

## CHAPTER 6

### PRIOR RESEARCH ON VOLUNTARY DISCLOSURE IN CORPORATE REPORTS

#### 6.1 Introduction

The issue of the importance and extent of voluntary disclosure in annual reports and the information needs of external decision makers has been the subject of many and varied empirical research studies. Various reasons have been put forward by researchers as to why companies should disclose more voluntary information, including that it reduces the cost of capital, affects the company's share price and affects the company's ability to raise funds in capital markets.

This chapter examines these studies and their findings as they provided a basis for the selection and development of the research methodology used in this study. Prior research studies were classified into two groups, namely empirical studies addressing the extent of voluntary disclosure and its association with company characteristics and those addressing the perceptions of various constituents of annual reports on the importance of voluntary disclosure. While the studies are discussed in chronological order starting in 1961, more importance is attached to the most recent studies.

#### 6.2 Empirical studies on disclosure and company characteristics

These studies examined the relationship between the level of voluntary disclosure and selected company characteristics such as the rate of return, earnings margin, company size, number of shareholders, market risk, listing status, audit firm and growth. Table 6.1 at the end of the discussion provides a summary of the most important studies on this topic.

### 6.2.1 Cerf (1961)

Cerf was one of the first researchers to construct an index of information which may be disclosed in an annual report. The disclosure level was related to three company characteristics, namely asset size, number of stockholders and listing status. The results of his research were that there is a positive relationship between asset size and extent of disclosure. Many researchers have followed the research methodology used by Cerf.

### 6.2.2 Singhvi and Desai (1971)

The purpose of their study was to test the significance of the relationship between quality of disclosure and various company characteristics. Their point of departure was similar to that of Cerf, but they added earnings margins and rate of return and used a step-wise multiple regression model to analyse their data. They concluded that listing status (quoted or unquoted) was the characteristic with the highest correlation and also that the greater the extent of the disclosure, the less the risk exposure of shareholders.

### 6.2.3 Buzby (1974 and 1975)

Buzby studied the relationship between a sub component of adequate disclosure – the extent to which selected items of disclosure are presented in company annual reports – and two company characteristics, namely size and listing status. His statistical tests indicated that extent of disclosure for manufacturing companies in the United States was positively associated with asset size of a company but not with listing status. His results were thus consistent with those of Cerf, but contrary to those of Singhvi and Desai.

### 6.2.4 McNally, Eng and Hasseldine (1982)

Their study focussed on three aspects of discretionary disclosure of financial and non-financial information. Firstly, the attitudes of external decision makers, namely financial editors and stock exchange members, were surveyed. Secondly, the disclosure

practices of manufacturing companies listed on the New Zealand stock exchange were examined, and finally the association between disclosure practices and selected corporation characteristics and auditors was analysed. Their findings were consistent with prior research in the United States and the United Kingdom, namely that size is a dominant corporation characteristic in establishing the leaders in voluntary disclosure practices. However, when compared with what professional external users desired the extent of disclosure in annual reports was low.

#### **6.2.5 Firth (1984)**

In his initial research in 1979, he found that both size and stock market listing variables were positively related to disclosure but that the auditor factor had no impact at all. In his 1984 survey Firth examined whether the extent of disclosure, specifically the amount of voluntary disclosure, was linked to the assessment of stock market risk with regard to three aspects, namely systematic and unsystematic risk and variance of return. The research involved regressing measures of leverage, earnings beta, size, dividend yield and disclosure on measures of security risk. The sample consisted of 100 manufacturing companies and the disclosure index consisted of 48 items of information (similar to those used in his 1979 research) that could be disclosed in an annual report. These items were weighted in terms of importance. The results of the empirical tests were that there was no evidence that the disclosure score had any impact on the level of stock market risk.

#### **6.2.6 Firer and Meth (1985)**

The objective of their study was to measure the level of voluntary disclosure of information by listed South African manufacturing companies and examine the relationship between disclosure and company size on the basis of total assets, market capitalisation, net income and sales as size measures. Their results showed that there was a positive relationship, although weak, between the level of voluntary disclosure and company size. This was confusing as a significant positive correlation was found in similar studies of Buzby (1975) in the USA, Firth (1979) in the UK and McNally, Eng

and Hasseldine (1982) in New Zealand.

#### 6.2.10 Malone, Piles and Jones (1993)

#### 6.2.7 Chow and Wong-Boren (1987)

Their study was based on one principal research question: Are larger companies

In explaining the overall level of information voluntarily disclosed by companies in their annual reports, Chow and Wong-Boren cited company size as an important variable. The reason being that voluntary disclosure is predicted to help with the reduction of the accentuated information asymmetry problem that emerges as entities increase in size. Managers of larger companies have incentives to publicly disclose additional information, such as investment performance and bonus forecasts, as it helps to enhance their reputation for sound business management.

Without doubt, the study by Chow and Wong-Boren (1987) is one of the most influential

#### 6.2.8 Cooke (1992)

most of which have been cited in the literature on disclosure of financial information

Cooke examined the effect of size, stock market listing status and industry type on the extent of disclosure by Japanese corporations. He found that multiple listed corporations, incorporating certain foreign regulation aspects into their financial reports to raise capital on the international markets at the lowest cost, tended to have a higher level of disclosure than corporations listed only on the Tokyo Stock Exchange. Other findings by Cooke was that Japanese manufacturing corporations disclosed significantly more information than other types of corporations. The interaction between industry type and quotation status was also found to be significant.

showed that company size, country/region of origin, international listing status

#### 6.2.9 Negash (1990 and 1995)

findings of individual sample companies. The other three independent variables

In his first study Negash examined 50 companies on the Brussels Stock Exchange and determined that extent of disclosure was a function of size and leverage. The results of the 1995 study were based on 50 Zimbabwean 1992 annual reports of listed companies. It indicated that the extent of disclosure could not be used as a policy instrument to influence a company's risk parameters, as represented by beta and variance.

#### **6.2.10 Malone, Fries and Jones (1993)**

Their study was based on one principal research question: Are there identifiable and measurable factors that are associated with the extent to which companies in the oil and gas industry disclose financial information? They tested ten hypotheses, of which three were supported and seven were not. The following hypotheses were supported: Companies with high debt/equity ratios, with a greater number of shareholders and that were listed on a major stock exchange disclosed financial information to a greater extent than companies with low debt/equity ratios, fewer shareholders and whose stock was traded over the counter. The following hypotheses were not supported: The extent of disclosure of financial information of oil and gas companies were not significantly associated with the level of total assets, extent of inter industry diversification, higher rates of return and higher earnings margins or with companies that engaged larger audit firms, with foreign operations and that had a greater number of outside directors on the board.

#### **6.2.11 Meek, Roberts and Gray (1996)**

Their study examined factors influencing the voluntary disclosures of three types of information, namely strategic, non financial and financial contained in the annual reports of multinational corporations from the US, UK and Continental Europe. Their results showed that company size, country/region of origin, international listing status and to a lesser extent, industry were the most important variables explaining the voluntary disclosures of their sample companies. The other three independent variables, namely leverage, profitability and extent of multinational operations did not appear to be significant in explaining voluntary disclosures.

**9.2.12 Patton and Zelenka (1997)**

Their research focused on the 1993 annual reports of 50 Czech companies after the Act on Accounting, 1991, was promulgated. They subjected eight independent variables to a univariate analysis, which showed that asset size, return on equity performance, financial risk (leverage) and the number of employees were significantly correlated with extent of disclosure. However, after running multivariate regressions, the variables proving to be statistically significant were type of auditor, number of employees, stock exchange listing status and return on equity performance.

**6.2.13 Adams and Hossain (1998)**

Using 1988-1993 data drawn from New Zealand life insurance companies, the results of their study indicated that organizational form, company size, product diversity and distribution system (i.e. the amount of business sold through independent sales agencies) were positively related to the level of voluntary disclosure as implied by the managerial discretion hypothesis.

Table 6.1 contains a summary of research studies on voluntary disclosure in terms of the size and nature of the sample companies used, the number of voluntary disclosed items included in the evaluation and the type and size of weighting scale used. Where no such data were available, the space was left blank.

Researcher	Year	Industry and sample size	No. of	Type of
Patton and Zelenka	1997	Czech companies	50	Unweighted
Adams and Hossain	1998	Life insurance	189	Unweighted

The unweighted scale was:  
 1 = disclosed and 2 = undisclosed, or  
 1 = disclosed and 0 = undisclosed.

**Table 6.1 Summary showing sample size and type of disclosure index scale used in prior studies on extent of voluntary disclosure**

Researcher	Year	Industry and sample size	No. of items	Type of scale	Scale
Cerf	1961	527 listed and unlisted companies	31	Weighted	1 - 4
Singvhi and Desai	1971	100 US listed and 55 unlisted industrial companies	34	Weighted	1 - 4
Buzby	1974	88 listed Wall Street manufacturing companies	39	Weighted	0 - 4
Buzby	1975	US manufacturing companies	39	Weighted	1 - 4
McNally, Eng and Hasseldine	1982	New Zealand companies		Weighted	
Firth	1984	Manufacturing companies	48	Weighted	1 - 5
Firer and Meth	1985	S A manufacturing companies	49	Unweighted	0 - 1
Chow and Wong-Boren	1987	Mexican companies		Unweighted	
Cooke	1992	Japanese companies		Unweighted	1 - 2
Malone, Fries and Jones	1993	Oil and gas industry		Weighted	
Negash	1990 1995	50 listed Belgium and 50 listed Zimbabwean companies	81	Unweighted	0 - 1
Meek, Roberts and Gray	1996	116 US, 64 UK, 16 French, 12 German and 18 Netherland companies	85	Unweighted	0 - 1
Patton and Zelenka	1997	50 Czech joint-stock companies	66	Unweighted	0 - 1
Adams and Hossain	1998	Life insurance	189	Unweighted	0 - 1

\* The unweighted scale was:

1 = disclosed and 2 = undisclosed; or

1 = disclosed and 0 = undisclosed.

**Table 6.2 Summary of survey findings of the relationship between company characteristics and extent of voluntary disclosure**

Researcher	Year	Company characteristics used in study	Research conclusions
Cerf	1961	Asset size, number of shareholder, profitability, listing status	All controlling variables were associated with disclosure levels
Singhvi & Desai	1971	Asset size, number of stockholders, listing status, rate of return, earnings margin	Inadequate disclosure is associated with small companies as measured by total assets, number of stockholders, companies free from listing requirements, companies audited by small CPA firms and less profitable companies as measured by rate of return and earnings margin
Buzby	1975	Company size using asset size, listing status	Extent of disclosure was positively associated with the size of the company's assets and not affected by listing status
Firth	1979	Company size using sales, capital employed, asset size, listing status, auditors	Size and listing were associated, but not auditors
Firth	1984	Leverage, earnings, beta, asset size and dividend yield	Disclosure has no impact on the systematic risk, unsystematic risk or variance of return



**Table 6.2 (Continued)**

<b>Researcher</b>	<b>Year</b>	<b>Company characteristics used in study</b>	<b>Research conclusions</b>
McNally, Eng and Hasseldine	1982	Company size using total assets	Significant relationship between company size and disclosure
Firer and Meth	1985	Company size	Limited positive correlation between company size and level of voluntary disclosure
Meek, Roberts & Gray	1996	Sales size, country, industry, leverage, degree of multi nationality, profitability	All positively associated with extent of voluntary disclosure
Patton & Zelenka	1997	Size, performance, risk, listing status, number of employees, industry	Significant correlation with asset size, return on equity performance, leverage and number of employees
Adams & Hossain	1998	Organisational form, company size, product diversity, distribution system, assets-in-place, localisation of operations, non-executive directors, reinsurance	The first four explanatory variables are positively related to the level of voluntary disclosure, the fifth and sixth are not significant and the last two are statistically significant but in the opposite direction to that predicted

### 6.3 Empirical studies on the perceived importance of voluntary disclosure

In order to gain insight into how market constituents rate the efficiency of the stock market, how they appraise disclosure practices of companies and how effectively their information needs are satisfied, it was necessary to review previous literature and to examine the opinions of corporate report compilers and users. This made it possible to build on previous research, hereby making a meaningful contribution to the field.

#### 6.3.1 Buzby (1975)

The study of Buzby consisted of 39 items of financial and non-financial information appearing in an annual report which was presented to a selected user group consisting of professional financial analysts. In addition, a worksheet using the same items was developed in order to measure the extent of disclosure in annual reports of 88 small and medium sized companies. Their results showed that many items of information which financial analysts believed to be important were not being adequately disclosed and that there was little correlation between the relative importance of the items and the extent of their disclosure.

#### 6.3.2 Benjamin and Stanga (1977)

The objective of their study was to compare the perceived information requirements of two user groups of annual reports, namely commercial bank loan officers and professional financial analysts. The study revealed that bankers, when making term loan decisions, did not value information to the same extent as did financial analysts when making common stock investment decisions. This conclusion held good for 51 of the 79 information items in which a significant difference was noted.

#### 6.3.3 Firth (1978)

In view of the fact that financial directors are responsible for determining the disclosure policy that the company should adopt after considering the needs of the end users, Firth

examined the importance of individual voluntary disclosure items as weighted by finance directors, auditors, financial analysts and bank loan officers. His findings revealed that the importance rating by finance directors and auditors was similar with that of financial analysts but significant differences were found between the two groups.

#### **6.3.4 McNally, Eng and Hasseldine (1982)**

Their study focused on the importance of financial and non-financial information by surveying attitudes of financial editors and stock exchange members and relating these user preferences to the level of disclosure of companies listed on the New Zealand Stock Exchange. Their findings indicated that the level of disclosure was considerably lower than that considered desirable by the external users and that size was a dominant corporate characteristic in establishing the leading companies as far as voluntary disclosure practices were concerned.

#### **6.3.5 Firer and Meth (1986)**

In their study Firer and Meth investigated the extent to which the non-statutory information requirements of investors were met by disclosure practices in the annual reports of South African companies. Little positive correlation was found between the investors' information requirements and the disclosure of such information in annual reports.

#### **6.3.6 Curtis (1992)**

Curtis used a metatheory to accumulate findings across 11 studies over a period of 16 years. All the studies based their analysis on means calculated from perception aggregations from lists of information items. Of the 475 items of information contained within these studies, 63 common items were identified. The purpose of the investigation was to determine whether perception consensus existed across diverse studies and between different user and preparer groups.

Their findings may be summarised as follows:

- approximately 30% of the common items were perceived consistently in terms of their information importance by users and preparers;
- information items with a future orientation were, as a group, perceived to be more important than items with an historical or current period orientation;
- financial analysts appeared to exercise less variability than other groups in their perceptions about the importance of specific items;
- sophisticated users perceived items to be more important than non-sophisticated users with regard to investment and bank loan decisions;
- financial analysts attached more importance to items than the preparers of the information; and
- per item group perceptions appeared to be the same.

### 6.3.7 Eccles and Mavrinac (1995)

In an effort to determine the key factors for a high level of corporate disclosure, Eccles and Mavrinac focused on the disclosure process itself and on perceptions of constituents. They conducted a survey of corporate managers, financial analysts and portfolio managers, to determine their opinions on disclosure regulations and how companies communicated with the capital markets. Their findings revealed that although their respondents did not support an increase in the regulation of disclosure, there was a need for companies to upgrade the role of the investor relations personnel, to voluntarily report non-financial information, to formulate explicit disclosure strategies and policies, and to reach out to capital market customers and solicit their needs, opinions and preferences in order to close the communication gap.

A summary of research studies on the perceptions of compilers and users is provided in table 6.3 with information on the number of voluntarily disclosed items used in the survey, the user groups included in the sample and the scale that the researcher used for grading items.

**Table 6.3 Summary of previous studies examining perceptions of users and compilers showing number of disclosure items, type of user groups and scale**

Researcher	Year	No. of items	Type of user groups	Scale used	No. of Respondents
Buzby (USA)	1975	39	Financial analysts	0 - 4	131
Benjamin and Stanga (USA)	1977	79	Bank loan officers and professional financial analysts	0 - 4	208
Firth (UK)	1978 1979	75	Financial directors, auditors, financial analysts and bank loan officers	1 - 5	Various samples
McNally, Eng and Hasseldine (New Zealand)	1982	41	Financial editors and Stock exchange members	1 - 5	9
Firer and Meth (South Africa)	1986	49	Members of the Investment Analysts Society of Southern Africa	1 - 5	137
Courtis (Australia)	1992	63	Private shareholders	1 - 5	274
Eccles and Mavrinc (USA)	1995	-	Corporate managers, financial analysts and portfolio managers	1 - 7	-

#### 6.4 Conclusion

Past research suggests that there is a positive association between voluntary disclosure policies of companies and company size, number of shareholders, listing status, industry type, analysts' forecasts and good news versus bad news.

The presence of perception consensus within a set of specified studies and between user and preparer groups was investigated by Courtis (1992) in order to cumulate findings across the broad spectrum of time and culture. All 11 studies, most of which are mentioned in table 6.3, used respondent perceptions to information items as the basis

## CHAPTER 7

## RESEARCH METHODOLOGY

for computing overall means. He concluded that approximately 30% of the items-in-common are perceived consistently in terms of their information importance by users and preparers.

## 7.1 Introduction

Before the two major empirical studies are discussed in chapters 8 and 9, the research methodology for the two studies is discussed in this chapter. The aim of the research methodology was to contribute to breaking the barrier of voluntary disclosure. This chapter reports the methodology of the empirical studies. The empirical study 1 (see chapter 8) tested the impact of voluntary disclosure on the perceived information importance of various company disclosures. The aim of the second empirical study (see chapter 9) was to examine the impact of voluntary disclosure on the perceived information importance of various disclosures. The research methodology of the two studies was designed to test the hypothesis that voluntary disclosure is positively related to the perceived information importance of various disclosures. The methodology of the two studies was designed to test the hypothesis that voluntary disclosure is positively related to the perceived information importance of various disclosures. The methodology of the two studies was designed to test the hypothesis that voluntary disclosure is positively related to the perceived information importance of various disclosures. The methodology of the two studies was designed to test the hypothesis that voluntary disclosure is positively related to the perceived information importance of various disclosures.

Two entirely different research methods were used in this study to capture the necessary data, the first using a disclosure index that was used to measure the extent of voluntary disclosure and the second using a questionnaire survey that was used to investigate the level of importance of voluntary disclosure as perceived by users and preparers. The research methodologies for each study are discussed.

## 7.2 First empirical study on the extent of voluntary disclosure

The first empirical study concerned extent of disclosure and the following procedure was followed for

- a disclosure index was developed and designed to measure the extent of voluntary disclosure in annual and interim reports with reference to a number