The economic benefits of voluntary disclosure with particular reference to environmental disclosure

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Information asymmetry in the market leads to adverse selection problems because buyers cannot differentiate the quality of certain products. This problem can also happen in the capital market as uninformed potential investors lack information about firms' future cash flow, which may lead to a 'lemons problem'. This provides incentives to high quality firms to convey their private information to the market and reduce the underpricing of their securities. Investors can infer private information from some action(s) or decision(s) of management. Companies can use voluntary disclosures, especially environmental disclosures as a means of transferring their information to the market because of the expected economic benefits (e.g., reducing underpricing). This paper links the economic benefits of voluntary disclosures with the problem of environmental externalities.

Keywords: Economic benefits, voluntary disclosure, environmental disclosure, capital market, information asymmetry

1. Introduction

There are some problems such as information asymmetry and agency conflicts which impede the efficient allocation of resources in a capital market economy. Disclosure and the institutions (e.g. regulators, standard setters, auditors, and capital market intermediaries) established to facilitate and enhance the credibility of management disclosures play an important role in mitigating these problems. Corporate disclosure is critical for the functioning of an efficient capital market. In addition, some firms engage in voluntary communication, such as management forecasts, analysts' presentations and conference calls, press releases, internet sites, and other corporate reports. Also, there are disclosures about firms by information intermediaries, such as financial analysts, industry experts, and the financial press (Healy and Palepu 2001). The main argument of the paper is that disclosures, especially voluntarily disclosures including voluntary environmental disclosures, have economic benefits for companies.

2. Prior Research on the economic consequences (benefits) of accounting disclosures

There are sound reasons for disclosures in term of economic benefits. The literature (e.g., Foster 1986) shows that market forces rather than regulatory based forces are more likely to be the cause of disclosures. They also affect the content or timing of financial statement disclosures. Companies compete in the capital market on the types of securities offered and on

the terms and expected returns from each security (Foster 1986). Market forces apply pressure on companies and other capital raisers to provide financial information that relates to the preceding factors. Regarding the doubt about product quality and the cost of being perceived as a "lemon", firms have an incentive to supply the set of information that they believe will enable them to raise capital on the best available terms. David F. Larcker et al. (1983) provided evidence in support of this idea that mandated accounting standards "may give rise to economic consequences (e.g., incentive, debt, and political effects) for a firm".

It is assumed (Leuz and Verrecchia 2000) that there is an association between economic theory and contemporary accounting thought which implies greater disclosure should lower information asymmetry's costs. Increasing the level of the disclosure reduces the likelihood of information asymmetry arising either between a company and its shareholders or among potential buyers and sellers of companies' stocks. It is proposed by economic theory that a company's obligation to increase levels of disclosure should lower the information asymmetry element of a company's cost of capital.

It was argued that transaction costs, as reflected in the bid-ask spread, should be decreased as information asymmetries decrease. Marilyn M. Greenstein and Heibatollah Sami (1994) provided verification on the consequences of accounting disclosure on the size of the relative bid-ask spread as a proxy for transaction costs. Christine A. Botosan (1997) also found an association between the cost of equity capital and disclosure level. Her study showed, for the companies with relatively low analyst following, that lower cost of equity capital is associated with a greater disclosure. The association between the quality of disclosure and the costs of issuing debt was examined by Partha Sengupta (1998). It was found that companies ranked highly by financial analysts have lower interest costs of issuing debt.

In summary, it can be said that the economic consequences or economic effects of disclosures are the most important factors that encourage managers to engage in such activities. It seems that regulatory disclosures do not reflect management performance perfectly and completely. Therefore, management tries to use voluntary disclosures as a powerful tool to communicate with stakeholders and decrease the cost of capital.

3. Prior research on the voluntary accounting disclosure

Voluntary disclosure is an efficient means of transferring inside information to stakeholders.[1] According to George Foster (1986) there is some evidence to suggest that issues other than regulatory mandates persuade the supply of financial statements. First, financial statements were provided to public before the installation of regulatory bodies such as the SEC. Second, financial statements have been voluntarily provided by firms not under the authority of the SEC. Third, some companies provide financial statements at more frequent time intervals than is required by regulatory bodies. Fourth, some companies provide significantly more information in their financial statements than is required by regulatory bodies.

The increase in voluntary disclosure has been a response to the limitation of mandatory disclosures. Financial reporting has been the subject of severe criticism. For example, current accounting rules do not allow managers to demonstrate the benefits of investments in quality improvements, human resource development programs, research and development, and customer service on their balance sheets in an appropriate manner.

Empirical research has done little to help managers in addressing the above problems. Most of the disclosure studies suppose that equity markets are efficient, and conclude that investors see through the limitations of accounting. Empirical studies have concentrated on the function of debt and compensation contracts, as well as political considerations on managers' accounting decisions (e.g., Watts 1977, Holthausen and Leftwich 1983, Watts and Zimmerman 1990). But there has been only a little empirical research on how capital markets influence accounting decisions.

Nevertheless, recent theoretical studies have started to deal with accounting and disclosure decisions from a capital market perspective (e.g., Beaver 1976, Holthausen and Leftwich 1983). This research, which draws on information models in economic and finance, assumes that managers have better information on their firms current and future performance than outside investors. Disclosure strategies then present potentially important means for corporate

managers to report their knowledge to outside investors, even if capital markets are efficient (Healey and Palepu 1993).

Since there is information problems some firms are misvalued by public capital markets, which provide some incentives for managers of these firms to take actions to correct the misevaluation. Voluntary disclosure can be used to improve the credibility of financial reporting and also to mitigate the misevaluation problem (Healey and Palepu 1993).

Mimicking behavior in particular industries can also encourage voluntary disclosure by some companies. For example, Walter Aerts et al. (2006) findings indicate that imitation has an important role in corporate environmental reporting (CER). Their findings suggest that imitation tendency among companies in the same industry to mimic each other determines a firm's CER imitation propensity. This trend is superior in highly concentrated companies and is less when a company is faced with public media exposure.

In addition, prior research (e.g., Karamanou and Vafeas 2005, Lim et al. 2007) shows that the quality (attributes) of a company's corporate governance affects its disclosure decisions. Companies with more effective corporate governance (e.g., independent directors) tend to have a higher level of voluntary disclosure (Cheng and Courtenay 2006).[2]

Generally, researchers have identified and explained six factors that affect managers' disclosure decisions including voluntary disclosure for capital market reasons (Healy and Palepu 2001):

I. Capital Markets Transactions Hypothesis

The perceptions of investors are important to the corporate managers who look forward to issuing equity or public debt or even to obtaining another company in a stock transaction (Healey and Palepu 1993 and 1995). Information asymmetry causes problems for the companies such as higher cost of debts or public equity (Myers and Majluf 1984). Therefore, managers who look forward to make capital market transactions are interested (have motives) to provide voluntary disclosure in order to reduce the information asymmetry problem, so as to reduce the company's cost of external financing.

II. Corporate Control Contest Hypothesis

Managers are held responsible for current stock performance by the board of directors and also investors. There are some evidences, which show that there is an association between poor stock performance and CEO turnover (e.g., Weisbach 1988). It is assumed that management uses corporate disclosure to reduce the probability of undervaluation and to describe away poor earning performance because of the risk of job losses (Healy and Palepu 2001).

III. Stock Compensation Hypothesis

There are different stock-based compensation plans, such as stock option grants, and stock appreciation rights which are used as a basis for computing managers compensations. These kinds of compensation plans present motives for managers to employ voluntary disclosures for the following reasons. First, managers are interested to disclose private information to meet limitations enforced by insider trading rules and to increase liquidity of the firm's stock in order to trade their own stock holdings.

Second, some managers may consider the interest of the existing stockholders and provide voluntary disclosure to decrease contracting costs related to stock compensation for new employees. There is evidence which shows that there is an association between managers' disclosure decisions and their stock-based compensation. David Aboody and Ron Kasznik (2000) found that COEs of companies with scheduled awards make opportunistic voluntary disclosures which maximize their stock option compensation.

IV. Litigation Cost Hypothesis

Managers' disclosure decisions may be affected by the fear (danger) of shareholder's litigations. First; companies may have incentives to increase voluntary disclosure because of the legal actions against managers for inadequate or untimely disclosures. Second, management's motives to provide disclosure, especially of forward-looking information, may be reduced by litigation (Healy and Palepu 2001).

Douglas J. Skinner (1997) found strong evidence indicating an association between managers' earnings disclosures and litigation. This study showed that "managers' earning disclosures are timelier during lawsuit quarters than during non-lawsuit quarters".

V. Management Talent Signalling Hypothesis

Brett Trueman (1986) indicated that there is an incentive for talent managers to make voluntary earning forecasts to disclose their kind. The forecasts provide investors a more positive assessment of the manager's ability to predict economic environmental changes and to alter production plans accordingly. Forecast release can thus convert into a higher company market value.

VI. Proprietary Cost Hypothesis

Some studies (e.g., Verrecchia 1983, Gigler 1994) found that companies may have incentive not to disclose information that will decrease their competitive situation; even it increases costs to raise additional equity. However, this incentive seems to be sensitive to the nature of the competition, especially whether companies face existing competitors or just the risk of entry, and on whether firms compete mainly on the basis of price or long –run capacity decisions.

In summary, it can be said that economic consequences or economic effects of voluntary disclosures are the main reasons for the voluntary disclosures. Voluntary disclosure is an effective way for managers to transfer information, which has different economic consequences (e.g., decreasing the cost of capital). One kind of voluntary disclosure used by some companies recently is environmental disclosure. It seems that economic benefits of this kind of disclosure are the main reason for doing them not litigation costs or pressures (Epstein and Freedman 1994).

4. Economic consequences (benefits) of environmental disclosure

In the context of environmental disclosure, it is also in the best interests of companies to pursue this voluntarily. There has been an increasing interest in the social performance reporting by large corporations. Most of the consideration has been committed to either the need or the appropriate mode for corporate social disclosure. Social disclosure includes the communication and reporting of information regarding a company's community involvement, human resources, environmental impact, and product/service contribution. This kind of information may be as important as other information (financial or non-financial) relating to a firm's activities (Anderson and Frankle 1980).

John C. Anderson and Alan W. Frankle (1980) found that economic resources appear to be allocated in the market to securities of those companies that socially disclose; social performance information has an impact on the market; and voluntary (not subject to GAAP) accounting information has an impact on the market. Thus, the ethical investor may exist and, in fact, dominate the market. Jill F. Solomon and Aris Solomon (2006) findings indicate that institutional investors consider social, ethical and environmental (SEE) issues in their portfolio investment decisions. Therefore, when public SEE disclosure is not adequate sophisticated private SEE disclosure channels are developed as a supplementary device to overcome this failure.[3] The results also show that the private SEE disclosure process has become dialogic in nature in which not only the investors commence the engagement process with companies but

also the companies are increasingly requesting from their core shareholders the information that they need in order to develop their SEE disclosure accordingly.

John C. Narver (1971) argued that the supposed objective of a firm is to maximise its present market-value, but it is *only by voluntary* actions with regard to externalities (particularly pollution) that a company can maximise its value. With increasing environmental awareness and expectations of firms, there are many potential legal and economic risks to which the capital market is increasingly responsive. Regarding its pollution, the rational firm will voluntarily engage in costly activities abating its pollution externalities. The firm will then disclose to both its product and capital markets the fact of its actions (abatement activities) precisely so as to differentiate itself and thereby to increase its market value. Sulaiman, A. Al-Tuwaijri et al. (2004) findings support Narver's (1971) argument that public concerns in regard to the environment affect companies' strategies and eventually their market values. By an integrated analysis of the interrelations among environmental performance, economic performance, and environmental disclosure, they found a significant positive association between environmental performance and economic performance as well as quantifiable environmental disclosures of specific pollution measures and occurrences.

Conventionally, it is assumed that investors act in accordance with their economic interests when there are different investment alternatives and they want to choose among them. They will search for the maximum possible return in terms of capital gain and dividends given their risk preferences. However, increasing public concern about the social and environmental effects of corporate activities created a condition in which two essentially new factors have been introduced into investment decision-making. The first of these is increasingly stringent sanctions against certain types of corporate activities because of the public concern about the side-effects of corporate activities. The second is an increase in the number of the moral or ethical investors who believe they should avoid investing in certain classes of corporations which cause social injury or environmental damages (Spicer 1978).

Barry H. Spicer (1978) found a statistically significant association between the investment value of a company's common shares and its social performance. Particularly, it was found that companies with better pollution-control records tend to have higher profitability, lower total risk, lower systematic risk and higher price /earnings ratios than companies with poorer pollution–control records.

There has, however, been a debate over the appropriate action of companies in regard to their external or side effects of their activities. Some people believe that the sound reaction for the profit-maximising firm is to do nothing about its external effects until it is required by law, while others argue that it is rational for companies to take some actions.

The logical end, of greatest importance to the wealth-maximizing firm, is that the favourable product-market response will tend to encourage a lower perceived risk and /or higher perceived expected earnings in the capital market. The relation between social responsibility and the market performance of a firm's common stock had been the subject of conflicting views as reported by Godon J. Alexander and Rogene A. Buchholz (1978). One opinion was that a socially conscious and concerned management will also posses the essential ability to run a better company in the conventional sense of financial performance, thus making its firm an attractive investment. Another view is that socially responsible firms will be at an economical disadvantage due to the added expense incurred by such performance.

Ahmad Belkaoui (1976) examined 50 companies which disclosed their pollution control expenditures. His research demonstrated a considerable change centred on the date of disclosure, and the resulting expectations had apparently a substantial and temporary effect on the stock market performance. The research results disprove the proposition that the worst offenders in the reporting of social costs will be rewarded more in the capital market.

D. Neu et al. (1998) found that there is an association between the concerns of financial stakeholders (measured by profit) and government regulators (measured by fines) with an increase in the level of environmental disclosure while the concerns of first nations people and other environmentalists (measured by media) are related with a decrease in the level of disclosure. These results present empirical support for Christine Oliver's (1991) proposal that in conditions of conflicting interests, companies try to communicate legitimating characteristics to the most important relevant publics and to challenge or ignore less important publics.

Denis Cormier and Michel Magnan (2003) findings recommended that economically derived variables such as information costs (risk, dependence on capital markets, trading volume, ownership) and proprietary costs (leverage, profitability) are significant determinants of a firm's environmental reporting strategy. Denis Cormier and Michel Magnan (2007) argued that environmental disclosures improve investors' assessment of a company's earnings prospects and reduce implied uncertainty, which ultimately reduces companies' implied cost of capital. They investigated the effects of voluntary environmental reporting on the relationship between a company's earnings and its share price. Their findings indicate that: companies' environmental reports affect their stock market valuation (i.e., earnings valuation multiple), different aspects of environmental reporting have different effects on a company's valuation multiple, and the effects of environmental reporting differ depending on the reporting (i.e., national institutional) context that companies face.

Taking into consideration the work on voluntary disclosure cited in this paper, it seems that economic benefits (outcomes) are the main reason for many companies to disclose their environmental issues voluntarily. There are other factors such as litigation, legal fees, and legitimacy that encourage or in some cases enforce companies to be involved in such activities but all of them finally may have economic costs (consequences) for the companies which influence companies' disclosure policies and strategies. Although, environmental disclosure has several advantages for companies, there are also certain difficulties and issues (e.g., measurement problem in regard to some important categories of externalities), which place some limitations on companies.[4]

5. Conclusion

The literature on the voluntary disclosures suggests that economic benefits of the activities under taken by the companies are the main reason for doing them. There has been increasing environmental awareness and expectations regarding the activities of companies that may bring many potential legal and economic risks for companies. Capital markets are ever more responsive to these matters. There has been an increase in the number of the moral (ethical) investors who believe that they should avoid investing in certain types of companies which cause social injury or environmental damages. Also increased stringent sanctions against certain types of corporate activities because of the public concerns have increased the risk of investment in them.

Regarding these issues, the rational firm (the firm which wants to maximise its shareholders welfare/reduce its costs of capital) voluntarily engages in the environmental protection activities (e.g. pollution reduction, reduce the use of natural resources, and try to recycle previous products) and then communicate to its markets (product, labour, and capital) the fact of its actions so as to differentiate itself and thereby maximize its wealth. Thus, voluntary disclosure has, in the main inherent economic benefits for companies.

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[1] Following Gary et al. (1995, p.555) in this paper voluntary disclosures refer to " disclosures in excess of requirements".

[2] Other factors affecting companies' voluntary disclosure decisions are firm size, ownership concentration, industry classification, management compensation and investment growth set (e.g., Lim et al., 2007).

[3] " Private disclosure refers to the process of engagement where one to one discussions are held between institutional investors and their investee companies as well as to forms of private SEE disclosure such as specialized questionnaires on SEE issues, distributed to investee companies by institutional investors" (Solomon and Solomon, 2006, p.565).

[4] For more information regarding the difficulties please see Belkaoui and Jones (1996).

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