

A Review of Empirical Studies on Company Financial Reporting

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ABSTRACT

Corporate financial reporting has been recognized as very important issue in accounting area since a long time. Increased awareness among investors and stringent disclosure regulations has converted the subject of corporate financial reporting into an area of growing corporate and academic interest. The empirical review conducted in this paper provides an insight for understanding different dimensions of corporate financial reporting as investigated by different researchers, particularly cost of capital, proprietary cost of financial reporting and measuring quality of financial reporting.

Key Words: Corporate Financial Reporting, Cost of Capital, Proprietary Cost, Financial Reporting Quality.

Introduction

Financial reporting connotes communication of published financial statements and related information from an enterprise to the third parties including shareholders, creditors, customers, governmental agencies and the public. Financial reporting is the communication of accounting information of an entity (individual, firm, company, government enterprises) to user group or groups or users .

Financial reporting is not confined to information communicated through financial statements. In addition to it, some firms engage in voluntary communication, such as management's forecasts, analysts' presentations and conference calls, press releases, internet sites, and other corporate reports. Finally, there are disclosures about firms by information intermediaries, such as financial analysts, industry experts, and the financial press.

Financial reporting is intended to provide information that is useful in making reasoned choices among alternative uses of scarce resources in the conduct of business activities .The emphasis is reflected in the FASB's Statement of Financial Accounting Concept No. 1 (1978) , which states:

"Financial reporting should provide information that is useful to prevent and potential investors and creditors and other users in assessing the amounts, timing, and uncertainty of prospective cash receipts.....Since investor's and creditor's cash flows are related to enterprise cash flows, financial reporting should provide information to help investors, creditors, and others assess the amounts, timing and uncertainty of prospective net cash inflows to the related enterprise."

In nutshell, financial reporting is a process of communicating all type of relevant or significant accounting information, directly or indirectly, relating to a business enterprise, to investors and other users for assisting them in making rational economic decisions in the best possible manner. Thus financial reporting is not an end in itself rather means to provide information which helps in making economic decision in a rational manner.

Disclosure could reduce the ability of the firm to reap the benefits of innovative activities such as oil exploration, product development, and research and development. This is often called the competitive disadvantage aspect of disclosure .

Hence the concept of financial reporting carries such a great relevance and significance in accounting that several researchers across the world have been studying different aspects of corporate financial reporting.

The purpose of this paper is to make a survey of empirical studies dealing with different dimensions of corporate financial reporting particularly cost of capital, proprietary cost of financial reporting and measuring quality of financial reporting.

This article is organized into three section. Section 1 reviews the empirical literature on the firm specific different dimensions of corporate financial reporting particularly cost of capital, proprietary cost of financial reporting and measuring quality of financial reporting. Section 2 provides summary and conclusion followed by some suggestions for future research which are given in Section 3.

1 Reporting of the American Accounting association's Committee on Basic Auditing Concepts, *The Accounting Review Supplement*, 1972, p.23.

2 American Institute of Certified Public Accountants, *The objectives s financial Statements*, 1973, p.13-26.

3 Financial Accounting Standard Board, *Statement of Financial Accounting Concept No. 1* (1978).

4 See Beaver W., and William H.; "Financial Reporting: an Accounting Revolution"; p.34.

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Review of Empirical Disclosure Studies

A scanning of the literature available from different published resources reveals that a couple of studies have been conducted in India and many abroad in the field of corporate financial reporting. Empirical studies on financial reporting discussed here deal with different aspects such as cost of capital, measuring quality of financial reporting and proprietary cost of financial reporting.

Financial Reporting and Cost of Capital

Choi [1973] argues that if investors are kept well informed then, over the long run, an individual company's share prices will be relatively higher. Higher security prices would mean that a primary security issue could be priced higher and that the net proceeds from the issue would be higher. Thus the firm would experience larger receipt from a given issue and hence experience a lower cost of capital.

Generally, empirical research supported theoretical prediction of an inverse relationship between the level of financial reporting and the cost of capital.

Merton [1987] develops a simple model of capital market equilibrium where (some) investors have incomplete information and are not aware of all firms in the economy. In the Merton model, information asymmetry is modeled as only a subset of investors knowing about each firm. If the firm can increase the size of this subset, say by the voluntary release of information, its market value will rise, other things being equal. Diamond and Verrecchia [1991] model suggests that revealing public information to reduce information asymmetry can reduce a firm's cost of capital by attracting increased demand from large investors due to increased liquidity of its securities. The resulting increase in market liquidity attracts large institutional investors who, if they have to do in future, can sell large blocks of shares without lowering the price they receive. The firm's share price increase as a result of this greater demand. It should be noted that market efficiency, whereby the markets probably interpret the firm's information, is assumed in this argument.

Lang and Lundholm [1996] examine the relations between the disclosure practices of firms, the number of analysts following each firm and properties of the analysts' earnings forecasts. Using data from the Report of the Financial Analysts Federation Corporate Information Committee (FAF Report 1985-89), the study provides evidence that after controlling for size, the earnings surprise and other attributes of the information environment, firms with more informative disclosure policies have a larger analyst

following, more accurate analyst earnings forecasts, less dispersion among individual analyst forecasts and less volatility in forecast revisions. Further, they suggest that potential benefits to disclosure include increased investor following, reduced estimation risk and reduced information asymmetry, each of which have been shown to reduce a firm's cost of capital. Although the evidence is indirect, their study finds relationships between firms' disclosure policies and factors that have been linked to a reduced cost of capital. Botosan [1997] establishes a direct empirical link between corporate disclosures and cost of equity capital by regressing firm specific estimates of cost of equity capital on market beta, firm size and a self-constructed measure of disclosure level. For firms that attract low analyst following, the result indicates that the greater disclosure is associated with a lower cost of equity cost of equity capital. The magnitude of the effect is such that a one-unit difference in the disclosure measure is associated with a difference of approximately twenty-eight basis points in the cost of equity capital, after controlling for market beta and firm size.

Healy, Hutton, and Palepu [1999] use AIMR rankings to examine a sample of firms that exhibit a voluntary and sustained increase in their disclosures. They find these firms had a significant increase in their liquidity (bid-ask spreads and trading volume) after the perceived increase in their disclosure quality. However, they find that firms' realized stock returns are higher in the years following an improvement in their disclosures. This finding suggests that better disclosure actually increases firms' cost of capital.

The past literature has only examined the relation between financial disclosure and cost of capital. Social disclosure could play a role similar to financial disclosure and reduce the cost of equity capital by reducing transaction costs and/or reducing estimation error. In addition to these two effects, social disclosure could influence the cost of equity capital directly through investor preference effects if investors are willing to accept a lower expected return on investments that also fulfill social objectives. Richardson and Welker [2001] examine the relation between both social and financial disclosures and cost of equity capital estimates. They find that there is a significant inverse relationship between the level of financial disclosure and the cost of capital. They also confirm Botosan [1997] finding that higher levels of financial disclosure can reduce the cost of capital in cases where there is low financial analyst following. Their results, however contrary to expectations, suggest that this relation does not hold for social disclosures. There is a statistically significant, positive relation between the level of social disclosure and the cost of capital, that is, more social disclosure raises the cost of capital for the firm. The number of analysts following the firm does not affect this result. The cost of equity penalty

for firms with extensive social disclosure is mitigated by higher financial performance.

Type of disclosure is critical since they document inverse, positive, and no association between disclosure level and the cost of equity capital depending on disclosure type as evidenced by Botosan and Plumlee [2002] who explore the association between the expected cost of equity capital and three types of disclosure (annual report, quarterly and other published reports, and investor relations) measured by AIMR reports. As expected, they find that the cost of equity capital is decreasing in annual report disclosure level. In contrast to expectations, however, they find a positive association between the cost of equity capital and the level of more timely disclosures, such as the quarterly report to shareholders. Finally, they document no association between the level of investor relations activities and the cost of equity capital.

In an international context, for a cross-sectional analysis Hail [2003] examines sample of Swiss firms where mandated disclosure is low and there is large variation in firms' voluntary disclosure policies. He indicates the presence of about a 1.8 to 2.4% cost difference among the most and the least forthcoming firms i.e. more forthcoming firms enjoy around a 1.8 to 2.4% cost advantage over the least forthcoming firms. The findings are not only statistically significant but also economically relevant. The results hold even after taking into account various other firm characteristics, e.g. firm size, market beta and financial leverage. The considerable magnitude of his findings in a weak disclosure environment is consistent with the idea expressed in Leuz and Verrecchia [2000] that the magnitude of the relation may depend on countries' institutional factors. These findings also illustrate the possible interactive effects between firms' disclosure policies, institutional factors, and ultimately the impact of disclosure regulation.

A significant shortcoming of numerous empirical disclosure studies is the failure to address the endogenous nature of the disclosure quality decision. If researchers do not control the determinants of disclosure policy, their inferences regarding the economic consequences of disclosure quality may be spurious (Fields et. al [2001], Core [2001]).

Cohen [2004] specifically addresses these concerns by accounting for the endogenous nature of the financial reporting decision. Recognizing the endogeneity associated with these choices, he investigates the determinants and economic consequences of cross-sectional variation in firms' choices concerning the quality of their financial reporting. The evidence suggests that firms with high quality financial reporting policies have reduced information asymmetries (as proxied by bid-ask spreads), lower uncertainty, and

lower estimation risk (as reflected in lower analyst forecast dispersion and higher analyst following). However after accounting for the endogeneity associated with the reporting quality choice, he does not find evidence that firms choosing to provide high-quality financial information necessarily enjoy a lower cost of equity capital. These results suggest that reporting quality is not necessarily an additional systematic risk factor, but rather a firm-specific factor associated with uncertainty and estimation precision, which investors do not price.

Francis et al. [2005] examine the link between cost of equity capital and the "quality" of a firm's accruals. They show a strong inverse relation between their measure of accruals quality and various cost of capital measures including P/E ratios, market betas, and observed stock returns, suggesting that firms with poor accruals quality have higher costs of capital than do firms with good accruals quality. This result is consistent with the view that information risk (as proxied by accruals quality) is a priced risk factor. They also find that the discretionary component of accruals quality, on average, has a significantly smaller pricing effect than the innate component of accruals quality suggesting that the accruals quality factor also picks up firm characteristics, such as the risk of the business process which is consistent with Cohen [2004] conclusion.

Philip G. Berger, Huafeng (Jason) Chen, and Feng Li [2006] develop a comprehensive and large-sample measure of a firm's information quality that can be measured as the ratio of the idiosyncratic volatility of returns to the idiosyncratic volatility of reported cash flows. They find that cost of equity capital decreases by about -0.4% on an annual basis if a firm's information quality increases by one standard deviation. Results indicate that more firm-specific information in stock returns is related to a lower cost of equity and hence potentially improves the capital allocation efficiency of the economy. Second, they provide large sample evidence on the effect of information quality on the cost of equity. This corroborates the findings from many previous studies based on small samples, short time periods and partial measures of information quality.

Chen, Dhaliwal, and Trombley [2007] extend the empirical analysis of Francis et al. [2005] to test the prediction that the effect of accruals quality on cost of capital increases with fundamental risk. Their findings show that relation depends critically on the level of fundamental risk, consistent with the model of Yee [2006]. The results also serve to qualify the findings of Francis et al [2005], who document a relation between accrual quality and cost of capital.

Jennifer Francis and Dhananjay and Nanda Per Olsson [2008] investigate the relation between voluntary disclosure

and earnings quality, and the pricing effects of voluntary disclosure unconditionally and conditional on earnings quality. They find that firms with good earnings quality have more expansive voluntary disclosures than firms with poor earnings quality. By earnings quality, they mean the precision of the earnings signal emanating from the firm's financial reporting system. In unconditional tests, they find that greater voluntary disclosure is associated with a lower cost of capital. This relation, however, disappears or is substantially reduced when they control for earnings quality, indicating that voluntary disclosure has little or no distinct pricing effect.

Controlling for the firm-specific characteristics determining financial reporting quality, Cohen [2008] find evidence of a inverse association between firms' total risk and financial reporting quality. Decomposing total risk into a systematic component and an idiosyncratic one, the results imply that firms providing financial information of higher quality do not necessarily enjoy a lower cost of equity capital. However, a significant inverse relation is documented between reporting quality and idiosyncratic risk. This suggests that the quality of accounting information cannot be characterized as an additional systematic priced risk factor, but rather as an idiosyncratic one, once the firm specific characteristics determining information quality are controlled for.

Although financial reporting quality is not significantly associated with the systematic components of assets returns, as proxied by the equity cost of capital, it is associated with firm specific uncertainty and estimation precision.

This finding suggests that capital markets participants are not likely to price the documented uncertainty as other risk factors, such as beta, size and book-to-market ratios. This finding is consistent with recent theoretical work by Hughes, Liu, and Liu [2007] who argue that idiosyncratic risk is a diversifiable phenomenon and should not affect risk premiums in large economies.

Randall [2009] examines the relation between corporate financial disclosure and cost of capital in the context of information environment (hereafter, IE) and industry competition in order to provide a potential explanation for the mixed findings. This is the first empirical study that directly tests whether the impacts of disclosure on cost of capital vary with firm size and industry competition. His study finds a significant inverse association between disclosure quality and cost of capital for small firms. No significant relation is found for large firms. These results suggest that the impact of disclosure on cost of capital varies with firms' information environment and industry competition. Financial reporting disclosure is more effective at reducing small firms' cost

of capital than large firms' cost of capital. Therefore, by pooling firms of all sizes in the sample, prior studies may get biased results about the effect of disclosure quality on cost of capital.

Recent work by Ng [2010] suggests that certain information quality attributes are associated with the liquidity of a firm's shares and hence cost of capital. To analyze the economic significance of this association, he investigates whether information quality, measure by Earning precision, Accruals quality, Analyst consensus and aggregate of three, affects the cost of equity capital through liquidity risk. He extends Lambert et al. [2007a] by examining the relation between information quality and liquidity risk. Results indicate that compared to firms in the bottom quintile of information quality, firms in the top quintile have a cost of capital that is lower by 4.521% due to lower liquidity risk. To give the relative magnitude of this effect, the difference in the cost of capital through lower market risk is 1.081%. Hence, the economic effect of higher information quality in lowering the cost of capital through liquidity risk is economically significant and larger than it is through market risk.

Thus, prior studies empirically testing the relation between corporate financial disclosure and cost of capital provided mixed findings, and also raised several concerns, such as the endogeneity of disclosure, the information disclosure environment, and the sample size. While some studies find strong inverse associations consistent with theoretical predictions (Merton [1987], Diamond and Verrecchia [1991], Leuz and Verrecchia [2000]), Hail [2003], Philip G. Berger, Huafeng (Jason) Chen, and Feng Li [2006], others fail to document a significant relation (Botosan and Plumlee [2002], and Cohen [2004, 2008]), Francis et al. [2005], Chen, Dhaliwal, and Trombley [2007], Jennifer Francis and Dhananjay and Nanda Per Olsson [2008], Randall [2009], and Ng [2010], some find only partial evidence (Botosan [1997], Healy et al. [1999], Richardson and Welker [2001]) or even report a positive association (Cheng et al. [2006]).

As per Randall [2009] difference in firm sizes of their samples may account for the inconsistent findings in prior disclosure studies. Whereas previous studies treat disclosing firms as a homogenous group, he shows that the relation between disclosure and cost of capital varies with some firm characteristics such as firm size and industry affiliation. Therefore, by pooling firms of all sizes in the sample, prior studies may get biased results about the effect of disclosure quality on cost of capital.

Overall, the evidence on the cross-sectional relation between corporate financial disclosures and firms' cost of capital is quite mixed and hence it is difficult to draw a definitive

conclusion from the aforementioned studies or other work in this area. The results appear to be very sensitive and can vary across types of firms (i.e., different sizes), with the presence of other intermediaries (i.e., financial analysts), across types of disclosures (i.e., annual reports versus timely disclosures versus conservative earnings), and across different institutional environments (i.e., U.S. versus other markets).

Disclosure Quality

Disclosure quality refers to the precision and accuracy of information. Precision of disclosures is measured by consensus among investors and accuracy of disclosures is measured by accuracy of investors' earnings expectations. In essence, quality measures the extent to which the voluntary disclosures make investors better informed, which depends on the precision and accuracy of the information. Investors are considered better informed if, upon receiving the information, their beliefs about the eventual outcome become less dispersed and the expectation (mean) of their beliefs moves closer to the realized outcome.

One of the major limitations of empirical studies on corporate disclosures is the difficulty in measuring the quality of disclosure policies (Healy and Palepu [2001]). There is no theoretical guidance on measuring disclosure quality. Despite this, empirical researchers developed several innovative measures of disclosure quality such as:-

1. Measures based on Association for Investment Management and Research (AIMR) ratings.
2. Self-constructed measures.
3. Management forecasts of earnings.
4. Conservative accounting reports.
5. Earnings smoothing activities.
6. Earnings persistence.
7. Value-relevance of earnings.
8. Aggregate of individual proxies.
9. Firm's cash flows and working capital accruals.

A widely-used corporate financial disclosure measure is based on the AIMR-published analyst ratings as proxies for disclosure. (e.g., Lang and Lundholm [1993, 1996], Welker [1995], Healy, Hutton, and Palepu [1999], Lundholm and Myers [2002], Botosan and Plumlee [2002], Nagar, Nanda, and Wysocki [2003], Brown and Hillegeist [2007], Randall [2009] etc.).

While the AIMR scores are imperfect measures of disclosure quality, they offer several advantages over alternative proxies.

AIMR scores are based on a comprehensive evaluation of a firm's disclosure activities and the evaluation period covers an extended time period. In addition, the AIMR scores allow us to examine the effects of disclosure quality on a relatively large and representative population of firms. The limitations of the AIMR rankings are that they are only applicable to a subset of large U.S. firms ranked in the survey during the 1980s and 1990s.

Other studies use measures of disclosure activities constructed by researchers (e.g. Botosan [1997], Hail [2003] and Jennifer Francis and Dhananjay and Nanda Per Olsson [2008]). These **self-constructed measures** generally use a check-list of information disclosures in firms' annual reports. The limitations of these types of measures are that the selection and coding of the relevant disclosures are subjective. Other studies focus on the timing and frequency of firms' disclosures such as management forecasts of earnings (e.g. Hutton, Miller and, Skinner, 2003, and Nagar, Nanda, and Wysocki, 2003). While it is difficult to objectively quantify the information issued with management forecasts, these studies highlight the fact that these disclosure events generally reveal useful qualitative and contextual information to outside investors.

More recently, studies have made a more direct attempt to measure the "quality" of accounting information provided to outside investors by analyzing the properties of a firm's reported earnings. For instance, research suggests that conservative accounting reports (e.g. Basu [1997], Ball, Kothari and Robin [2000]), earnings smoothing activities (e.g. Leuz, Nanda and Wysocki [2003], Francis, LaFond, Olsson and Schipper [2004], LaFond, Lang, and Skaife [2007]), earnings persistence (e.g. Dechow and Dichev [2002], Francis, LaFond, Olsson and Schipper [2004]) and the value-relevance of earnings (Francis and Schipper [1999], and Francis, LaFond, Olsson and Schipper [2004]) can capture important (positive or inverse) dimensions of a firm's discretionary information quality.

Several papers use these individual proxies or aggregate them to measure corporate financial reporting quality. For example, Leuz, Nanda and Wysocki [2003] examine four earnings properties that indicate opaque financial reporting and/or earnings management, both of which can limit the usefulness of the accounting information for outside investors. These measures have been used in a variety of contexts and by several other studies (e.g. Bhattacharya, Daouk and Welker [2003], Lang, Raedy and Yetman [2003b], Lang, Raedy and Wilson [2006], and Ng [2010]).

Dechow and Dichev [2002] and Francis, LaFond, Olsson and Schipper [2004, 2005] model the relation between a firm's cash flows and working capital accruals to derive a

conclusion from the aforementioned studies or other work in this area. The results appear to be very sensitive and can vary across types of firms (i.e., different sizes), with the presence of other intermediaries (i.e., financial analysts), across types of disclosures (i.e., annual reports versus timely disclosures versus conservative earnings), and across different institutional environments (i.e., U.S. versus other markets).

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Dechow and Dichev [2002] and Francis, LaFond, Olsson and Schipper [2004, 2005] model the relation between a firm's cash flows and working capital accruals to derive a

measure of financial disclosure quality. Subsequent research even suggests that these accruals-based measures can potentially capture a firm's overall information quality (e.g. Ecker, Francis, Kim, Olsson, and Schipper [2006], Chen, H., L., Dan S. Dhaliwal and Mark A. Trombley [2007], Daniel Cohen [2004, 2008], Jennifer Francis and Dhananjay and Nanda Per Olsson [2008], Gary C. Biddle, G. Hilary, and Rodrigo S. Verdi, [2009] and Ng [2010]). However, Core, Guay and Verdi [2007], and Wysocki [2009] study casts doubt on this claim and even questions the extent to which "accruals quality" captures a firm's financial disclosure quality.

Table given below summarizes different proxies for measuring the quality of disclosure choices used by different researchers in their studies:

Proxies Used for Measuring the Quality of Disclosure Policies

No.	Proxy for quality of disclosure choices	Research studies
1.	The Association of Investment Management and Research (hereafter, AIMR)	Lang and Lundholm [1993, 1996], Welker [1995], Healy, Hutton, and Palepu [1999], Lundholm and Myers [2002], Botosan and Plumlee [2002], Nagar, Nanda, and Wysocki [2003], Brown and Hillegeist [2007], Randall [2009]
2.	Conservative accounting reports	Basu [1997], Ball, Kothari and Robin [2000].
3.	Earnings persistence	Dechow and Dichev [2002], Francis, LaFond, Olsson and Schipper [2004].
4.	Earnings smoothing activities	Leuz, Nanda and Wysocki [2003], Francis, LaFond, Olsson and Schipper [2004], LaFond, Lang, and Skaife [2007].
5.	The value-relevance of earnings	Francis and Schipper [1999], and Francis, LaFond, Olsson and Schipper [2004].
6.	Aggregate of individual proxies	Leuz, Nanda and Wysocki [2003], Bhattacharya, Daouk and Welker [2003], Lang, Raedy and Yetman [2003b], Lang, Raedy and Wilson [2006], Burgstahler et al. [2006].Cohen [2008], Lang and Maffett [2010], and Ng [2010].
7.	Firm's cash flows and working capital accruals	Dechow and Dichev [2002] Francis, LaFond, Olsson and Schipper [2004, 2005], Ecker, Francis, Kim, Olsson, and Schipper [2006], Chen, H., L., Dan S. Dhaliwal and Mark A. Trombley [2007], Daniel Cohen [2004, 2008], Jennifer Francis and Dhananjay and Nanda Per Olsson [2008], and Ng [2010].
8.	Self-constructed measures	Botosan [1997], Hail [2003], Francis, Nanda, and Olsson [2005], Jennifer Francis and Dhananjay, and Nanda Per Olsson [2008], Gary C. Biddle, G. Hilary, and Rodrigo S. Verdi [2009].
9.	Management forecasts of earnings	Hutton, Miller and, Skinner [2003], and Nagar, Nanda, and Wysocki [2003]

Models such as Dye [1985b,1986], Verrecchia [1983], Darrrough and Stoughton [1990], Wagenhofer [1990], Hayes and Lundholm [1996], Zhang [2001] and Verrecchia [2001] argue that, all things being equal, the probability of disclosure decreases as the associated proprietary costs increase. Most of these proprietary costs borne by firms arise from interaction with other parties - the costs of competitive disadvantage from disclosing information to their competitors and regulators, of bargaining disadvantages

with both suppliers and consumers, and of litigation that might follow informative disclosure.

Disclosure decisions are results of managers' trade-off between costs and benefits associated with disclosures choices.

Proprietary Cost

Proprietary costs are the costs faced by a firm if it reveals information to outside parties. These costs include the revelation of trade secrets, the disclosure of profitable customers and markets, or the exposure of operating weakness to competing firms, unions, regulators, investors, customers or suppliers.

Although the association of proprietary cost with disclosure decisions has been extensively examined in analytic research, empirical research on the role of proprietary cost has not been dense. Saudagaran and Meek [1997] comment that empirical research on the effects of proprietary cost is "notably absent." Healy and Palepu [2001] express a similar opinion in their review of the empirical voluntary disclosure literature. Firms measure the valuation benefits of providing

higher quality earnings against the associated costs. If the proprietary costs outweigh the market valuation benefits, the firm will choose to provide a lower quality of reported earnings, which will be less informative in predicting future performance. Most of the relevant studies examine the relation between segment reporting choices and proprietary cost. There are a number of empirical studies that examine the effects of proprietary costs on firms' voluntary disclosure decisions.

Harris [1998] investigates the relation between levels of industry competition and managers' choices of which operations to report as business segments. He finds that firms in highly concentrated industries make less disclosure on their segment operations than firms in more competitive industries, suggesting that proprietary costs associated with disclosure increase with industry concentration. These costs offset the benefits from disclosure. Therefore, disclosure's impacts on cost of capital vary with the degree of industry competition. Randall [2009] expresses a similar opinion in their review of the empirical voluntary disclosure literature. As per his findings financial reporting disclosure is more effective at reducing small firms' cost of capital than large firms' cost of capital.

Similarly, Bamber and Cheon [1998] investigate the effects of disclosure-related costs on managers' decisions about how (in terms of specificity) and where (in terms of venue—such as special press releases or analyst meetings) to disclose earnings forecasts. They provide evidence on how proprietary costs affect managers' forecast venue and forecast specificity choices. The evidence suggests that the higher the proprietary information costs, the less likely managers are to disclose forecasts in special press releases.

Luez [2003] examines the propensity of German firms to report segments as a function of proprietary cost. He exploits specific features of the German institutional environment to provide a more complete test of the proprietary cost hypothesis than previous studies. German firms voluntarily provide business segment data when the proprietary costs are low. i.e., when entry barriers are relatively high, segment information is highly aggregated and firm profitability is low. He finds that firms are less likely to voluntarily provide segment reports if segment profitability is more heterogeneous and the average profitability reported in the income statement is less revealing.

[Cohen 2004] provides a link between the quality of accounting information and the relative proprietary costs related to such a disclosure policy decision. The results of this study suggest that the higher the proprietary costs, (as proxied by realized margins, capital intensity, and industry

concentration), the lower the quality of earnings and thus the ability to accurately predict future cash flows. These results hold both in a pooled and a firm-specific analysis.

Graham, Harvey and Rajgopal [2005] survey managers from 312 public U.S. firms and find that nearly three-fifths of survey respondents agree or strongly agree that giving away company secrets is an important barrier to more voluntary disclosure (58.8% of respondents agree or strongly agree and 24.8% of respondents disagree or strongly disagree to avoid giving away "company secrets" or otherwise harming their competitive position). There is also interview support for the proprietary cost hypothesis.

Hou and Robinson [2005] show that firms in more concentrated industries have a lower cost of capital. Based on their findings, they infer that firms in highly concentrated industries face a lower distress risk due to the less competitive environment in which they are competing in. Consistent with theory, Wang [2007] finds that firms were more likely to provide private earnings guidance before Regulation Fair Disclosure, if they had higher proprietary information costs, and if their earnings were more predictive of other firms' earnings (i.e., their earnings had higher "information transfer value" for their analysts).

[May Zhang 2007] finds that firms with high proprietary cost provide more frequent but less precise and less accurate information disclosure than firms with lower proprietary cost. These findings suggest that firms with high proprietary cost lower disclosure quality to reduce the usefulness of the information to competitors and instead they use a high quantity of disclosure as their primary means of resolving information problems.

Summary and Conclusions

Generally, theoretical research support an inverse relationship between the level of financial disclosure and the cost of capital and positive relationship between the level of financial disclosure and the market liquidity supported by empirical research as well. One of the major limitations of empirical studies on corporate disclosures is the difficulty in measuring the quality of disclosure policies. Although the association of proprietary cost with disclosure decisions has been extensively examined in analytic research, empirical research on the role of proprietary cost has not been dense. However, there are a number of empirical studies that examine the effects of proprietary costs on firms' voluntary disclosure decisions. Most of the relevant studies examine the relation between segment reporting choices and proprietary cost. However, firms' segment reporting choices may not be representative of their discretionary

disclosure behaviour in general. A number of studies have been undertaken to examine the relation between proprietary cost and disclosure choices other than segment reporting. When managers are allowed discretion over disclosure content, the above studies demonstrate that proprietary cost affects the precision and accuracy i.e. quality of firms' voluntary disclosures. Disclosure decisions are results of managers' trade-off between costs and benefits associated with disclosures choices.

Suggestions for Future Research

Corporate financial reporting is an important issue which has received the attention of researchers, writers, accounting bodies, regulators in the past and it is expected that in future also, this will continue to be a potential area for academic debate and research in the accounting community. The studies reviewed here broadly deal with some aspects of company financial reporting such as cost of capital, proprietary cost and their relationship with corporate disclosure, measuring quality of disclosure etc. Almost all studies evaluated here have been conducted abroad and studies conducted in India on these aspects are negligible.

Corporate financial reporting is a desirable commodity and needs to be investigated continuously and empirically. Based on the review of studies undertaken in this paper, some potential areas for research are being suggested here for the benefit of researchers especially in India.

1. There is a need to investigate the relationship between market-wide (macro-level) costs and benefits to the firms due to disclosure.
2. The relation between disclosure and cost of capital can be studied for different firms having different characteristics and affiliation such as firm size, industry affiliation, heterogeneity, and listed vs. unlisted firms.
3. The competitive disadvantages associated with corporate disclosure can be enquired into.
4. The impact of financial reporting on investors' welfare through investment decisions needs to be empirically tested.
5. The role of mandatory disclosure vs. voluntary disclosure in relation to corporate objectives could be examined.
6. Besides the overall company disclosure, one may examine specific disclosure areas and their associated benefits and detriments.

7. Impact of disclosure regulation on company financial reporting is another important area for future research.

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