CHAPTER – 1
BACKGROUND OF THE STUDY

The present chapter incorporates the general overview of the topic of research. The chapter also puts forth the objectives which the present study seeks to examine and also describes the motivation for the study. Further, the chapter includes the limitations of the research undertaken. The chapter concludes with a brief description of different chapters into which the study has been organised.

1.1 INTRODUCTION

Indian capital market has been very vibrant and attractive to foreign investors for past few years. The performance of Indian capital market in terms of the number of transactions as well as volume of trade has been quite impressive. There has been an increasing flow of funds from foreign institutional investors. Indian corporate governance too has taken major steps in the direction of instilling confidence among institutional and increasing foreign investors. The Securities and Exchange Board of India (SEBI) established as a part of wide ranging economic reforms in 1991, has made an impressive progress in creating a rigorous regulatory regime that has helped to ensure transparency and fair practices among Indian companies. In spite of all this, the financial statements of Indian companies are regarded often with suspicion.

Academic literature indicates the difference in earnings management and disclosure practices among the developed and the developing countries. In a research initiative, Morgan Stanley (2011) analyzed earnings quality of five prominent emerging market countries: Brazil, Russia, India, China, and South Africa.\(^1\) The research report suggested significant difference in earnings quality of emerging markets and developed markets. Original BRIC countries were found to have on average weaker earnings quality than developed markets. South Africa, however, appeared indistinguishable from developed markets. Chinese, Indian and Brazilian industry groups dominated the top 15 country-industry group pairs ranked on the basis of average earnings quality score, indicating weaker earnings quality. Similarly, some other empirical studies (e.g., Leuz et al., 2003) have also classified India among the cluster of countries that engage in highest level of earnings management. There

are other empirical studies (e.g., Bhattacharya et al., 2003 and Dhaliwal et al., 2012),
which provide evidence of financial opacity among Indian companies. A study by
Bushman et al. (2004) also points to low informativeness and low credibility of the
financial statements of Indian companies. Further, information asymmetry has also
been cited as a reason for investor biasness. All this put together point to poor
corporate transparency in India.

Since 1992, much attention is paid to the accounting policies and methods of
Indian companies, as during this time Indian companies were permitted to issue
depository receipts to global investors to raise funds. In the wake of increasing foreign
direct investments, it becomes important for the Indian incorporate to improve the
credibility of its financial statements and have reporting practices at par with
international standards. The sophisticated investors have become more aware and are
interested not only in the earnings numbers but their quality also. It is, therefore,
imperative that Indian companies should be forthcoming with enhanced disclosures
and transparency in their financial reporting and also improve the quality of their
earnings, if they want to raise funds in international market. However, the concept of
quality of earnings has multidimensional approach as it manifests in different forms.
Earnings quality has been used by standard setters, researchers and practitioners, but
the issue of earnings quality has been dealt differently by different parties. It is
difficult to operationalize and measure it empirically.

A related issue is whether information in enhanced disclosures and earnings
quality is used by investors in their investment decisions. This would be evidenced
by reduced cost of capital for the companies with enhanced disclosures and better
earnings quality, as the investors would be ready to pay a higher price for such
companies. Francis et al. (2008) linked the literature that disclosure has cost of capital
effect and that earnings quality has cost of capital effect and emphasised the need to
examine the impact of voluntary disclosure on cost of capital conditional on earnings
quality. They provided evidence that earnings quality is a more primitive construct
affecting cost of capital and that if controlled for earnings quality, impact of voluntary
disclosure on cost of capital disappears. Another issue is whether it is the firms with
good earnings quality or the firms with poor earnings quality that issue more
expansive disclosures. Expansive disclosures by good earnings quality firms are

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2 The terms disclosure and disclosures have been used interchangeably in literature.
considered to be more credible by investors (Francis et al., 2008). On the other hand, expansive disclosures issued by poor earnings quality firms to reduce their information asymmetry will be treated as less credible by investors as they are based on poor quality information (Francis et al., 2008). Empirical research has focused primarily on the relation between management earnings forecast frequency (proxy for voluntary disclosures) and earnings volatility (proxy for earnings quality), with mixed results.

With this in backdrop and motivation from the study by Francis et al. (2008) that relates voluntary disclosure, earnings quality and cost of capital, the present study attempts to examine whether companies can reduce their future cost of capital by enhanced voluntary disclosures or by improving their earnings quality. Following Francis et al. (2008), the study also examines the association between voluntary disclosure of information for a sample of Indian companies as provided in their annual reports and their earnings quality. The present study is, therefore, an exploratory study that attempts to examine the association between voluntary disclosures and earnings quality and also examines their impact on future cost of capital. Beyer et al. (2010), however, observed that establishing the relationship between measures of accounting quality, information asymmetry/ information risk and the cost of capital is not an easy task.

This research study builds on the theoretical research that investigates how and whether the supply of information affects the cost of capital. Investors demand information to assess the value of the firms and make informed investment decisions. Differences in information among shareholders and managers and also among the shareholders cause information asymmetry. Information asymmetry causes information risk which is manifested in the form of increased cost of raising capital. Whether information risk arising from information asymmetry would affect the cost of capital depends on diversifiability or non-diversifiability of the information risk. However, whether information risk is diversifiable or not is a debatable question. Analytical models by, for example, Easley and O’Hara (2004) and Leuz and Verrecchia (2004), provide theoretical support for pricing of information risk i.e. the investors demand a higher cost of equity capital for firms with high information risk. They provide evidence that in a multi-asset and multi-period setting with informed
and uninformed investors, the information risk arising from information asymmetry is not diversifiable and hence priced. On the other hand, Cohen (2003), Hughes et al. (2007), and Lambert et al. (2007) do not consider information risk as an additional risk. Lambert et al. (2007) argue that the role of information asymmetry can be eliminated in large economies by holding well diversified portfolios and hence information risk is not priced.

Empirical studies predicted and explored relationship between information risk and cost of capital using different characterizations of information risk. Taking information attributes, for example, probability of informed trading (PIN), disclosures, or earnings quality as a separate information risk factor, these studies have examined the impact of information attribute(s) they considered on the cost of capital of the firms. Much empirical evidence is limited to the sample of U.S. firms. The objective of the present study is to examine the association between information risk and cost of capital in Indian setting. The present research effort, however, examines the impact of two information attributes (voluntary disclosures and earnings quality) on the cost of capital of the sample firms.

There are two streams of theoretical research that support the hypothesis that enhanced disclosure reduces the cost of capital. One stream of research suggests that enhanced disclosure mitigates the adverse selection problem in the capital markets by reducing information asymmetry between the firm and investors. This enables greater stock market liquidity and hence reduced cost of equity capital. Reduction in cost of capital becomes possible either through reduced transaction costs or increased demand for firm’s securities. The second stream of research suggests that enhanced disclosures reduce estimation risk that arises from investors’ estimates of the parameters of an asset’s return or pay off distribution. This research suggests that if the estimation risk is non-diversifiable, investors demand compensation for this additional risk in the form of increased cost of equity. Hail (2002), however, observed that empirical work on this link is confronted with major methodological drawbacks—neither disclosure nor cost of capital can be observed directly—and has documented somewhat confounding results so far.
Empirical studies also provide evidence that poor earnings quality is significantly and incrementally associated with higher information asymmetry. This is because poor quality reporting impairs the co-ordination between firms and the investors with respect to firm’s capital investment decisions. The poor co-ordination creates information risk, which manifests in the form of increased cost of capital. Bhattacharya et al. (2013) view reduction in information asymmetry to be an important benefit of improving earnings quality. The conjecture that the information in earnings is used by investors in their investment decisions is validated if earnings quality affects the expected rate of return that investors implicitly use to discount future cash flows (i.e. affects the cost of capital).

Section 1.2 outlines the broad field of study and then leads into the focus of the research objectives. Section 1.3 puts forth the need and motivation for the study. Further, Section 1.4 discusses the limitations of the study. The concluding Section 1.5 gives a brief description of the different chapters of the study.

1.2 RESEARCH FOCUS AND OBJECTIVES OF THE STUDY

The basic research question addressed in the present study is whether information in voluntary disclosures and earnings quality is used by investors in their investment decision making. This would be evidenced by an association between voluntary disclosure and cost of equity as well as an association between earnings quality and cost of equity. The study has attempted to achieve the following objectives:

1. To examine the association between voluntary disclosure and earnings quality of the sample companies.

2. To study the impact of voluntary disclosure on cost of equity of the sample companies.

3. To study the impact of voluntary disclosure on cost of debt of the sample companies.

4. To study the impact of earnings quality on cost of equity of the sample companies.

5. To study the impact of earnings quality on cost of debt of the sample companies.
6. To examine the impact of voluntary disclosure on cost of equity conditional on earnings quality.

Figure 1.1 gives a snap shot view of the discussed objectives of the study.

Figure 1.1 A Snap Shot View of the Objectives of the Study.

The study builds on the prior research that hypothesized an inverse relationship between voluntary disclosure and cost of capital and a positive relationship between earnings quality and cost of capital. An inverse relationship between voluntary disclosure and cost of capital and a positive relationship between earnings quality and cost of capital would confirm the notion that information risk is priced or the information in voluntary disclosures and earnings quality is used by investors and lenders in their decision making. To meet the above stated objectives,
the extent of voluntary disclosure \((VOLDISC)\) was measured for each sample firm. For this, voluntary disclosure index was developed. The sample companies were awarded scores for the items appearing in voluntary disclosure index. The total of scores for each firm was its voluntary disclosure score \((VOLDISC)\). Items in the voluntary disclosure index were classified into three broad categories, strategic \((STVOL)\), non-financial \((NONFINVOL)\) and financial \((FINVOL)\) voluntary disclosures.

Further, the final measure of earnings quality \((EARNQUAL)\) was derived by averaging three measures of earnings quality, accruals quality \((ACCQUAL)\), earnings variability \((EARNVAR)\) and absolute value of accruals \((ABACC)\). Empirical studies have also used more than one measure of earnings quality to capture it better. The choice of three measures of earnings quality was motivated by Francis et al. (2008) study. However, the present study used absolute value of accruals \((ABACC)\) as one of the measures of earnings quality instead of absolute value of abnormal accruals taken by Francis et al. (2008). Since the ordering of the three measures of earnings quality was the same (i.e., the higher earnings quality score for all the three measures meant poorer earnings quality) and also these three measures were positively correlated, the earnings quality scores derived from these three measures were averaged to arrive at a final measure of earnings quality \((EARNQUAL)\). The final measure of earnings quality \((EARNQUAL)\) is also interpreted in the similar way as the underlying three measures of earnings quality. This means a higher value of \(EARNQUAL\) was interpreted as poorer earnings quality.

The study examines the impact of voluntary disclosures and earnings quality on the future cost of capital. Most of the empirical studies examining the impact of voluntary disclosure or earnings quality on cost of capital have taken cost of capital to be synonymous with cost of equity. Following Francis et al. (2005), the present study takes cost of capital to be cost of debt \((COD)\) and cost of equity \((COE)\). The study

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3 Of the three measures of earnings quality, accruals quality has been the prominent proxy for earnings quality.

4 Absolute value of accruals has been taken as a measure of earnings quality for data constraints.
uses earnings-price ratio as a proxy for cost of equity. Cost of debt (COD) has been calculated as interest expended in $t+1$ period divided by average borrowing for the year $t$ and $t+1$.

1.3 NEED AND MOTIVATION FOR THE STUDY

The review of literature suggested that considerable research has been done on the association between information risk and cost of capital in other countries, especially in the U.S. Using voluntary disclosures or earnings quality as a proxy for information risk and for different proxies of cost of capital, a plethora of studies conducted in the U.S or other developed countries have examined the impact of either voluntary disclosures or earnings quality on the cost of capital. Empirical evidence on the impact of either disclosure practices or earnings quality on cost of capital has not been found in India.

However, there is no dearth of studies on corporate reporting practices in India (e.g., Chander, 1992; Kohli, 1998; Roshanlal, 2006; Chandra, 2008; Sarkar, 2011). These studies have measured the extent of disclosure (voluntary, mandatory or both) by the companies in their annual reports. The extent of disclosure has been measured by adopting disclosure index model. Most of these studies have either assessed the level of corporate disclosure of listed firms or have measured empirically the association between corporate disclosure level of these listed firms and firm characteristics namely, age, listing status, ownership structure, leverage, size of audit firm, profitability etc. To the best of researcher’s knowledge, no such comprehensive study has been carried out in India, where either disclosure or earnings quality is related to cost of capital.

Demand for information from investors and other stakeholders in India has increased over the years on account of increased complexity in the way business units operate and also on account of cross-border investment and lending. Firms in India may have the incentive to differentiate themselves in order to attract foreign sources of funds at a lesser cost by improving their disclosures and earnings quality. Also the institutional investors have become more demanding for information and transparency.
Much of the current debate on globally accepted high quality accounting standards is based on the notion that high disclosure standards reduce the firm’s cost of capital. The results of the association between disclosure and cost of capital in the U.S. have been mixed. The reasons cited have been the difficulties in measuring the cost of capital, different proxies for disclosure and already rich disclosure environment of the U.S. This makes a strong case for the present study conducted in Indian context, where, because of low level of corporate disclosure environment (than in the U.S) and variability in disclosure practices across firms, it is expected to have larger marginal effect of voluntary disclosure on cost of capital.

Further, earnings quality becomes all the more important in the wake of foreign direct investments in Indian companies, where sophisticated investors are more interested in earnings quality than earnings numbers. An exclusive attention on bottom-line income misses significant information about the quality of earnings. Company’s earnings are said to be only ink deep, though they are eagerly watched by the market. To truly understand a firm’s financial position, it is important to consider the quality of firm’s earnings and not just the quantity. Earnings quality is an additional tool to work with, in selecting stocks and building superior portfolios for clients by the asset management companies. It means putting a firm’s earnings data under the microscope to gain insight into future earnings growth. However, not much research has been reported on earnings quality in India. Also, there has been no research in India on the information risk associated with low quality earnings. In recent times, taking evidence from India, some working and published papers have related earnings quality with firm performance and corporate governance (e.g., Madhumathi and Ranganatham, 2011), and others have related earnings management with family firms and earnings management with IFRS (e.g., Jaiswal and Banerjee, 2012; Rudra and Bhattacharjee, 2012).

The recent wave of accounting scandals, which occurred primarily due to poor quality of earnings, has provided further momentum to the drive for enhanced transparency and accountability. This further justifies the need for this study in Indian
context, where investors have become obsessed with the quality of earnings, especially after Satyam scam. Indian companies provide an ideal setting for this kind of study. Through this study, an attempt was made to test whether two information attributes, voluntary disclosure and earnings quality can benefit the sample firms in the form of reduced cost of capital.

1.4 LIMITATIONS OF THE STUDY

Limitations of this study stem from both the nature of the sample as well as the data examined and include:

1. The study is based on voluntary disclosures made by the sample firms in a single year (2007-08), which makes this study a snapshot, limiting the generalizability of findings of the study.

2. Development and application of a disclosure index requires subjective assessment by the researcher applying the technique. The selected items in the voluntary disclosure index imply a certain level of subjectivity that may or may not reflect the actual use of information by the investors. Hail (2002) also supported this argument. Also subjective judgement used in identifying and classifying the nature of reported information items under three broad categories (strategic, non-financial and financial information) cannot be ruled out.

3. While developing the voluntary disclosure index, all voluntarily disclosed items have been given equal importance despite the fact that information content may vary substantially from one item to another. The voluntary disclosures are quantitative (presence or absence) in nature rather than qualitative or evaluative. The use of binary variable to measure voluntary disclosure score may have introduced measurement error into analysis; since such a variable may ignore valuable information. Moreover, simply disclosing large amount of information is not adequate. It is important to understand the perceived value of voluntary disclosure items for the needs of investors.

5 Hail (2002) observed that any list of items is subject to selection bias and can be criticized. Testing the validity of disclosure scores hence becomes critical.
4. The size of the sample used is relatively small (after applying filters). Procedure used for selecting the final sample resulted in a substantial loss of observations. The labour intensive nature of hand collecting the data for voluntary disclosure scores followed in this study created practical constraints on more number of companies to be included in the sample. Thus, analysis is constrained in statistical power by the small number of firms. It is possible that the sample may not be representative of the population. More number of companies can be included in such a study involving three variables, voluntary disclosures, earnings quality and cost of capital, where readymade voluntary disclosure scores are made available by research agencies as in developed countries.

5. While deciding on a measure of earnings quality, only a partial set of alternative proxies for earnings quality have been taken. Though the researchers have used either one proxy for earnings quality or have taken multiple proxies for earnings quality for completeness. Since the size of the sample is relatively small and a narrow set of earnings quality constructs have been used, all conclusions, should, therefore, be interpreted with caution.

6. The use of ex-post measures of both the cost of equity as well as the cost of debt in the present study is unlike most of the studies which have used ex-ante measures of cost of capital. Ex-post measure of cost of equity has been used because of the requirement of earnings and dividend forecasts required for ex-ante measures of cost of equity. Botosan (1997) observed that for a measure to be a valid measure of cost of equity, it should be increasing in risk as measured by beta. In the present study, though cost of equity as measured by

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6 The studies relating voluntary disclosure to cost of capital, conducted in the U.S or other developed countries have taken large sample of firms using readily available disclosure indexes prepared by agencies (e.g., Lang and Lundholm, 1993; Welker, 1995; Sengupta, 1998; Healy et al., 1999; Botosan and Plumlee, 2002; Heflin et al., 2005 used AIMR scores as a measure of disclosure quality). Whereas studies using self-constructed disclosure index have taken small samples (e.g., Botoson,1997 and Boessio and Kumar, 2007).

7 Following Francis et al. (2008), the present study has used three proxies for earnings quality. However, instead of taking absolute value of abnormal accruals, the present study has used absolute value of accruals as a measure of earnings quality. This has been done because of data constraints.
earnings-price ratio is positively related to beta but is statistically not significant.

7. The requirement of positive earnings-price ratio as a measure of cost of equity biases the sample towards more stable and less risky firms. This also results in a further loss of sample firms while testing the association of voluntary disclosure and earnings quality with cost of equity.

8. Complexity and alternative operationalization of all the three variables of interest, voluntary disclosure, earnings quality and cost of capital was another constraint in the present study.

9. Still another limitation of the present study is that the study has not considered disclosure cost while analyzing the relationship between voluntary disclosure and earnings quality.

Notwithstanding these limitations, the present study is relevant since it is a first attempt to assess the impact of two information attributes, voluntary disclosure and earnings quality on cost of capital.

1.5 ORGANISATION OF THE STUDY

The study has been organised in the following seven chapters:

CHAPTER 1 BACKGROUND OF THE STUDY provides background of the study and a brief introduction to the topic of research. It also includes the objectives of and need and motivation for the study. The chapter also puts forth the limitations of the study and concludes with the organisation of the study. Organisation of the study gives brief description of the chapters covered in the study.

CHAPTER 2 VOLUNTARY DISCLOSURE, EARNINGS QUALITY AND COST OF CAPITAL explains in detail the three key variables used in the study, voluntary disclosure, earnings quality and the cost of capital. The chapter also traces the relation among the three key variables to information economics and also explains how the information risk arising from information asymmetry affects the cost of capital.
CHAPTER 3 LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT includes the review of relevant literature and the hypotheses formed on the basis of review of literature. The chapter also identifies the gaps in the literature.

CHAPTER 4 DEVELOPMENT OF VOLUNTARY DISCLOSURE INDEX discusses the development of voluntary disclosure index. The chapter gives the comprehensive list of information items included in voluntary disclosure index. It also discusses the procedure followed for scoring of information items disclosed by the companies in their annual reports. Further, it also discusses the validity and reliability of voluntary disclosure index.

CHAPTER 5 RESEARCH DESIGN discusses the study period, sample selection procedure, data collection and operationalization of different variables and control variables used in the study. The chapter also discusses the measurement of key variables used in the study. Further, it discusses the construct validity of earnings quality measures used and elaborates the research methodology adopted for testing the hypotheses formulated in Chapter-3.

CHAPTER 6 VOLUNTARY DISCLOSURE AND EARNINGS QUALITY makes an industry wise analysis of voluntary disclosure and earnings quality. It also examines the nature of relationship between voluntary disclosure and earnings quality of the sample firms.

CHAPTER 7 IMPACT OF VOLUNTARY DISCLOSURE AND EARNINGS QUALITY ON COST OF CAPITAL examines the impact of voluntary disclosure and earnings quality on both the cost of debt as well as cost of equity. The chapter seeks to examine whether investors use information in voluntary disclosures and earnings quality of the firms in taking their decisions.

CHAPTER 8 SUMMARY, IMPLICATIONS AND CONCLUSIONS discusses the summary and the overall findings of the study. The chapter also puts forth the conclusions arrived at on the basis of findings of the study. Further, the chapter concludes with discussing the implications of the study and providing directions for future research.
Apart from the above mentioned chapters, references for all the chapters, bibliography and annexures are also included.

1.6 SUMMARY

The chapter has presented the nature and the framework of research reported in this study. The background to and justification for the study has also been provided. Further, the chapter has also discussed the objectives and the limitations of the study.

The following chapter discusses at length the key variables, voluntary disclosure, earnings quality and the cost of capital, used in the study. The chapter also traces the rationale of this study to information economics and discusses the pricing of information risk.
REFERENCES


