a base to have the second objective of the study as to explain the influence of firm specific characteristics such as company size, industry type, profitability, leverage and listing of shares in foreign stock exchanges on the level of risk disclosure in the annual reports of Indian companies. The third objective of this study is to analyze the influence of the level of risk disclosures on Indian companies on the cost of equity.

The study was done by taking a sample of all the 134 companies belonging to eleven sectoral indices of Bombay Stock Exchange. The content analysis was done on the annual reports (2014 – 2015) of all the companies with the help of a self developed risk disclosure index, to measure the levels of risk disclosures. It is stated that disclosure levels found in the annual reports are correlated positively with the amount of disclosures provided by other media (Lang and Lundholm, 1993). The company size is measured using asset size and turnover. Profitability is measured using return on equity. Leverage is measured by dividing total debts with total assets. Listing status is taken as one if the company's share is listed in any foreign stock exchange and zero, if it is not. The cost of equity is measured using Capital Asset Pricing Model (CAPM).

Initially, at the item generation stage of risk disclosure index, an exhaustive list of 172 items were generated. The list was given to a group of experts to check the relevance (group consisted of qualified eleven Chartered Accountants / Certified Financial Analysts with a minimum of 15 years' experience as auditors or financial analysts in different industries in India). At this stage the items got reduced to 130. Pretest was done on 11 annual reports with the 130 items. During this stage the risk categorization was done. This list was given again for expert review for checking the risk categories and items included under each category along with the results of the pretest. (Risk categorization was made based on the previous research works). Items got reduced to 53 at the second stage of expert review due to the ambiguity in definitions; semantic issues etc. The final number of items and risk categories consisted of Business risk (13 items), Environmental risk(9 items), Operational risk (21items) and Financial risk (10 items). A pilot study done on a sample of twenty annual reports (the sample was part of the final sample).

To capture the data from the annual reports, incidence approach (checking for the presence or absence of items) was adopted. Each item in the risk disclosure index was clearly defined before coding. A multi dimensional coding approach was adopted by the researcher for obtaining the score. This system of coding further classified the items based on (1) the nature of information disclosed (qualitative and quantitative), (2) information timeframe (past, noontime, present, future) and (3) type of information (good, bad and neutral news).

Krippendorff (1980) has defined three types of reliability to be achieved in content analysis; 1) stability 2) reproducibility and 3) accuracy. Stability is achieved when the results of coding or categorization remain unchanged as the process repeated over a period of time. To ensure stability in this research, the same content was coded more than once by the same coder with a set of clearly pre-defined items and fixed guidelines for coding. Reproducibility concerns whether a different investigation would obtain the same results. To ensure reproducibility, a set of annual reports were given to a group of experts without revealing identities and they were asked to prepare the scores. With the scores obtained from these experts, inter-rater reliability checked using Krippendorff alpha which had a score of 0.81. Accuracy of content analysis presents the extent in which the coding and classification of the content complies with a standard or norm that already exists. Currently there are no established standards or norm in risk disclosures area. So to achieve accuracy, coding and classification scheme is based on literatures review and guidance issued from official organizations, which can be considered as an accurate source of information

Validity is achieved when other data, coding procedures, or classification scheme generate similar results (Weber, 1990). Careful design of categories can also augment validity (Holsti, 1969). For ensuring validity, the following procedures were followed. Risk categorization was designed referring to previous studies. Pretest of risk categorization was also performed on a subset of the sample (11 annual reports). Learning cycle of the coder is achieved by double analyzing 31 selected reports as the literature suggests that average learning cycle for less-experienced coders is estimated at around 20 reports. Krippendorf (1980) suggested that, if, after training the coder demonstrates an acceptable level of accomplishment by coding a pilot sample, the coder might be acceptable. This was assured by peer verification of coding results.

The validation of the risk disclosure index was done using an expert panel consisting of four members. The annunal reports of thirty companies, which were included in the sample, were given to the four experts. The identities of panelists were not disclosed to others. They were asked to code thirty annual reports of the same companies, using the risk disclosure index developed by the researcher. The guidelines for coding and the definitions of all the items included in the index were provided to all the four members to ensure objectivity.

The scores provided by all the four members were compared and the uniformity in scoring was ensured. These scores were also compared with the scores given by the researcher for the same set of companies. This validation process was repeated twice at 6 months interval during the research process to validate the risk disclosure index.

Analysis

The risk disclosure level of the firms, which is expressed by the total risk disclosure level, is measured using the risk disclosure index. The risk disclosure index score card consists of 53 items under four different categories namely, Business Risk, Environmental Risk, Operational Risk and Financial Risk. The number of items under each risk category is as follows – Business Risk (13 items); Environmental Risk (9 items); Operational Risk (21 items) and Financial Risk (10 items). The figures reveal that the risk disclosure levels in the annual reports of the firms are very low as the maximum score obtained is only 218 and the minimum score is 31out of the total obtainable score of 1272. But the firms vary in their risk disclosure levels as there is a range of 187 and standard deviation of 27.84. The mean value of risk disclosure level is the highest in healthcare sector with a score of 102. 38 and the lowest mean score is in the realty sector (mean score 62.72). Highest disclosure trend is seen under operational risk category with a mean score of 33.50 followed by business risk category (mean score 20.08) and environmental risk category (mean score 17.42). The firms have lowest disclosure levels for financial risk category (mean score 13.25).

To facilitate meaningful analysis, the coding system used for content analysis is multidimensional in nature which measures qualitative / quantitative nature of disclosure, time frame of information disclosed (past, non time, present and future) and also the type of news disclosed (good, bad and neutral news). When the levels of qualitative and quantitative disclosures in the annual reports of the companies

are compared, it is seen that the level of qualitative disclosures is much high (mean value 56.88) compared with that of quantitative disclosures (mean value 27.43). Qualitative disclosure, therefore, contributes significantly to the trend in total disclosures. This result is in the same trend with previous study of Linsley and Shrives (2006) on UK listed companies. Considering another characteristic (quality variable) of information disclosed i. e., disclosure according to its time frame (past, nontime, present and future information), the figure depicts that disclosure of items pertaining to the present time period is high (mean value 47.31) followed by non time (mean value 14.45), past (mean value 14.18) and future (mean value 8.37) information. As per the definition given, the present information is the information which pertains to the current accounting year of the firm for which the annual report is prepared. The results show that present information disclosure dominates. Classifying the disclosure according to the news type) good news, bad news and neutral news), the results revealed that good news disclosures are high (mean value 65.66) followed by bad news disclosures (mean value 16.23) and neutral news disclosures (mean value 2.42).

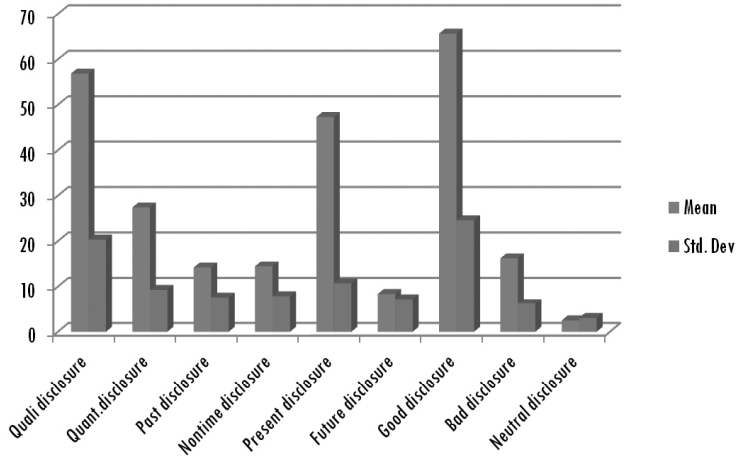

Fig.1 : Total Disclosure level based on evidence type, time frame and type of news

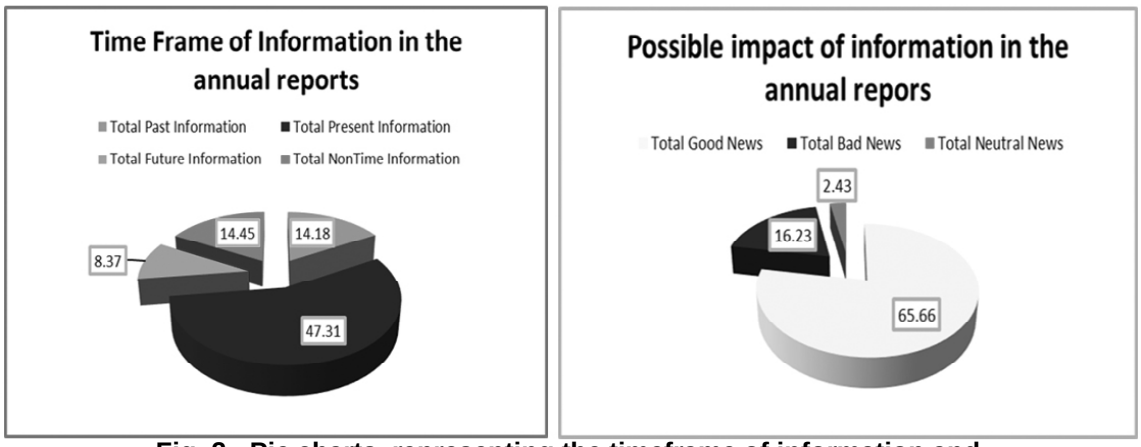

Fig. 2 : Pie charts representing the timeframe of information and possible impact of information in the annual reports

The researcher has analysed the key factors which affect the risk disclosure level. The first relationship to be explored is the effect of industry on the risk disclosure levels using ANOVA and it was found that there is significant difference between industries in terms of mean level of risk information disclosed by the companies. This finding is consistent with the results found in previous literature in which the amount of corporate risk disclosure is found to be associated with industry. Further the researcher analysed the effect of industry on different risk

categories. It was found that except environmental risk disclosure levels, for all other risk categories (business risk, operational risk and financial risk), there is significant difference in the mean value of risk disclosure levels across industries. The relationship between firm specific characteristics namely company size (measured in terms of asset size and turn over), leverage and profitability, and the influence of these firm specific characteristics on risk disclosure levels are analysed. It was found that only profitability has significant positive relationship with the risk disclosure levels and profitability has significant influence on the risk disclosure level.

Table 1 : Influence of Firm Specific Characteristics on Total Risk Disclosure Level

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.293[a]	.086	.079	26.81560	1.582

a. Predictors: (Constant), PROFITABILITY
b. Dependent Variable: TOT_DISCLO_LEVEL

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8754.314	1	8754.314	12.174	.001
	Residual	93479.928	130	719.076		
	Total	102234.242	131			

a. Predictors: (Constant), PROFITABILITY
b. Dependent Variable: TOT_DISCLO_LEVEL

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	77.391	3.113		24.864	.000		
	PROFITABILITY	42.091	12.063	.293	3.489	.001	1.000	1.000

a. Dependent Variable: TOT_DISCLO_LEVEL

Excluded Variables[b]

Model		Beta In	t	Sig.	Partial	Collinearity Statistics		
						Tolerance	VIF Tolerance	Minimum
1	LEVERAGE	.045[a]	.517	.606	.045	.944	1.060	.944
	TURNOVER	.089[a]	1.061	.291	.093	.998	1.002	.998
	ASSETSIZE	.046[a]	.531	.597	.047	.949	1.054	.949

a. Predictors in the Model: (Constant), PROFITABILITY
b. Dependent Variable: TOT_DISCLO_LEVEL

Performing the multiple regression using the stepwise method confirms that the model included only one variable (profitability). The other variables were eliminated. The adjusted coefficient of determination (adjusted R2) indicates that 8.6 percent of the variation in the dependent variable is explained by variation in the independent variables. The coefficients, representing profitability is statistically significant, while the coefficients on size and leverage are not statistically significant. It is found that the company size measured in terms of asset size & turnover and leverage do not have significant influence on the total disclosure level. Profitability has a significant positive influence on risk disclosure level. Variance Inflation Factor (VIF) values are shown to check for the multi collinearity and the values are quite acceptable. The Durbin-Watson Statistic is used to test for the presence of serial correlation among the residuals. The value of the Durbin-Watson statistic ranges from 0 to 4. As a general rule of thumb, the residuals are uncorrelated is the Durbin-Watson statistic is approximately 2. A value close to 0 indicates strong positive correlation, while a value of 4 indicates strong negative correlation. The value of Durbin-Watson is 1.582, approximately equal to 2, indicating no serial correlation. So the final equation is written as

Total Disclosure Level = 77.391 + 42.091 profitability

Size has been shown to be an important explanatory variable of corporate disclosure in previous studies, but here the results of statistical analyses indicate otherwise. This is not consistent with the arguments contained in the theoretical framework that disclosure helps to overcome agency costs, political costs, and other opportunities costs as a firm grows in -size. Of course, the sample of 134 companies was from the eleven sectoral indices of Bombay Stock Exchange, so all the firms included in the sample could be classed as 'large'. If this research had surveyed a greater range of Indian firms, a positive association between size and disclosure may be more obvious. Even for this sample, for two industries (Automobile and Information Technology sectors) we could find strong positive correlation between company size and risk disclosure levels. However, some previous research (Aljifri, 2008; Gray et al., 1995) did not find positive relationship between size and disclosure. Large firms might have the incentives for reducing the level of risk disclosure if firms believe that the information disclosed may impose a proprietary cost, hence putting a company at a competitive disadvantage and affecting the company negatively.

To test whether the risk disclosure levels of the firms significantly vary according to the listing status of a firm in a foreign stock exchange significantly, the researcher has done t- test. The p- value of independent sample T- test (p – value 0.533) suggests that there is no significant relationship between listing status of Indian companies and total risk disclosure levels. This is against the expectation that the firms which are listed in foreign stock exchanges to raise more funds, tend to disclose more information due to the strict disclosure norms applicable in that country. The possible explanation for the insignificance of this relationship could be that the reporting norms in Indian stock exchanges are progressing steadily, and that there is not much difference between the disclosure norms of foreign stock exchanges and Indian stock exchanges for the companies which get listed in both. Another possible explanation for the insignificance of this relationship is that, because of the nature of the sample which is chosen for this study (large size firms) to avoid certain costs associated with the disclosures (political cost and proprietary cost), the firms which are listed abroad, are disclosing additional information only in foreign stock exchanges, not in the annual reports published in India.

Barry and Brown (1985) suggested that disclosure affects cost of equity. Bertomeu et. al (2009), Botosan (1997) and Botosan & Plumlee (2002) suggested a negative association between the firm's cost of capital and extent of disclosures. The explanation for this association rely on a linkage between the disclosure quality and the cost of capital mediated via the effects of disclosure on information asymmetry in the capital markets. The following regression model was fitted to the data in order to assess the effect of risk disclosure level on the cost of equity capital:

Cost of Equity (Ke) = â0 - â1 risk disclosure level

To measure the cost of equity, Capital Asset Pricing Model (CAPM) is used. The CAPM (Sharpe,1964,and Lintner,1965) offers powerful predictions on the measurement of risk and the relationship between expected return and risk. The Capital Asset Pricing Model is based on two parameter portfolio model developed by Markowitz (1952). The model postulates that the equilibrium rates of return on all risky assets are a linear function of their covariance with the market portfolio.

The equation form of this model can be expressed as

E(Ri) = Rf + âi [E(Rm) – Rf], where E(Ri) is the expected return on the asset i, Rf is the risk free rate of return, E(Rm) is the expected return on market portfolio and âi = Cov (Ri, Rm)/ Var (Rm). The CAPM assumes a linear relationship between the expected return of a risk asset and its â and further assumes that â is an applicable and sufficient measure of risk that captures the cross section of average returns.

Table 2 : Empirical relationship between Risk Disclosure Levels and Cost of Equity

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.635[a]	.404	.399	21.58338	1.516

a. Predictors: (Constant), Cost of Equity

b. Dependent Variable: Total Disclosure Level

NOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	41626.050	1	41626.050	89.357	.000[a]
	Residual	61491.173	132	465.842		
	Total	103117.224	133			

a. Predictors: (Constant), Cost of Equity

b. Dependent Variable: Total Disclosure Level

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	155.642	7.776		20.016	.000		
	newke	-4.702	.497	-.635	-9.453	.000	1.000	1.000

a. Dependent Variable: Total Disclosure Level(Source: Author's computation using SPSS)

The adjusted coefficient of determination (adjusted R^2) indicates that 40.4 percent of the variation in the dependent variable is explained by variation in the independent variable. The coefficients, representing risk disclosure level is statistically significant. The beta value of -0.635 shows that the total risk disclosure level has significant negative influence on cost of equity. Collinearity statistics is checked with Durbin Watson test and it is 1, which shows that there is no collinearity.

The regression equation will be

$K_e = 22.413 – 0.086$ Total risk disclosure level, where K_e is the cost of equity.

The results of regression analysis clearly states that the level of risk disclosures in the annual report is negatively related to the cost of equity capital. In other words, the firms can get advantage in terms of lower cost of capital, if they ensure transparency by disclosing more in their annual reports. In academic literature, it is assumed that enhanced disclosure will result in greater transparency and a high liquid market, hence a low cost of capital (Botosan 1997). Perhaps, in Indian context the annual report has not lost its relevance and is still considered as one of the most important vehicle of communication, in conveying information to the market which affects the cost of capital.

Limitations of this research

This research extends the empirical knowledge and adds to the prior disclosure, and most importantly, to risk disclosure and cost of capital literature. The research, however, has its own limitations that have to be considered when interpreting the results. For this research, the researcher has concentrated only on the published annual reports of the companies. Though annual report is one of the major

sources of published information for the companies, there are other sources of information like press releases, conference calls, analysts' reports, website bulletins etc. Such sources are not considered for this study based on the findings of previous researchers that annual report is still considered one of the most comprehensive reporting sources by the investors. The second limitation of this research pertains to the use of content analysis. Though measures have been adopted to check the reliability of the index and to ensure the level of objectivity in the content analysis, an element of subjectivity is still there in the process. Moreover the quantity of risk disclosure (number of statements relating to disclosures) is not considered, rather quality of risk disclosure is considered for this study. The third limitation of this research is the sample size and selection. The sample was chosen from Bombay Stock Exchange's sectoral index, which had a market capitalization of more than 70% on the total market capitalization. Therefore the study mainly concentrates on larger firms with higher stock market liquidity and hence the results may not be generalized to small firms with lower stock market liquidity.

Conclusion

Examining the current state of risk disclosure in annual reports might be of assistance to companies, regulators, and users (mainly investors) who have an interest in corporate reporting. The results of this study suggest that there is a lot more need for improving the corporate risk disclosure practices in the annual reports of Indian companies. This finding shows that the information needs of the stakeholders who refer annual report as a disclosure medium, are not fully met at the present time. General statements regarding risks (non time, qualitative statements) seem to dominate the type of risk disclosures in the annual reports. The efforts should be focused on developing a framework for risk disclosure and guidance for companies to provide more specific and detailed risk discussions that can be of use to investors in evaluating the risk profile of the company. This research suggests that policy makers should take necessary steps to improve the nature and scope of mandatory items, by making the timely disclosure of certain relevant items such as strategic initiatives, mandatory items. With the increasing complexities in the corporate structures and innovative financial instruments being introduced, there is an urgent need to assure the continued utility and integrity of financial reporting to improve its usefulness to the stakeholders. This is possible by bringing integrated and radical changes in all the rules and regulations governing corporate disclosure norms in the case of Indian companies. The research also suggests that the firms can reap the benefits by ensuring transparency in the form of reduced cost of capital. The reduction in the information risk gap allows the firms to attract investors and funds at cheaper rates. These results of this study, showing a strong negative correlation between risk disclosure levels and the cost of equity should encourage the firms to disclose more and reap the benefits of low cost of funds.

The findings of the present study suggest that the firm specific characteristics such as company size, leverage and listing status of the firm do not have significant influence on the risk disclosure levels made by the firms. Future research can be done with larger samples to further identify the major firm specific characteristics which will influence the risk disclosure levels of the firms. Since this study has chosen only non financial Indian firms, attempts can be made to understand the risk disclosure practices of financial companies in India and there is scope to do a comparative study on

the risk disclosure levels of financial and non financial Indian companies. Future research could also be conducted to ascertain the view of analysts and investors regarding the importance of dominant risk categories and other risk items detected in annual reports. This will reflect user perceived importance of different risk disclosure items. Time span of the study can be increased and longitudinal study can be done to understand the impact of IFRS convergence on the risk disclosure practices at different time periods. The comparability of risk disclosure across countries and across time is another potential area for future research. Future research could examine risk disclosure in developed countries and in developing countries in order to gain a useful and relevant insight into risk reporting practices in different countries.

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