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Cross-sectional effects in community disclosure

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Abstract

Purpose – This paper seeks to address a gap in the literature in that it explores community disclosures in annual reports examining annual reports for 5 UK FTSE 100 sectors between, 1974 and 2000.

Design/methodology/approach – The sample was bifurcated into types – those with higher public profile and those with lower public profile based on a measure of "proximity to end user". Two approaches were adopted in the paper: longitudinal volumetric word count mean and frequency of disclosure by company.

Findings – The two approaches demonstrated that community disclosure was positively associated with public profile. The findings are consistent with reporting behaviour found in other categories of voluntary disclosure, where disclosure has been found to be associated with the presumed information demands of specific stakeholders. Additionally the research supported a legitimacy theory-based explanation of cross-sectional variability in community disclosures. Illustrative disclosures from a number of companies are also presented in the paper.

Research limitations/implications – Further areas of research are suggested by these findings. In addition to articulating the potential value of examining community disclosure patterns in other contexts (e.g. in other sectors and other national situations), and in other media (e.g. internet studies), the findings in this study suggest that there may be value in exploring the ways in which voluntary disclosure responds to other external structural variables.

Originality/value – The contribution of this paper has been to show that a hitherto less-analysed category of voluntary social disclosure (community disclosure) is cross-sectionally responsive to the structural vulnerability of companies to issues associated with "general" social concern.

Keywords Research, Disclosure

Paper type Research paper

Introduction

The empirical literature in social and environmental accounting arises from a community of researchers in the exploration not only of the definition of social and environmental disclosure but also of how to resolve meaning and reporting intent from such disclosures. The latter of these two concerns is reflected in the debate over

Helpful comments were received on earlier drafts of this paper from Rob Gray and Alex Arthur. It was presented at the BAA annual conference in Jersey and at the Critical Perspectives on Accounting conference in New York (both in April, 2002) where further helpful feedback was received. We are very grateful to two anonymous *AAAJ* reviewers for providing very helpful comments and bearing patiently with us as we brought the paper to this point.

methods of content analysis, whilst the former in the various categories and types of social and environmental information that have been captured in previous empirical studies.

The content analysis literature reflects a debate on how best to code and count the various types of social and environmental disclosure. Coding decisions (Milne and Adler, 1999) are concerned with how to identify a disclosure type from a narrative source, while measuring (or counting) decisions are concerned with how to assign value to such disclosures once they have been coded for meaning. Commonly used measurement methods have included word count (Deegan and Gordon, 1996; Deegan and Rankin, 1996; Wilmshurst and Frost, 2000; Campbell, 2003, 2004), sentence count (Milne and Adler, 1999; Deegan *et al.*, 2000); summed page proportions (Guthrie and Parker, 1990; Gray *et al.*, 1995; Campbell, 2000), frequency of disclosure (Cowen *et al.*, 1987; Ness and Mirza, 1991) and "high/low" disclosure (Patten, 1991).

Arguments over the meanings of the terms "social" and "environmental" are reflected in the different categories of these terms that have been used in content analysis. Environmental disclosures are the most commonly captured in the empirical literature (for example Patten, 1992; 1995; Deegan and Rankin, 1996; Deegan and Gordon, 1996; Wilmshurst and Frost, 2000; Campbell, 2003; 2004), although not all of these have attempted to disaggregate disclosures into "types" of environmental disclosure (see Gray et al., 1995, for such a disaggregation). Similarly, some have captured "social disclosure" as a whole (Campbell, 2000) whilst others have disaggregated this into "types" of social disclosure (such as community disclosure). Cowen et al.(1987) and Patten (1995) are examples of studies that disaggregated disclosures into sub-types (Cowen et al.'s categories, for example, were environment, energy, fair business practice, human resources, community involvement, product safety and "other").

This study examined one particular category of social disclosure, namely community disclosure. This was described by Patten (1995) as that disclosure which "includes disclosures related to community activities, health-related activities, donations of cash, products or employee services to education or the arts, or other community activity disclosures" (Patten, 1995, p. 280) — essentially a wide range of concerns of general interest to society as a whole and not to any narrowly-defined stakeholder group.

Despite its importance as a broadly conceived stakeholder group (Clarkson, 1995), only a small number of previous studies have examined community disclosures and findings have hitherto been inconclusive. Cowen *et al.* (1987) included community disclosure in their study, finding that it responded to company size and industry type although response to industry type (using a frequency-based method) did not appear to follow any discernable pattern. In terms of disclosure by volume, Patten (1995) found community involvement information to be lower in volume than other categories such as environment and employee disclosure. Other than these findings, however, little has been researched and hence little is known about the motives for, and longitudinal and cross sectional behaviour of, community disclosure.

The paper seeks to address a gap in the understanding of this category of disclosure by reporting on a survey of community disclosures by UK based companies over a 27 year period for a cross sectional sample of ten companies in five sectors. In order to enrich the data analysis and in an attempt to provide a richer set of conclusions upon

which to comment on existing theory, both volumetric (word count) and frequency-based content analysis methods were used.

The rest of the paper proceeds as follows. In the next section, the literature is reviewed as it relates to disclosure studies in general and cross-sectional studies in particular. A hypothesis is presented and the suppositions underpinning the hypothesis are made explicit as two "propositions". Method is then described and findings are presented. Finally, the findings are reviewed in the light of current explanatory theory and conclusions are drawn.

Disclosure studies and cross-sectionality

Previous empirical studies and differential vulnerabilities

The proposition that different types of information-demand situation will precipitate differing disclosure patterns has been an accepted theme in voluntary disclosure studies for some time (Watts and Zimmerman, 1986; Lang and Lundholm, 1996). Hence, for example, vulnerability to environmental criticism (as a result of a company's activity or industry membership) has been found to precipitate higher volumes of environmental disclosure in annual reports (Deegan and Gordon, 1996; Campbell, 2003). A similar response to differential vulnerability is also in evidence with regard to voluntary risk disclosures (Linsley and Shrives, 2000).

The belief that structural vulnerability to a particular issue may arise from industry membership has been explored in a number of previous studies (Deegan and Gordon, 1996; Adams *et al.*, 1998) and this was helpful in suggesting a way forward for the present study. The assumption that industry membership may be a primary cause of pressure to disclose a certain type of information presents a problem, however, when a hitherto less-explored category of disclosure is considered. Given that the previous studies that isolated community disclosure did not seek (and did not find) any notable cross-sectional effects, a challenge existed with regard to predicting and explaining variability in community disclosures. Why might a company disclose specifically community information and what factors or pressures might trigger disclosure decisions on the part of reporting entities? For some companies, there may be cause to be self-laudatory when reporting on contributions to benevolent causes or it may be linked to the favourableness (or otherwise) of a company's or sector's general reputation.

A potentially helpful lead in theorising community disclosure emerged from the steadily growing literature on corporate reputation management. MacMillan *et al.* (2002) found that the best social reputations were enjoyed by retailers (including Marks and Spencer and Boots). All of the "top 20" corporate reputations, according to MacMillan *et al.*, belonged to companies that had some direct contact with consumers – and the same was true of the "worst 10". The public apparently cannot report their opinion on a company with which they have had no contact. "Fame" or public profile would, therefore, appear to be a qualifier for entry onto the shortlist of companies to be considered as having a good or poor reputation; no companies engaged in entirely secondary or primary activities were listed in MacMillan *et al.*'s top 20 or bottom 10.

Insofar, therefore, that public profile may be a cause of vulnerability to changes in community opinion about a given company, it would be intuitively reasonable to suggest that companies with higher public profiles — those most vulnerable to changing social opinion — would be the most likely not only to undertake community

activities but also to report on them. Hence, whilst community disclosure may be an indicator of community activity (the more activity, the more to report on) it is also likely that disclosure would be driven by the felt-need to appear to be aligned to the expectations of those stakeholders to whose concerns the company is most sensitive. In the case of companies with high community visibilities, these are likely to be end-user consumers and the "general public".

The term "the general public", however, is ambiguous and eludes ready definition or circumscription. Insofar as "the general public" manifestly contains a high proportion of consumers (customers of tertiary industries such as retailers), it may be possible to employ tertiary consumers as a proxy, as the MacMillan *et al.* study would suggest. The benefit of this would be that customers of tertiary producers are readily identifiable in a supply chain whereas "the general public" are not. Accordingly, a proximity to end user metric measuring a company's "distance" from tertiary customers could approximately indicate its "public profile." This, in turn, might indicate the company's exposure to information demands from consumers and hence the need to disclose community information.

However, while proximity to end user is clearly one part of public profile, there are, equally, other stakeholder groups that may be similarly immediate, as Patten's definition (above) indicates. Beyond Patten's definition, we could for example include other "general society" stakeholders such as lobby and media groups. Although a ready identification of all "general society" stakeholders remains elusive, it is acceptable nonetheless to employ proximity to end user (tertiary customer) as a proxy for exposure insofar that this is capable of capturing a company's or sector's public profile as it relates to society and its representative stakeholder groups. Insofar that proximity to end user is an assumed correlate of visibility to "general society" stakeholders, "public profile" is an appropriate way of describing this.

This way of proceeding is supported by other researchers in the area. Cowen et al. (1987) suggested, but did not test the belief that, "consumer-oriented industries can be expected to exhibit greater concern with demonstrating their interest in social responsibility since corporate image among the mass market consumers is likely to have an influence over the amount of sales generated" (Cowen et al., 1987, p. 113). Similarly, Hackston and Milne (1996) contention that, "consumer-oriented companies can be expected to exhibit greater concern with demonstrating their social responsibility to the community" (Hackston and Milne, 1996, p. 81) has hitherto remained untested. The proximity that a sector has to the end user has been used in other studies as a possible predictor of vulnerability to social criticism. Clarke and Gibson-Sweet (1999) divided a cross sectional sample into three types (no link with final consumer; known brand sold to consumer; direct selling relationship with final consumer) on the basis that this would serve as a proxy for public profile. Adams et al. (1998) ordered four industrial groupings according to their proximity to the final customer.

In sorting by proximity to end user, however, the complexities of company structure – particular where companies are vertically integrated – would render any attempt to produce a fine-grained metric for public profile problematic. However, it is clear that there are sufficient differences between the public profiles of different companies such that, while it may be implausible to construct a continuum along

which companies could be "plotted", bifurcation into broad groupings would be defensible.

In addition, size is known to be a factor in social disclosure and performance studies and is likely to be a factor in public profile — Hackston and Milne (1996) study was among several to note size effects in voluntary social disclosure (see also Trotman and Bradley, 1981; Kelly, 1981; Cowen *et al.*, 1987; Belkaoui and Karpik, 1989; Adams *et al.*, 1998). In order to observe any relationship between voluntary community disclosure and public profile, therefore, any study is likely to need to control for size, since this would otherwise be likely to mask other effects.

Theoretical perspectives

In relation to theorising in this area, the voluntary disclosure literature has utilised a number of "disclosure theories" in an attempt to explain or predict disclosure behaviour. Agency theory (Jensen and Meckling, 1976), signalling theory (Spence, 1973; Morris, 1987; Campbell *et al.*, 2001), political costs hypothesis (Watts and Zimmerman, 1986), media agenda-setting theory (Brown and Deegan, 1998) and political economy of accounting (Cooper and Sherer, 1984) have all been discussed as possible frameworks wherein parts of the motivation for voluntary disclosure may be described. The development of and diversity of these different theories is indicative of the problems researchers have experienced in trying to explain disclosure patterns.

In the field of social and community disclosure, however, perhaps the most prominent among this family of theories is legitimacy theory (Suchman, 1995; Lindblom, 1994). Legitimacy theory has been demonstrated to be predictive in nature and is capable of lending itself to empirical experiment (see, for example, Guthrie and Parker, 1989; Deegan and Rankin, 1996; Deegan and Gordon, 1996; Wilmshurst and Frost, 2000, O'Dwyer, 2002; O'Donovan, 1999, Campbell, 2000; 2003). As a disclosure theory, legitimacy theory suggests that voluntary disclosures can in part be intended to manage the various legitimacy threats faced by a company. A number of studies have found disclosure to respond to threatened reputation (such as following an allegation of malpractice, legal censure or similar mishap – Patten, 1992; Deegan and Rankin, 1996; Deegan *et al.*, 2000). Other papers have found disclosure to respond to structural vulnerability (especially with regard to environmental threat – see for example Deegan and Gordon, 1996; Campbell, 2003).

It is the ability of legitimacy theory to explain and predict the relationship between specific structural vulnerability and responsive disclosure that makes it a useful conceptual framework for the current study. In the absence of a legitimacy-threatening event that might trigger specific legitimacy-restoring disclosures (such as those identified by Patten, 1992 and Deegan *et al.*, 2000), specific categories of disclosure (in this case, community disclosure) can be expected to respond – over a period of time – to the general vulnerability of a company or sector to that issue. It is the contention of this paper that a key determinant of such vulnerability with regard to community disclosure is public profile and in the next section the hypothesis and underlying propositions for testing this association are described.

Hypothesis and propositions

Given the above discussion, the following hypothesis is proposed:

Volume and frequency of community disclosure in annual reports will be positively associated with public profile when a sample is controlled for size

Two propositions underpin this hypothesis.

Proposition 1

While attempts to position companies by public profile on a fine-grained continuum are likely to be frustrated by the complexities of companies' structures, two broad bifurcated groupings of public profile (higher and lower public profile), based primarily on sector membership, are definable.

As noted above, it is very unlikely that a fine-grained metric for public profile could be devised, but division into two broad groupings, based on proximity to end or tertiary user (as a proxy for vulnerability to other relevant "general society" stakeholder groups) to produce an overall assessment of public profile, is defensible. For example, at the two extremes, a high street retailer is likely to have a very high public profile whilst a mining company of comparable market value and with no tertiary industry involvement will, *ceteris paribus*, have a lower public profile.

The practice of dividing sample companies into broad groupings has been employed in a number of previous studies. In addition to the studies by Clarke and Gibson-Sweet (1999) and Adams *et al.* (1998), reported above, Kelly (1981) divided a sample into primary, secondary and tertiary types, finding that some categories of social and environmental disclosure were associated with these different industry types (energy and environmental disclosures, for example). Hackston and Milne (1996) divided a sample (47 top New Zealand companies) into the binary groupings of "high profile" and "low profile" — an approach similar to those adopted by Patten (1991) and Roberts (1992). Deegan and Gordon (1996) similarly divided a sample according to structural vulnerability by industry (in their case, according to environmental sensitivity).

The choice based on precedence, therefore, appears to be between employing two, three or four groupings. It is suggested that the more robust treatment is a binary division, using a model similar to the methods employed by Adams *et al.* (1998), Deegan and Gordon (1996) and Hackston and Milne (1996). Given the longitudinal period employed in this study and minor changes in sample companies' activities over the period studied, contiguous membership of a grouping would be more difficult to ensure were more than two groupings employed. It is further argued that by consideration of the factors given above, (proximity to end user incorporating vulnerability to other relevant "general society" stakeholder groups), a binary divide into "higher" and "lower" public profile, based primarily on sector membership, is defensible. (Although sector membership is the primary consideration, individual consideration by company may also be necessary to account for particularities that sector membership alone would not distinguish.)

Proposition 2

Community disclosure in annual reports is capable of indicating a company's intent on how it wishes to be perceived as relating to the general public. A high community discloser wishes to be perceived as more attuned to public concerns than a low discloser.

This proposition raises two issues: the validity of community disclosure as an indicator of a company's attitude to public concerns and the validity of capturing community disclosure data from annual reports only.

Why, then, should community disclosure be indicative of how a company wishes to be perceived by the general public? As indicated above, community involvement disclosures include a set of subjects of typical concern to society at large, in contrast to, say, employee disclosures (of concern mainly to employees) and environmental disclosures (of concern mainly to certain stakeholders only, including environmental lobbying organisations and investors concerned about potential environmental liabilities). If a company wanted to provide reputation managing disclosures on an ongoing basis, it would be inclined to include disclosure information about its attitudes to issues of general interest to the public: health, education, the arts, community activities, charitable involvement and donations, and similar issues.

Community disclosure is also likely to be associated in some ways with social performance in this area. Although Ullman (1985) cautioned against using disclosure as a proxy for performance, companies, which have more reason to perform strongly in this area will also thereby have more activity to describe and thus their disclosure may be higher. In line with other studies of its type, however, this study did not set out to test the relationship between community performance and community disclosure and it makes no claims in relation to the former. The proposition stands insofar that it relates only to disclosure and its relationship with a company's reporting intent.

The use of annual reports only as the source of content analysis data has been queried (Unerman, 2000; Campbell *et al.*, 2003) although the majority of previous studies have taken the view that, though not all corporate communications are captured using annual reports only, sufficient reporting intent can be inferred from them. Studies of reporting on internet sites are becoming increasingly important (Shepherd *et al.*, 2001; Xiao *et al.*, 2002, for example) and whilst the use of annual-report-only studies are likely to be rendered less useful in future social reporting studies, it is argued that for the majority of the period 1974-2000 (the longitudinal period of this study) when the internet was not a feature of the reporting environment, the annual report can be assumed to be a reliable source of reporting intent for content analysis. See also Gray *et al.* (1995) and Deegan and Rankin (1996) for a discussion of the use of annual reports only for social disclosure data capture.

With specific regard to community disclosures, it is argued that there are three reasons why it is reasonable to suggest that companies may elect to use the annual report to convey its reporting intent, despite the fact that the main audience for the report is likely to be shareholders. First, since expenditure on community activities may be seen either as an expense that reduces the level of profit and potentially of the dividend, or as an investment that may provide a return in the future, disclosure to shareholders in the annual report may be used as a means of explaining and justifying such activity and expenditure.

Second, companies may see community disclosures as a part of their reputation risk disclosure. As with other forms of risk, disclosure may be in proportion to the perception of risk on the part of the investor. A business with, in the opinion of investors, a higher structural exposure to a certain form of reputation risk may elect to

manage that risk by disclosing information as a form of reassurance to investors. If this is true of (say) potential environmental and exchange rate liabilities, it is reasonable to assume it may be true for a number of social risks. In this context, "social risks" means potential costs arising from a deterioration of the company's reputation in society and might include boycotts, lobbying and any lost sales arising from distrust or poor reputation.

The third reason why companies may use (or may have used in pre-internet years) the annual report for community disclosure is to provide relevant information in case any parts of its community constituency wished to establish the company's attitudes to selected social issues. For most of the period of the study in question it would be a reasonable assumption that interested parties might have used a statutory corporate communication (the annual report) for such information-gathering purposes.

Sample and method

Sample

As noted above, several studies have found size effects in voluntary social disclosure. The question probed in this study is whether, if a sample is approximately controlled for size, volume and frequency of community disclosure can be shown to be positively associated with public profile.

In order to address the hypothesis, a sample was designed that could be meaningfully organised according to public profile. Several stages were undergone in the establishment of the longitudinal and cross-sectional elements of the sample.

In order to control for size, large companies only were included in the study (assuming all companies in the FTSE 100 were "large"). The FTSE 100 was sorted by market value as at July 1998 (when the research was commenced) and at January 1974 and all companies that had not enjoyed contiguous membership between the two dates were eliminated. The start date of 1974 for the longitudinal element was chosen as this was the year in, which UK Companies House began recording annual reports on microfiche (this being one of the media used for data capture). Importantly, however, the length of the longitudinal sample was designed to increase the confidence in the cross sectional findings. The aim was to enable the reporting of volume means by company over an extended period when all short term peaks and troughs had been "evened out". The longitudinality was also capable of providing a frequency-based analysis of some reliability and these measures, together, were capable of establishing the long term reporting intent by company.

Cross-sectionally, the objective was to sample the FTSE 100 broadly whilst at the same time providing industries that were demonstrably different with regard to public profile. The following sectors were selected from the sectors that remained with at least two contiguous memberships between 1974 and 1998: retailers, brewers, petrochemicals, chemical intermediates and aggregates.

The optimisation of validity in inferring reporting intent by sector by year would be served by the selection of several representative companies in each sector. In practice, however, it was found that three of the five sectors selected had only two representatives in the FTSE 100 at the time of the selection in July 1998. In order to ensure consistency across the sample, it was decided that two companies from each sector should be selected. Where there were only two in the FTSE 100 from the sector, those two were chosen. Where there were more than two, two were selected at random

from the sector's representatives within the FTSE 100. The suggestion that data from two companies may be insufficient for the reliable establishment of sector reporting intent is conceded but analysis of the data by sector is only a part of the findings discussed in this paper. Reporting by membership of the bifurcated groupings of higher and lower profile is of greater importance and is not dependent on the validity of selection of the two companies per sector.

A final sampling filter was applied in order to ensure longitudinal stability in the lower and higher public profile groupings. This concerned "significant change" in the companies' public profiles over the period in question. Insofar that the study assumed that each of the lower profile companies had always been lower profile, and *vice versa* for the higher profile grouping, any company that had substantially changed its core activity over the longitudinal period would not have been selected. Based upon a careful reading of the narrative on activities in the annual reports themselves (in the operating review or equivalent), all companies in the sample were found to have pursued similar business activities between 1974 and 2000 and it was thus assumed that high and low public profile grouping membership was stable (for the two groups) over time.

Based on the foregoing, the companies selected were as follows:

- · Retailers: Marks & Spencer and Boots
- · Brewing: Bass and Whitbread
- · Petrochemicals: Shell Transport and Trading and British Petroleum (BP)
- Chemicals: ICI and BOC
- Aggregates: Blue Circle (BCI) and Ready-Mixed Concrete (RMC).

Based on the earlier discussion on proximity to end user, the sample was bifurcated into groupings as follows:

"Higher" public profile – retailers, brewers, petrochemicals. The retailers and brewers have higher public profiles in part because they interact directly with consumers. The petrochemicals companies (Shell and BP), despite being vertically integrated, are known to the consumer because some consumer products bear the company name (even if some operations, such as petrol retailing, are franchised). In addition, each of the firms has a degree of structural vulnerability to other relevant stakeholder groups including lobby and media groups since, being of higher public profile, they are more likely to be targets for media exposure or criticism by the general public.

"Lower" public profile – chemicals, intermediates and aggregates. In line with the need to give individual consideration to particular companies, it is acknowledged that it is a matter of debate as to whether ICI is a "higher" or "lower" profile company. As its business activities for most of the 27 year period over which annual report content was analysed was in non-tertiary activity, it was located, along with BOC (industrial gases) in the "lower" public profile grouping. Blue Circle Industries (BCI) and Ready-Mixed Concrete (RMC) are less well known to the public and produce very little material (by proportion of output) sold directly to the end user/consumer. Being relatively unknown, the degree of structural vulnerability to other relevant stakeholder groups is limited.

Method

Data was captured on community disclosures by word count in the annual reports of the companies in the sample over the years 1974 to 2000. The definition of community disclosure used in the study was the same as that employed by Patten (1995) – see above).

The use of words as the unit of analysis has been critically discussed (Milne and Adler, 1999; Unerman, 2000) but has nevertheless been employed in a number of previous studies (see for example Deegan and Gordon, 1996; Deegan and Rankin, 1996 and Wilmshurst and Frost, 2000). Wilmshurst and Frost (2000), drawing upon Zeghal and Ahmed (1990) and Krippendorff (1980) argued that, "words are the smallest unit of measurement for analysis and can be expected to provide the maximum robustness in assessing the quantity of disclosure" (Wilmshurst and Frost, 2000, p. 16). Furthermore that, "words are a preferred measure when it is intended to measure the amount of total space devoted to a topic and to ascertain the importance of that topic" (Wilmshurst and Frost, 2000, p. 17). Similarly, Deegan and Gordon (1996) suggested that, "by counting words, which are the smallest possible units of analysis, maximum robustness to error in calculating quantity is achieved" (Deegan and Gordon, 1996, p. 189).

The numerical data was entered onto a spreadsheet containing four fields: year, company, sector, words community disclosure. Disclosure was not resolved by location in the report. Corporate reports were accessed from three sources in order of priority: the corporate reports archive at Northumbria University, England; the companies themselves; microfiches from UK Companies House. Some of the reports toward the end of the period were available from company web sites as Adobe Acrobat files[1].

In addition to the volumetric mean calculations, a frequency-based interrogation method similar to that used in Cowen *et al.* (1987) was undertaken in order to explore the frequency with which community disclosure was reported on, again comparing behaviour in the higher and lower public profile groupings.

In general terms, word counted (volumetric) data is capable of expressing the importance placed upon a disclosure category by a reporting entity based upon a semiotic conception which suggests that volume of disclosure signifies the importance placed upon the disclosure by the reporting entity. Disclosure frequency (how often a category of disclosure is disclosed at all in a longitudinal and/or cross-sectional sample), is cruder but in some situations a more powerful discriminator of reporting intent than volumetric measures insofar that each present/not present datum describes the relative importance placed on the disclosure category for a given company in a given year. When a frequency table is examined longitudinally and cross-sectionally in addition to a volumetric analysis, an overall picture can be seen, describing the proportion of the total years in a sample each company chose to report on the disclosure in question. Hence longitudinal and cross-sectional patterns of the "popularity" of the disclosure category can be noted.

Findings

Narrative content

The nature of the narrative on community disclosures from a sample of the reports analysed may serve to exemplify the nature of the information being communicated. Given that a prominent audience for the disclosures is likely to be shareholders and that appearing to be socially beneficent may be a prominent motive in such disclosures, examples of community-relations activities would reasonably be expected to feature

prominently. "Mean-spiritedness" would not be expected to be in evidence as this would be inconsistent with the cultivation of a favourable image with any conceivable readers of the annual report. The most likely purpose of community disclosure from an investor-relations perspective would be to demonstrate to shareholders how the company is managing the claims or potential claims of its various "general society" stakeholders. The content, accordingly, would reasonably be expected to tend towards the "good news" and the self-laudatory.

These expectations were found to be the case. There were no obvious longitudinal nor cross sectional effects in the type of content disclosed (although there were effects in volume and frequency — see later). Wherever it was found (whether in higher or lower profile companies) the disclosures tended towards the self-laudatory and the news communicated was invariably "good".

Among the disclosures from higher profile grouping, the following are illustrative. The disclosure in BP Amoco's annual report from 1999 is a typical example in which the importance of community relationships to the company were clearly stated:

Mapping and improving relationships with governments and communities is given highest priority at group level (BP Amoco, 1999, p. 28).

Examples were given of areas in which the company sought to engage with community and issues of general interest to society:

We continue to develop social impact assessment techniques and use formal consultation processes for local social reporting and to support local external relations needs. At group level we maintain active dialogue with human rights and development organizations as well as with environmental non-governmental organizations (BP Amoco, 1999, p. 29).

The policy basis of the company's involvement was described:

After fundamental analysis of our approach to relationships with communities, we are moving from the philanthropic basis for corporate community contributions to a social investment model aligned with group strategy (BP Amoco, 1999, p. 29).

Marks and Spencer (1998) was among those that gave an example of the ways in which the company supported charitable causes:

Each day, Marks & Spencer distributes food products, which have passed their shelf expiry date but are still fine to eat. Since this scheme started 20 years ago, individual stores have formed partnerships with local organizations, which can make best use of these goods. Such a policy helps both by reducing waste and by supporting those in need (Marks and Spencer, 1998, p. 13).

The causes supported were described in general terms:

Our support is targeted at small, local initiatives in the fields of health and care, community development, environment and the arts; (Marks & Spencer, 1998, p. 28).

The same document contained disclosures entitled, "Helping the helpers" (supporting the Carers' National Association charity) and "Opening young eyes to art."

Other examples serve to illustrate further:

Boots continued to sponsor the Royal Philharmonic Orchestra in its Nottingham residency and to play an active and influential role in the orchestra's extensive community outreach programme. The company is among the UK leaders in recognising the needs of staff who are

carers – an estimated 11,000 are caring for elderly or sick relations. The Education Liaison Unit continues to work with the education sector on a wide range of activities relating to issues of concern to Boots. This work included projects on anti-racism ... and skin cancer (Boots, 1996, p. 25).

Most support was given in the area of Community Care, covering medical help and research, social welfare, the disabled and handicapped, the elderly, young children, the homeless and disadvantaged Education and youth charities were, together, the second highest beneficiary of charitable funds [after Macmillan Cancer Care] ... Support for the Arts also reflected the Company's interest in education and young people with donations to ... [examples given] (Bass, 1995, p. 35).

Several thousand organisations and programmes are supported annually. Education has always been a high priority and continues to account for the major portion.... Development projects... are another important area [examples given]... Further significant areas were support for culture, the arts, community activities and the development of the talents of young people... Assistance is also given to universities and other institutions to study some of today's national and international issues (Shell, 1992, p. 5).

Lower profile grouping disclosures were found to be similar in content to higher profile company disclosures.

ICI made a general statement in 1979 emphasising its support for youth education as it relates to understanding its business area:

Young people are a particularly important group for the future and ICI has continued to pursue the aim of improving their understanding of ... manufacturing industry [examples of initiatives then given] (ICI, 1979, p. 19).

As a highly internationalised company, ICI made reference to initiatives in its various countries of operation:

The year has seen a large number of imaginative schemes by ICI [subsidiary] companies to improve the welfare of local communities. In Malaysia, for example, ICI helps to fund nature camps for schoolchildren. ICI Australia, meanwhile, has been sponsoring local schoolteachers to take part in scientific expeditions. In the UK, ICI Pharmaceuticals joined Cheshire Constabulary in distributing 7,500 reflective armbands to protect children on the roads at night (ICI, 1991, p. 27).

BOC made reference to the importance of ensuring the safety of the communities around its sites:

All our operating sites regularly review and control all potential hazards to our neighbouring communities ... [examples given] (BOC, 1994, p. 37).

RMC described a prize established to sponsor university students:

In 1997, in memory of the late John Camden, the Group's former Chairman, the Group inaugurated the John Camden Memorial Prize. This is awarded to two post-graduate students, one from the UK and one from Germany, who undertake one year MSc courses in civil engineering at the University of Birmingham ... and at the University of Aachen in Germany (RMC, 1997, p. 23).

It can be seen from these illustrative extracts that community disclosures in annual reports include a wide range of social issues of general interest to society. There were no apparent differences in content type between the higher and lower profile

groupings. Other "social" disclosures such as those relating to employees and environmental issues may also communicate social intent, but to specific audiences. It is community disclosures, this paper contends, that represent the best indicator of a company's intention toward the "general public".

The narrative as reported above is potentially capable of meeting the information needs of several stakeholders. For current and potential shareholders, it may serve to convey the message that the company is deploying such expenditure prudently and, in so doing, is managing any reputation risk. To charities and community beneficiaries it may serve to stimulate solicitations, which the company can carefully sift to use in future years to illustrate its beneficence. To casual or general readers, prospective employees and others, it may convey a "warming" message that the company recognises its citizenship in society and intends to behave in a socially responsible manner.

Volumetric data

The raw data by word count is summarised statistically in Table I. Figure 1 shows the mean community disclosure for the whole sample by year. Figure 2 shows the mean and confidence interval by company.

	Retail		Brewing		Petrochemicals		Chemicals		Aggregates and mining	
	M&S	Boots	Bass	Whitb'd	BP	Shell	BOC	ICI	RMC	BCI
Mean words	382	177	322	243	321	242	162	149	79	30.6
Standard error	52	44	84	35	42.6	36	38.6	34	36.4	12.2
Median	338	36	166	216	338	276.5	104	53	0	0
Standard deviation	273	225	436	181	221	177	197	178	189	63
Range	834	606	1530	690	949	492	804	533	668	266
Minimum	0	0	0	0	0	0	0	0	0	0
Maximum	834	606	1530	690	949	492	804	533	668	266
Count	27	26	27	26	27	24	26	27	27	27
Sector means	286		288		277		154		55	

Table I. Community disclosure by company (words, all years)

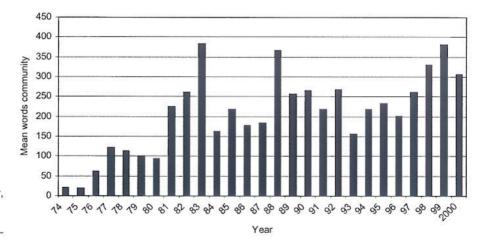


Figure 1. Mean word count by year, all companies in sample, community disclosure

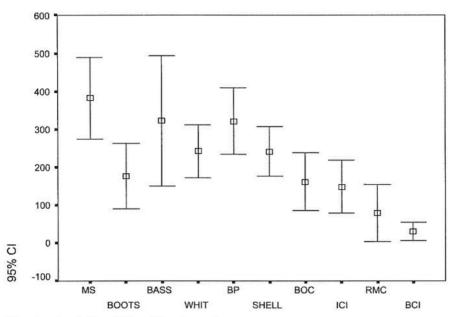


Figure 2.
Community disclosure
(words) by company,
mean of all years. Left
hand of graph is the higher
public profile companies.
Error bars indicate 95
percent confidence
intervals

Note: Error bars indicate 95% confidence intervals

Figure 1 shows that by mean volumes, community disclosure has been a feature of the sample's social disclosure for all of the 27 year history described. Overall (the longitudinal increase is "bumpy"), the mean volume by year has risen over time. Reasons for this are not immediately obvious although a number of issues have arguably grown in prominence since the mid 1970s including the notion of "corporate citizenship", social performance, "fair trade" and similar themes. The general lengthening of annual reports over the period of the study may also be a factor. In 1974, the mean length of the annual reports for the companies in the sample was 37 pages, remaining around that length until a steady increase began in the 1980s. By year 2000, the average report length was 90 pages. It seems that companies wish to disclose more information about many categories in addition to community disclosures, although only a small proportion of this increase will have been to accommodate voluntary disclosures. Mandatory reporting requirements have also risen over the period of the study.

The intensity with which business in general is scrutinised by society has also undoubtedly increased over the period of the study and the increase in community disclosure may be a response to the resulting general increase in demand for voluntary disclosure. However, the increase in disclosure volume, while being of general interest, is not, in itself, of material interest to this study.

Cross-sectional volume differences, which are of material interest to this study, became evident when the total historical community disclosures were averaged (i.e. a longitudinal mean was calculated for each company). Table I shows the mean of all years and descriptive statistics by company. The bottom line on Table I shows the word count sector means (derived from the mean word count per year of the two companies in each sector).

By means and totals, brewers and retailers showed very similar overall longitudinal mean volumes of community disclosure. Despite the possible supposition that retailing companies may have the highest public profile of the sectors in the sample, brewers, represented in this study by Bass and Whitbread, showed overall similarities to the retailers (mean = 286 words per annual report for retailers, 288 for brewers but note intra-sectoral differences in mean in Table I). Excepting this similarity, the other sectors followed a pattern approximately in line with the sectors' higher or lower public profile. Petrochemicals companies, over the 27 years, disclosed a mean of 277 words per annual report, chemical companies disclosed a mean of 154 words per annual report whilst aggregates companies disclosed the lowest community volume of all with a mean of only 55 words of community disclosure per annual report over the 27 year longitudinal period.

When the companies and sectors were divided into the binary "higher" and "lower" public profile groupings, statistically significant differences in mean were noted (the t-test findings are shown in Table II). Higher public profile sectors (comprising retailers, brewers and petrochemicals) were found to disclose significantly more volume than lower public profile sectors (comprising chemicals and aggregates).

The notional null hypothesis that there is no difference between samples assuming unequal means can be rejected with a very high confidence (P = 2.1E-10). In other words, companies that are higher profile are found to make higher volume community disclosures than those that are lower profile when all observations in the total longitudinal period are considered. Volumetric differences between the higher and lower public profile groupings are, therefore, observable[2].

Frequency data

The frequency-based analysis also showed disparities in reporting between the two groupings. In terms of reporting community disclosure at all (i.e. according to present/not present and ignoring volume), the six higher profile companies showed a higher proportional frequency of community reporting than the four lower profile companies (proportional meaning as a proportion of the total for each grouping – see Table III). The statistical significance of this separation was confirmed using a Mann-Whitney test (which, in contrast to a t-test, does not make any assumptions about the normality of the distribution of the data). The result showed that there was a statistically significant difference between the two groups such that those with the greater public profile disclosed community information more frequently at the 5 percent level (p = 0.011) than those with a lower profile.

Examining the data in more detail over the 27 years, the frequency analysis found that higher profile companies reported community information in 78 percent of their

Table II.
Stacked *t*-test (word count community disclosures by higher and lower profile grouping, all years)

	Higher	Lower		
Mean (words per year)	282.9	104.8		
Variance	74,845	29,513		
Observations	157	107		
t Stat	6.49			
$P(T \le t)$ one-tail	2.1E-10			
t Critical one-tail	1.65			

annual reports. In 1974 only one higher profile company reported community information but for most of the 1990s, all six companies contained some community disclosure. For the lower profile companies, the overall frequency was 43 percent. Again, the early years had a lower frequency but the low overall frequency is partly explained by the two aggregates companies that disclosed community information in only a small number of years (six out of 27 for RMC and seven for BCI). The highest frequency lower profile company had a lower frequency than the lowest frequency higher profile company — no overlap was observed. As a subject of reporting, therefore, community disclosure is more frequently found in the annual reports of higher public profile companies.

Conclusions

The hypothesis is supported by both the volumetric and frequency-based analyses. By volume, community disclosure, when a long time period is sampled, does respond by sector according to public profile. The frequency-based observations suggest that community disclosure is of higher priority as a reporting item in the annual reports of the higher profile companies whilst some lower profile companies chose very rarely to disclose any community information at all over the 27 year period of the study.

This study has thus demonstrated a cross sectional effect in community disclosure in response to public profile. In this regard, community disclosure has been shown to be responsive to the structural vulnerability of a company with regard to potential criticism or scrutiny by the general public. Patterns of disclosure are approximately in accord with the likely or potential demand for community information by or relating to the general public. This finding is consistent with patterns of reporting behaviour found in other categories of voluntary disclosure, where disclosure has been found to be associated with the information demands of a company's specific stakeholders.

The contribution of this paper has thus been to show that a hitherto less-analysed category of voluntary social disclosure (community disclosure) is cross-sectionally responsive to the structural vulnerability of companies to issues associated with "general" social concern. The higher public profile companies, having more reason to disclose community information because of their greater need to manage their social reputations, and because the general public in its various guises can collectively cause harm to those companies with which they directly interact, do make significantly higher volume and more frequent community disclosures. The lower public profile companies, having lower structural vulnerability and being less likely to suffer harm, disclose significantly lower volume community disclosures and at a lower frequency.

It should be noted that the observations made in this study are also supportive of a legitimacy-based understanding of the decision to disclose voluntary information in an

	M&S	Boots	Bass	Whit	BP	Shell	BOC	ICI	RMC	BCI
Years in which reports contained any community disclosure	26	18	19	23	24	17	17	15	6	7
Number of years accounts analysed	27	26	27	26	27	24	26	27	27	27
Percentage (frequency)	96.3	69.2	70.4	88.5	88.9	70.8	65.4	55.6	22.2	25.9

Table III. Frequency-based analysis annual report. Insofar that legitimating disclosures can be made in order to close or reduce the risk of the opening up of a legitimacy gap (Lindblom, 1994), community disclosures can be seen as a part of companies' management of the stakeholder pressures exerted upon them as a result of their particular structural exposures. This exposure, in turn, has been shown by this study to correspond approximately to companies' public profile. Those more likely to experience stakeholder claims and pressures from the "general public" (the higher profile companies in this sample) have been found to make higher volume and more frequent disclosures of information relevant to their claims, as legitimacy theory predicts.

Further areas of research are suggested by these findings. In addition to pointing to the potential value of examining community disclosure patterns in other contexts (e.g. in other sectors and other national situations), and in other media (e.g. internet studies), the findings in this study suggest there may be value in exploring the ways in which voluntary disclosure responds to other external structural variables.

Notes

- Despite this, some gaps remained in the record: Whitbread, 1974; Boots, 1974; BOC, 1978; Shell, 1979, 1982 and 1986. The missing years account for 2.2 percent of the total number of observations (i.e. six missing observations from a total of 270) and the omissions are therefore unlikely to influence the overall findings.
- As noted above, aggregated data over an extended period was used to even out short-term peaks and troughs. This method was further supported by the fact that an analysis of volumetric differences by grouping by year showed little by way of statistically significant difference.

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