Causes of variability in social disclosure in corporate reports

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Abstract

Legitimacy theory as an explicator of longitudinal and cross-sectional variability in social and environmental disclosure is explored using a content analysis based method. Annual corporate reports are examined for ten UK FTSE 100 companies in five sectors over the year 1974 to 2000 by extracting word count data into the three categories of employee welfare, community and environmental disclosure. Eight hypotheses are generated, some of which are adapted from previous studies, to 'test for' legitimacy theory. Three hypotheses test for intersectoral difference by disclosure category, three test for intrasectoral agreement by category and two test for correlation between environmental disclosure over time and environmental group membership in the UK.

The ability of the study to yield certainty of explanation upon demonstration of hypotheses is constrained by the epistemogically 'semi-hard' or 'indicative-only' quality of the data. Data analysis is carried out and conclusions are drawn within these constraints.

Evidence for a legitimacy-based explanation of disclosure variability is found where the categories are sufficiently resolved and circumscribed to discriminate by sector. In this study, community and environmental disclosure demonstrate this and thus provide evidence for a legitimacy-based explanation of social disclosure whilst employee welfare disclosure is found to be a less useful category for this purpose.

Contents

Acknowledgements

This PhD was something of an intellectual journey for me. It began in the autumn of 1996 with a seminal but 'chance' conversation with Geoff Moore. The nature of the theories and empirical study took shape over 1997 and into 1998 whilst the empirical study was undertaken during 1999, 2000 and into 2001.

I am genuinely indebted to my supervisors, Professor Geoff Moore and Philip Shrives. In both formal meetings and in informal chats, their patient guidance was always both sagacious and instructive. I also acknowledge the input of Professor Dr Claire Marston (now professor of accounting at Heriot-Watt University, Edinburgh) for her input in the earlier stages of the research.

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A note on time scale and resource support

This research was undertaken on a part-time basis and the time scale involved was just over 5 years. The initial idea, based on a suggestion made by Geoff Moore, was subsequently discussed with Professor Claire Marston and Philip Shrives. Registration for the degree of M.Phil (with PhD conversion) took place in January 1997. The basic objectives of the study and the hypotheses developed over the course of 1997. The RDC02 committee (to evaluate the viability of the proposal) was convened in late 1997 and was chaired by Dr Larry Wilkinson. The other members of the RDC02 board were Dr Ian Reekie and Paul Lee.

The MPhil to PhD conversion took place in January 2000, agreed by a panel chaired by Professor Les Johnson (then Head of the School of Accounting, Finance and Information Systems), also comprising Dr Barrie Craven (Reader in Public Accountability at Newcastle Business School).

The empirical content of the study was concluded at the end of 2000. Writing up took place during the summer and autumn of 2001. The thesis was submitted in March 2002.

This research was a 'desk-based' project. No resources were required for questionnaires, visits, interviews or other, similar, data collection initiatives.

Fees in support of the degree were kindly provided from the staff development budget at Newcastle Business School. The time needed to undertake the research and writing up of the research was partly provided by creative timetabling on the part of the (then) division leader, Paul Lee. In each of the five years of the study he was able to free up at least one day per week to enable the author to invest time in the study.

The corporate reports that were used for content analysis were obtained from three sources. The principal source was a managed archive of reports in the library of the University of Northumbria. Microfiches from Companies House were used for missing years in the hard copy record. For the years 1999 and 2000, content analysis was conducted using Adobe Acrobat .pdf files, downloaded from corporate web sites. The funds to purchase the microfiches from Companies House was kindly provided by the Information Services department at the University of Northumbria. A quality microfiche reader was lent to the author for the duration of the study. The University of Northumbria library also assisted in ordering the many inter-library loans that were solicited in support of the research.

Abbreviations used

SEA	Social and environmental accounting
LT	Legitimacy theory
CSR	Corporate social reporting
GAAP	Generally agreed accounting practice/principles
FCA	Full cost accounting
EMAS	Environmental Management Accounting System
ACCA	Association of Chartered Certified Accountants
MAST	Media agenda setting theory
EPA	Environmental Protection Act

1. Introduction

1.1 Context of study

One of the most prominent themes in business research over recent years has been a debate over the nature of the relationship between business, society and other economic and non-economic constituencies (see for example Mitchell, Agle & Wood, 1997). The modern conception of a 'stakeholder' was probably first recognised in the 1960s (see for example Ansoff, 1965) although as with other philosophical movements, the underpinning framework of thought is attributable to a disparate yet contiguous collection of antecedental themes.

The belief that hegemonic social or political institutions have some moral or contractual relationship with multiple constituencies predated the modern conception of stakeholder theory by many centuries. Legitimate claims on powerful institutions by affected groups is a central theme of classical social contract theory and preceding it, the neo-Platonic proto-democratic systems of governance in the classical Athenian period and in several other situations. The common thread linking these philosophical constructs is the belief that powerful institutions have an element of accountability concomitant with, and possibly inseparable from, the holding of power.

The major Enlightenment thinkers whose ruminations precipitated the modern conception of social contract theory conceived a redefinition of the relationship between government and the governed. The objective was to formulate a social contract that would facilitate freedom from molestation, active enfranchisement and participation of the governed in a legally-circumscribed government or system of governance. Changes in the distribution of power arising from the industrial revolution in the eighteenth century rendered part of the classical conception of social contract in need of revision. The rise of capital as a repository of power in society was ostensibly not foreseen by the Enlightenment architects of social contract theory and the fact that large business organisations, funded by private capital, had no formal accountability relationship to society, necessitated a reformulation of the social contract.

Stakeholder theory emerged as a coherent, if controversial theory in the 1960s and '70s (Mitchell, Agle & Wood, 1997). One of its central themes, that of recognition of multiple interested constituencies, derives from contractarian thinking and seeks to address the supposed democratic deficit resident within the Western capital model. In accepting and propounding an element of accountability from private capital to multiple constituences, adherents of stakeholder theory have explored mechanisms by which the accountability relationship can be expressed and discharged.

This debate has been reflected in several areas of business research. The strategy literature, for example, was one of the first to discuss a stakeholder framework in synthesising business objectives (see for example Freeman, 1984). In accounting research, an area in which studies in accountability are prominent by virtue of the nature of the discipline, the question of 'for what does accounting actually account?' and its variants was explored in research from the 1970s onwards.

It is because accounting reports are, by their nature, designed to account, that this became an area of some ferment, particularly among those writers who sought to increase and perhaps lobby for an increased level of accountability of business to those constituencies beyond shareholders and other financial stakeholders. That businesses might accept a responsibility to express this accountability using accounting instruments became a source of interest to researchers. Of particular relevance to this study is the expression of accountability using corporate disclosures on social issues – those that contain explicit content on the social and environmental behaviour and impact of a business.

Such disclosures are thought to be a *de facto* recognition, by businesses, of multiple (including non-economic) constituencies. Furthermore, social disclosures in accounting documents are only one of the accounting mechanisms by which accountability can be expressed. This is not to say that such disclosures are meaningful or that companies are anything other than profit-maximisers, but that it is possible to construct a case that the recognition of non-economic stakeholders has become a part of business reporting.

Accordingly, studies in corporate social and environmental reporting have studied both the practice itself and the nature of the business-society relationship that makes such disclosures necessary or desirable. The extent to which social disclosures represent actual benevolent intent towards social constituences or an acceptation of the stakeholder model is a different matter, however. The reasons for making social and environmental disclosures is a prominent feature of the literature and is a key theme in this study.

Social and environmental accounting has been defined in a number of ways. For example, it is, "…the process of communicating the social and environmental effects of organizations' economic actions to particular interest groups within society and to society at large. As such it involves extending the accountability of organizations (particularly companies), beyond the traditional role of providing a financial account to the owners of capital, in particular, shareholders. Such an extension is predicated upon the assumption that companies *do* have wider responsibilities than simply to make money for their shareholders." (Gray *et al.* 1987 :ix).

According to Mathews (1993), it is, "Voluntary disclosures of information, both qualitative and quantitative made by organizations to inform or influence a range of audiences. The quantitative disclosures may be in financial or non-financial terms." (Mathews, 1993: 64).

Social and environmental disclosure (sometimes referred to as corporate social reporting – CSR) is, therefore, disclosure concerning any aspect of a company's activities with regard to such issues as employees, communities and the environment, although some studies have defined CSR somewhat more widely (see for example Gray *et al.* 1995b; Adams, Hill & Roberts, 1998). Social disclosure has been captured in a range of accounting communications. Implicit in each study is the discussion that such disclosures are a partial description of the reporting organisation's responsiveness to social stakeholders. Higher levels of social disclosure are generally accepted to be a favourable sign that the reporting organisation seeks to address social stakeholders, even if only as a risk management initiative (as opposed to say, a meaningful attempt to engage social stakeholders in dialogue and discourse).

Mathews (1997) commented on the generous ways in which social and environmental accounting had been defined and the breadth of interests pursued and methods employed in the literature. He cited Mathews and Perera (1995):

"At the very least, social accounting means an extension of disclosure into non-traditional areas such as providing information about employees, products, community service and the prevention or reduction of pollution. However, the term "social accounting" is also used to describe a comprehensive form of accounting which takes into account externalities... Public sector organisations may also be evaluated in this way, although most writers on the subject of social accounting appear to be concerned with private sector organisations." (Mathews and Perera, 1995: 364).

1.2 A brief history of empirical SEA studies of LT

The earliest discussions in SEA appear to date from the early 1970s (Beams and Fertig, 1971; Churchman, 1971; Linowes, 1972; Mobley, 1970), although the stakeholder debate which partially gave rise to SEA probably began in earnest in the 1960s (as noted above, Ansoff used the term 'stakeholder theory' in 1965). Such early studies were, however, unsophisticated (mainly) empirical studies. Categorisations of types of social and environmental information were rarely made (excepting, for example, Dierkes and Preston, 1977; Ullman, 1976, Ernst & Ernst, 1972-78) and indeed, environmental disclosure was not a major feature of disclosures at this time. The majority of the journals that later became the main vehicles for SEA discussion did not exist in the 1970s.

Puxty (1986) curiously described social accounting as a 'child of the 1970s', although in context, he may have been describing its empirical origins. He contended that the 1960s and 1970s witnessed "increased unrest compared with the 1950s and previously... Criticism of established institutions and norms developed. These more general social changes were reflected in business and accounting: the changed perception of the environment led to overt criticism in these areas too." (Puxty, 1986: 102).

Empirical methods in the 1970s were unrefined and crude. Ernst & Ernst's (1972-1978) surveys of social disclosure initially employed a yes/no binary system of data recording for several SEA categories although this was refined towards the end of their analyses. The theoretical enquiries were several, although showed no pattern or hint that there might be any convergence of ideas in SEA. Bowman and Haire (1975) looked for a relationship between social disclosures and increased income to the corporation. Grojer and Stark (1977) analysed disclosures aimed at several constituencies but were particularly concerned with employee disclosures. Abbott and Monsen (1979), in a study superficially similar to Bowman & Haire's, sought to compare social disclosure (particularly concerned with social performance) to shareholder returns – another social/financial investigation. In his review of previous SEA studies, Mathews (1997) pointed to a number of other studies which he considered noteworthy: Trotman (1979), which, "showed an increased incidence of social disclosures by the largest corporations listed on the Sydney Stock Exchange. Disclosures were analysed by categories and quantified." (Mathews, 1997: 485); Anderson (1980) surveyed Australian accountants and found support for an increased use of social disclosures in corporate communications; Belkaoui (1980), in seeking to understand the effects of social disclosures on user groups, tested to see whether users reacted differently when provided with explicit disclosures of social information.

Mathews (1997) suggested that empirical studies in the 1980s showed, "increasing signs of specialization. For example, employee reports and value-added statements attracted a separate group of adherents in the early 1980s (Burchell *et al.*, 1985)." (Mathews, 1997: 490). He described how studies "paid greater attention to methodology in order to reduce subjectivity and increase the replicability of content analysis and, in many cases, have attempted some explanation of the source, direction and type of disclosures (Arlow and Gannon,1982; Belkaoui and Karpik, 1989; Brooks, 1986; Freedman and Jaggi, 1982, 1988; Guthrie and Mathews, 1985; Guthrie and Parker, 1989b; Mahapatra, 1984; Rockness, 1985; Shane and Spicer, 1983;

Trotman and Bradley, 1981; Ullman, 1985, for example)." (ibid. p. 491) Wiseman (1982) was another study of note from this period.

Theory-building was not a prominent feature of these early CSR studies. A phenomenon had been observed (voluntary social disclosure) and studies initially sought to examine trends, patterns and how these might be associated with other variables. Trotman & Bradley (1981), for example, noted that "a convenient starting point in theory building is the observation and description of the real world and the noting of correlations between variables of interest." (Trotman & Bradley, 1981: 355).

The earliest empirical discussions of legitimacy theory as a possible explicator for social and environmental disclosure date from the 1980s. Hogner (1982) examined influences upon US Steel's social disclosure and Guthrie & Parker (1989) conducted a review of Broken Hill Proprietary Ltd's social disclosure and possible external influences on it. Both studies employed crude methods compared to those developed in the 1990s. In parallel with these developments, some discursive and polemical books and papers broadened the agenda and enriched the intellectual climate in which SEA studies took place. Donaldson (1982) and Tinker (1985) were both persuasive and polemic treatises on the nature of the corporate-society relationship. Donaldson developed the notion of social contract theory and applied it to the business-society interface whilst Tinker ('Paper prophets') challenged the accounting orthodoxy from the critical Left.

Mathews (1997) suggested that the 1990s, "saw the advancement of environmental issues within accounting on a broad front" (ibid. p. 496). Certainly, the natural environment became a prominent theme in SEA during the decade. In legitimacy theory studies, the most prominent empirical studies were principally concerned exclusively with environmental disclosure (i.e. not with other categories of 'social' disclosure – see for example Patten, 1992; Deegan & Rankin, 1996; Deegan & Gordon, 1996; Brown & Deegan, 1998 and others). Other studies also made reference to LT from non-environment studies (Adams, Coutts & Harte, 1995, for example, whilst discussing equal opportunities disclosures).

The most cited LT studies are those from the 1990s. In addition to the contributions of Deegan, Adams, Hill & Roberts (1998), Tilt (1994), Wilmhurst & Frost (2000) and some others also made progress, both in method and in the expatiation of the usefulness of LT as an explicator of variability of CSR.

1.3 Plan of thesis

This study seeks to explore, drawing heavily on the social contractarian understanding of the business-society interface, an organisational legitimacy explanation for social disclosure in general and variability in the volume of the same in particular. Accordingly, the rest of this thesis is set out as follows.

The three theory/literature chapters (Chapters 2, 3 and 4) seek to underpin the research question. Chapter 2 seeks to explain the development of social contract theory and show the ways in which this may have influenced the current understanding of the stakeholder metanarrative. The historical review is necessarily selective but provides sufficient detail to demonstrate the contiguity of the key themes of reciprocal recognition and accountability. The various definitions of a stakeholder are introduced and the common ways by which stakeholders are categorised and analysed are discussed. The various positions that have been adopted with regard to stakeholder recognition are reviewed and these also describe the various perspectives towards business accountability.

Chapter 3 discusses the nature of accountability relationships and reviews some of the mechanisms that have been discussed (and in some cases, practised) to increase the accountability of businesses to society. Voluntary disclosure, the central theme of this study, is one such mechanism and is introduced in this context. The chapter proceeds to briefly review the theories that have been discussed to explain the phenomenon in general and variability in particular. Legitimacy theory, the main theory discussed in this thesis is introduced.

Chapter 4 provides a detailed discussion of legitimacy theory in two parts. A disparate literature is reviewed in order to define legitimacy and how it applies to organisations, legitimacy as a derivative of social contract theory, legitimacy gaps and how legitimacy might be expressed when 'seen' as voluntary social and environmental disclosure. The chapter then proceeds to review the methods that have been previously adopted for exploring and 'testing for' legitimacy theory in empirical studies. Some of the key previous studies are described in some detail, paying particular attention to how they approached the empirical and methodological challenges that LT presents. The chapter summary reviews the ways in which proxies for social concern have been employed.

Chapter 5 discusses methodology and introduces the hypotheses that comprise the central theme of the thesis. In the methodology section, the various epistemological perspectives are briefly reviewed. The case for a positivist approach based on the success of previous studies is presented. Hypotheses intended to provide a novel method for examining legitimacy theory are introduced and another, based on one developed by Deegan & Gordon (1996), is amended for this study.

Chapter 6 is the method chapter. A detailed discussion is undertaken of sample selection, content analysis, data collection and analysis. Some of these themes are matters of some contention in the SEA literature and a lengthy discussion is undertaken in order to present the controversies and defend the methods adopted in this study.

Chapter 7 provides a summary of the results of the empirical analysis. They are presented in order of the hypotheses and the summary findings are shown. Graphs are used and some summary statistics are included to demonstrate correlation and other statistical associations.

Chapter 8 provides a discussion of the results. The hypotheses are considered in turn, discussion is provided and tentative conclusions are drawn. Limited support for legitimacy theory as an explicator of variability in social disclosure is found. Where the nature of social concern can be more easily understood and circumscribed, companies can make explicit disclosures in response. Where concern is more amorphous, there is less evidence in support of a legitimacy-based explanation. Hence, the study is able to show that with regard to community and environmental disclosure, some support for a legitimacy-based explanation is found but the case is less convincing for employee disclosure.

Chapter 9 is a brief review of findings in summary form. It also reviews the method employed and suggests some areas in which it could have been improved to provide a more meaningful analysis. A formal statement is made on how the research objectives set out at the end of this chapter have been met.

1.4 Originality

This study draws heavily upon previous research into social and environmental accounting in general and legitimacy theory studies in particular. Previous methods of analysis are reviewed and, to some extent, borrowed from. There is, therefore, a possible grey area between the legitimate use of previous studies and the development of novel methods. This potential problem, however, is not unique to this study – very few make leaps in method involving the development of completely new principles, theory or methodology.

The main hypotheses seek to explore legitimacy as an explanation of CSR without explicit reference to external events that might have precipitated changes in reporting practice. Inter and intra-industry longitudinal analyses are used to examine patterns of similarity and difference that might shed light on LT. This is, to the author's knowledge, an original approach to the examination of LT. The one part of the analysis in which external measures of societal opinion are introduced borrows heavily from the method employed by Deegan & Gordon (1996). This is effectively an enriching exercise and is intended to add comment to the other hypotheses on environmental disclosure only.

The sample is original both in its cross-sectional and longitudinal detail. There are few longitudinal studies in CSR (with some exceptions, see for example Hogner, 1982; Guthrie & Parker, 1989; Unerman, 2000). This study examines a longitudinal period from 1974 to 2000 – a period of 26 years covering a number of social changes that might have influenced a change in social and environmental reporting practice. Cross-sectional sample was less wide than in some previous studies, but a trade-off was required between cross-sectional width and longitudinal depth. It was decided to privilege longitudinality (see Chapter 6 on method for explanation) and so ten companies were selected from the FTSE 100, grouped into five sectors. The sectors were selected for their ability to be sorted by both proximity to end user and environmental sensitivity (these being necessary for certain hypotheses – see Chapter 5). The actual sample of companies analysed in this research was original, as was the time period over which they were analysed.

In summary then, the study aimed to offer originality with regard to the method for exploring legitimacy theory. The use of intra and intersectoral differences and similarities, the use of sector 'ranking' as proxy and the uses of some statistical tests make this contribution to method possible. The particular longitudinal and cross sectional sample was also unique.

1.5 Research objectives

The objectives of this research were fivefold.

1. To formulate a set of hypotheses capable of testing legitimacy theory as an explicator of variability in CSR without the need to rely on a metric of societal opinion for the validity of the test. The hypotheses, testing for agreement within sectors and differences between sectors, seek to provide insight into LT by analysis of volume data, measured by word count.
2. To provide enrichment to the above hypotheses by applying an amendment to hypotheses developed by Deegan & Gordon (1996). This part of the study is not intended to be central, but to provide additional evidence for LT for environmental disclosure only.

3. To analyse the content analysis-derived data in a manner consistent with the quality of the data.
4. To provide comment on the hypotheses, draw conclusions as appropriate, concede limitations and suggest ideas for improvement in methods used to 'test for' legitimacy theory.
5. To use the outcomes of the research to suggest, as appropriate, refinements or amendments to empirical approaches for exploring and testing legitimacy theory in social and environmental accounting studies.

2. The development of social contract theory and the stakeholder metanarrative

2.1 Introduction

At the intellectual centre of social and environmental accounting is the research into, and debate over, stakeholder theory. This is because voluntary disclosure in addition to that targeted primarily at shareholders must have other intended audiences. The content of such voluntary disclosure suggests that some of these audiences may not have a direct economic relationship with the reporting entity.

The attitude that reporting companies have towards their (particularly non-economic) stakeholders is one of the key themes in social accounting research. The 'family' of explanatory theories that have been advanced to explain variations in social disclosure (see Chapter 3) are partly distinguished from each other according to the view taken of a company's responsibility to, and hence obligation to report to, constituencies in addition to those that have a financial stake in the company. At its simplest, stakeholder theory cannot be ignored - it can be rejected or it can be accepted as a description of the 'truth' of the relationship between an organisation and its constituencies, but to avoid it is to avoid one of the central themes in business teaching and research over recent years.

2.2 Development of the stakeholder perspective

Historical perspective

Any review of the historical development of a theory as eclectic as stakeholder theory is destined to be selective and possibly partial. The fact that stakeholder theory is also controversial and multifaceted makes this danger even more real. The belief that social contract theory is a progenitor of stakeholder theory, is, however, relatively uncontroversial (Donaldson & Dunfee, 1994). With this qualification in mind, therefore, this section traces some of the philosophical themes that were the antecedents to the modern constructs in stakeholder theory.

The conception of a hegemonic power as an entity subject to the legitimate claims of multiple constituencies was initially articulated by the Enlightenment thinkers who, in the first instance, sought to describe the relationship between government and the governed (see for example Hobbes, 1660; Locke, 1690; Rousseau, 1762). This need not be a surprise because at that time, governments were the main source of legitimate power in society (albeit with the feudal lords that enjoyed local power under the sanction of the state and, at various times prior to the Reformation, the church). The notion of social contract was evident in the governance of the proto-democratic Spartan and Athenian city states during the Platonic period, in Roman times and in some other situations.

In the English middle ages, the ascendancy of the sovereign monarch as an (ostensibly) arbitrary dispenser of law and justice precipitated the construction of the 'Articles of the Barons' in 1215 - the forerunner of the Magna Carta (also 1215). The feudal barons, meeting at Runnymede, offered the Articles to King John who, despite his supposed arrogance in other areas of his governance, accepted the Charter. The framework of the document was subsequently developed into the Magna Carta.

The Articles of the Barons began, "These are the articles that the barons asked for and the Lord King [John] grants..." The content of the Articles reflected feudal law and custom of the time and is largely irrelevant in the context of this study. The seminal influence of this document, however, lies in its formulation of the relationship between the monarch and his or her vassals. At the conclusion of the Articles, the final Article (49) stated, "This is the form of security for the observance of the peace and the liberties between the king and the kingdom." (Lee, 1997: 87).

It is this clause that provided the underpinning doctrine for the Magna Carta and with it, the recognition of a reciprocal responsibility from and to the ruler and the ruled.

The aspirations of the understanding between ruler and ruled was, however, limited to mutual recognition and the accordance of minimal legal rights. It was not until the 17th century that the conception of a social contract was formally proposed

Thomas Hobbes (1588-1679)

Hobbes is generally recognised as the earliest thinker to explicitly articulate the philosophic notion of a *de facto* social contract which, prescriptively, *should* subsist between powerful social institutions and their publics. The social and political environment in which Hobbes lived was probably salient to the content of his writings, *to wit*, his being contemporaneous with the events leading up to and climaxing in the English civil war (1642-45) in which the doctrine of the Divine Right of Kings was successfully challenged, both intellectually and militarily, by the Cromwellian parliamentary forces and their supporters. In a period in which social, economic and political disorder was in evidence, it is perhaps not surprising that Hobbes' primary motivation was to synthesize and advance a formulation that would provide a relationship between state and people that would engender and provide for the rule of law, with the implicit and willing acceptation of the people to the end that they (the people) should have legal sanction and recourse in the event of molestation or offence.

The moral presupposition underlying Hobbes' writings is a view of man derived from the traditional Judeo-Christian doctrine of original sin (which had been recodified in his recent political past by writers subsequent to the European Protestant Reformation of the sixteenth century and then during Hobbes lifetime in the *Westminster Confession of Faith* in 1646). According to Hobbes, the life of man in the state of nature (i.e. in the absence of salvation, however defined) *'is solitary, poor, nasty, brutish and short.'* Accordingly, Hobbes advanced the concept of a social contract in order, explicitly, to obviate the inevitable consequences and outworking of the effects of original sin (i.e. anarchy and social atrophy).

The order of society which Hobbes proposed is one in which the people *willingly* subordinate their own freedoms to the state in direct exchange for a range of social benefits, pre-eminent among which is, as has already been stated, legal protection from (as Hobbes saw it) the inevitable effects of original sin. Hobbes suggested that, *'The end of obedience* [to the state] *is protection.'*

A key component of Hobbes' thinking is a presupposition that the people's submission to the state is undertaken with a certain degree of reluctance or apprehension insofar as the social contract necessarily involves the foregoing of some personal freedoms (i.e. the social contract involves reciprocal responsibilities). Hobbes argued that *'The passions that incline men to peace are fear of death; desire of such things as are necessary to commodious living; and a hope by their industry to obtain them*'. Hence, the bases of his social contract are *'convenient articles of peace, upon which men may be drawn to agreement.'* The implicit assumption in Hobbes' thinking is consequently that the social contract is not a natural instinct of man but rather a mechanism by which peace (i.e. freedom from aggression) can be facilitated, notwithstanding man's natural inclinations to freedom.

The condensed essence of Hobbes' conception of the social contract is expressed in Part II of his seminal work, *Leviathan*, 'Of Commonwealth'. (Hobbes, 1660) In this section of the work, he contends that the social contract is a covenant *'of every man with every man, in such manner that every man should say to every man, I authorize and give up my right of governing myself, to this man, or to this assembly of men,* [i.e. the ruling hegemony] *on this condition, and thou give up thy right to him and authorize all his actions in like manne*r'.

Interestingly, though not surprisingly, given the socio-political environment of his time, Hobbes does not explicitly recognise the concept of democratic accountability of the state to the people. Hobbes was apparently willing to acquiesce to the Platonic construct of the sovereign monarchy of 'philosopher-kings' *if* this hegemonic arrangement was, in practice, capable of delivering the requisite social and legal benefits to the populace. However, in the intellectual environment in which the doctrine of the Divine Right of Kings had been challenged upon the defeat of Charles I (in 1645), Hobbes conceded that obedience to the king (or whatever other alternative hegemony) is, in practice, *conditional* upon the sovereign actually delivering the benefits for which the people have willingly subordinated their own personal freedoms. Accordingly, as Hamlyn (1987) observed, 'The obligation to obey the sovereign is a conditional one, and is not an absolute.' The implicit assumption is thus that the social contract can be rendered null and void if the sovereign reneges on his obligation to enforce the rule of law. Order in society, according to Hobbes, relied upon a framework in which mutual responsibilities are recognised and acted upon.

John Locke (1632-1704)

Like Hobbes, Locke's contribution was informed by both his personal background and his political times. Notably perhaps, Locke was the son of a supporter of the Parliamentary side in the English civil war. Locke became somewhat disillusioned with an aristocratic model of monarchic sovereign rulership, although it is likely that he espoused the Hobbesian notion of the social contract *per se*. Locke's most significant contribution to this theme was his introduction of the concept of popular support and acceptation of the policies with which the state governed. It is because of this emphasis that Locke has been closely associated with the intellectual formulation of the modern understanding of democratic theory and with it, a belief that powerful institutions have, by necessity, an obligation to enfranchise a range of constituencies.

In his *Second Treatise on Civil Government* (1690), Locke ruminated on the natural state of man bereft of order in a civil society. Like Hobbes, Locke espoused the view that an effective social contract was necessary if the true nature of man was not to become evident with its concomitant effect of social atrophy. However, whereas Hobbes' primary motive in proposing the social contract was to prevent personal molestation by the effective rule of law, Locke extended the ambitions of the contract in order to not only facilitate Hobbes' objectives, but also to, by the social contract, provide the environment in which 'life, health, liberty and possessions' may be safeguarded.

Hence, by the appointment of a ruling body by popular mandate, i.e. (in Locke's words) 'to submit to the determination of the majority,' it followed that the state was mandated only to carry out those policies that met with general societal approval and which, in addition to preserving peace, also facilitated the enjoyment of private property. This construction necessitated the formulation of an effective code of rights to which every citizen was naturally entitled to benefit from and it was this part of Locke's contribution that was instrumental in the development of the American Bill of

Rights in the late eighteenth century - perhaps the most perspicuous and explicit statement of social contract of the era.

The contractarian component of Locke's writing is succinctly summarised by Popkin, *et al.* (1983). 'Ultimately, the source of authority lies with the people who appoint the government. It [the government] is merely a means for carrying out their [the people's] will' (Popkin *at al.*, 1983).

With this belief enshrined in Western political and social culture, the contribution of Locke can be seen for the significance that it had. The idea that Hobbes had advanced with very limited objectives during the English civil war, had been developed by Locke and espoused by post-Enlightenment democratic political leaders to the point that it had become the axiomatic doctrine of a new socio-political paradigm.

Jean-Jacques Rousseau (1712-1778)

Rousseau, writing after both Hobbes and Locke, made a noteworthy if somewhat-debatable contribution to the thought on social contracts. His discussion on this matter is principally contained within his work *The Social Contract* (1762). Being contemporaneous with the Romantic philosophical and literary intellectuals like Coleridge, Herder and Shelley, it is perhaps not surprising that Rousseau's approach is informed by this movement. His enigmatic contention that 'man is born free but is everywhere in chains' is evidence of the indirect approach to his writing.

Evidence of Rousseau's attachment to the Romantic movement's emphases is provided by his view of the nature of man. In contrast to Hobbes and Locke (who subscribed to the Judeo-Christian doctrine of original sin) Rousseau presupposed that men were naturally good and were, by nature, social beings. However, in a polemic which is not immediately obvious, he goes on to contend that despite this moral predisposition, the institutions of government are a necessary prerequisite if oppression and slavery are to be avoided in the socio-political system.

Rousseau's principal formulation was to draw attention to the ostensibly paradoxical notion of the *absolute* submission of individual freedom to the state in order that, in return, individuals will, as a consequence of such a submission, enjoy a greater degree of freedom than that which they have hitherto foregone. In order for Rousseau's beneficent objectives to be sustained, he argued that the state should be a 'personification' of the '*general will*' of the people. Hamlyn (1987) said of Rousseau's general will, *'the ascription of a general will to a sovereign people involves the personification of the sovereign and the state ...'* (ibid. p. 213) and that *'the aim of political institutions is to achieve the common good'* (ibid. p. 214). Hence, Rousseau's *general will* obligates the state to govern only in such a way that will engender an optimal level of individual freedom for its peoples. Any compromise of this obligation would presumably be a *de facto* challenge to the social contract between people and state. Rousseau's formulation of the notion of *absolute submission* introduces the explicit and (in Rousseau's view) inalienable fiduciary responsibilities and duties on the part of the social institutions to which the constituents have absolutely submitted. The agent that is government, which exists only by the willing submission of the constituents, forfeits its legitimacy and hence its right to exist if it fails in its fiduciary responsibilities to its constituents which are, in material ways, its principals.

Although democratic enfranchisement was prenatal at the time of Rousseau's writing (the French Revolution being in 1789, for example), the format of universal adult franchise is undoubtedly one which Rousseau would have identified as being consistent with, and capable of delivering, the political expression of his general will. It is for this reason that Hamlyn (1987: 214) has referred to Rousseau as an 'extreme democrat' even although democracy in its current formulation was still some 150 years in advance of Rousseau.

Immanuel Kant (1724-1804)

As one of the last of the Enlightenment thinkers in this area, Kant was able to draw upon a literature of previous thinking in the formulation of his own moral philosophy. Kant's most significant work as it relates to the issues relevant to this inquiry are contained in his *Metaphysics of ethics* (1797) and in *Fundamental principles of the metaphysic of morals* (an essay, 1785).

In the context of a broad discussion about reason, Kant proposed two types of action distinguished from each other by the motive of the actor. Both courses of action are, he argued, intrinsically reasonable, although they need not be morally equivalent or valid.

1. The *hypothetical imperative* describes a course of action which is judged to be right because the outcome of the course of action is deemed to be favourable. Later commentators on this referred to the hypothetical imperative as consequentialist or teleological behaviour.
2. The *categorical imperative*, on the other hand, is a course of action undertaken because the action itself is judged to be right, regardless of the outcome. This not only avoids subjective judgments on the rightness of outcomes but also provides an ethical construct that can benefit society if universally applied.

Referring to the generalisability of ethical decisions, Kant argued that the categorical imperative is the only perspective that can be safely applied. In the *Metaphysics of ethics*, Kant commented, "Act as if the maxim of your action were to become through your will a general natural law" by which he meant that an action is right if society would benefit if everybody acted in such a way.

Kant's philosophy relied heavily on a view of man as a being intrinsically worthy of rights and duties. The deontological perspective resident within the categorical imperative construction provides for a form of behaviour towards others that is generally beneficent, because only beneficent behaviour, if generalised, would be to the net benefit of society. It was this logical extrapolation of the categorical imperative that led to Kant's prescription in the *Fundamental principles of the metaphysic of morals* (1785).

"Accordingly the practical imperative will be as follows: So act as to treat humanity, whether in thine own person or in that of any other, in every case as an end withal, never as means only. "

Although Kant rehearsed many arguments in addition to the above, it is generally this prescription that later became the kernel of what was termed *Kantianism* - a belief that man has a moral and civic duty to treat others in a manner consistent with a predefined ethical construction and which, if the action was generalised, would not result in the atrophy of social order.

In modern times, Kant's thinking was adapted by stakeholder theorists who sought to suggest that organisations have a moral duty to consider stakeholder claims upon objectives because to ignore such claims, if generalised, would result in continued and exacerbated social inequalities.

John Rawls (1921-)

Rawls' 1971 book, *'A theory of justice'* is amongst the most cited references in the stakeholder literature. The frequency of citation gives an indication of Rawls' influence over the development of stakeholder theory. Rawls' writing was not directly about business and it is unlikely that he foresaw the impact his work would have on the discussion about the interface between business and society. His discussion on justice as fairness, however, became an influential construction in stakeholder theory.

Rawls, writing in the light of a substantial shift of power in society away from government (the object of the social contract as formulated by the Enlightenment thinkers) and towards private capital, attempted to address the question of fairness. That wealth and power asymmetries existed in society was self-evident, but whereas classical social contract theory would have held government solely responsible for redress, the problem of disenfranchisement arose because of the (democratic) unaccountability of capital. It was clearly possible for some sectors of society (however defined) to be subjugated by the interests of capital without any formal mechanism of accountability to the subjugated.

It was a matter of 'natural lottery', according to Rawls, that some sections of society were endowed with greater talents and opportunities than others. Hence, the conventional understanding of meritocracy was structurally unfair as merit is not equally distributed. In his 'difference principle', Rawls argued that social and economic inequalities are acceptable only in so far as they benefit the least advantaged. Because it is wrong that benefit should be determined by class or educational opportunities, it is equally unjust that position should be determined by abilities and talents. Hence, the fact that some social constituences (e.g. large business corporations) are powerful, even if such power was gained by hard work, thrift and honesty, does not afford them the right (if society is to be fair) to use their largesse to disadvantage or deprive other, weaker constituencies. In the natural lottery, Rawls argued, talent, wealth and opportunity are unfairly distributed and fairness is only observed when those advantaged by the lottery accede to the demands to benefit the disadvantaged.

It is not surprising that this part of Rawls' thinking has been used as the basis of an argument for equality of income. This, however, was not part of Rawls's theory. Instead, he was prepared to 'allow' inequalities that benefited the worst off. Inequalities based on the difference principle would not be felt by the less well-off as unmerited or degrading.

This construct, one of the pre-eminent credos of left-wing liberalism, has been widely adopted by those who later came to advance to notion of stakeholder theory (see later in this chapter). It is evident that inequalities in society exist between capital and its disenfranchised (and disadvantaged) constituencies. Whilst these may not be desirable, they may be tolerated on the proviso that businesses exercise their power in such a way as to benefit the disadvantaged. Hence, stakeholder theory derived from Rawls's difference principle, insists on a fiduciary duty from the relatively powerful to the relatively powerless.

Whilst this position is open to challenge on a number of levels, it is not within the remit of this thesis to introduce such objections. The purpose of this review is to explore the development of stakeholder theory, not to critically evaluate each contributors' philosophy.

Summary of social contract theory

In an attempt to summarise the foregoing discussion, it is possible to formulate six propositions.

1. Wealth and power in society are not equally distributed.
2. This is not fair.

3. The less wealthy and powerful are capable of harming the more wealthy and powerful thus contributing to social disorder.
4. Social order is preferable to social disorder.
5. The recognition and enfranchisement of the less wealthy and powerful can reduce disquiet and contribute to social cohesion.
6. Democratic suffrage is one way to enfranchise and recognise the less powerful.

It is the sixth of these propositions that creates problems for social structures in which democratic enfranchisement is deemed inappropriate. In modern capitalism, for example, several less wealthy and powerful constituencies can be identified that are not enfranchised by the structures and protocols of corporate governance. Accordingly, the democratic process is incapable of underpinning a social contract between capital and some constituencies (such as employees, local communities, etc).

It is thus necessary to explore other mechanisms or social constructs that provide for a description of the nature of the business and society interface. Insofar that democratic enfranchisement is deemed inappropriate, how is the social contract to be delineated? This leads to the description of stakeholder theory in which multiple constituencies are recognised. Whilst not all constituencies are equal with regard to the fiduciary obligations of a business, stakeholder theory provides a framework for discussion on extending business accountability beyond capital holding constituencies.

2.3 Stakeholder definitions and typologies

Introduction and definitions

The recognition of social contractarianism as the antecedent of stakeholder theory is implicit in many discursive papers (e.g. Suchman, 1995) but is explicitly discussed by Preston & Post (1975) in their 'interpenetrating systems' model and by Donaldson & Dunfee (1994) in their formulation of 'integrative social contracts theory'. The social accounting literature which underpins this thesis in large part, has also employed social contract theory, usually when describing the sources of legitimacy theory (see for example, Shocker & Sethi, 1974; Guthrie & Parker, 1989; Lindblom, 1994; Tilt, 1994; Deegan & Rankin, 1997; Brown & Deegan, 1998; Deegan, Rankin & Voght, 2000).

Any recognition of a contract, expressed or implied, is not without some controversy, however. Whereas medieval England prior to 1215 did not acknowledge any such contract, so today the extent to which stakeholders should be recognised and accorded 'rights' is the subject of some disagreement. It is not the author's intention to divert into a detailed discussion of what has in some quarters been termed the stakeholder/stockholder debate, but to recognise that a plurality of positions can be coherently defended.

Within the stakeholder perspective, furthermore, the search for a workable definition of a stakeholder has been a theme in the literature since the 1960s. Mitchell, Agle & Wood (1997), in their review article, listed a 1963 reference as the earliest attempt to define a stakeholder (that being Stanford memo, 1963) although Roberts (1992: 597) suggested that Ansoff (1965) was the first to employ the term 'stakeholder theory' in a discussion referring to corporate objectives.

Table 2.1 (adapted from Mitchell, *et al.* 1997) demonstrates some of the more prominent contributions to the question, "What (or who) is a stakeholder?"

Who is a stakeholder? A chronology

Source	Stake
Stanford memo, 1963	"those groups without whose support the organization would cease to exist" (cited in Freeman & Reed, 1983, and Freeman, 1984)
Rhenman, 1964	"are depending on the firm in order to achieve their personal goals and on whom the firm is depending for its existence" (cited in Nasi, 1995)
Ahlstedt & Jahnukainen, 1971	"driven by their own interests and goals are participants in a firm, and thus depending on it and whom for its sake the firm is depending" (cited in Nasi, 1995)
Freeman & Reed, 1983: 91	Wide: "can affect the achievement of an organization's

	objectives or who is affected by the achievement of an organization's objectives" Narrow: "on which the organization is dependent for its continued survival"
Freeman, 1984: 46	"can affect or is affected by the achievement of the organization's objectives"
Freeman & Gilbert, 1987: 397	"can affect or is affected by a business"
Cornell & Shapiro, 1987: 5	"claimants" who have "contracts"
Evan & Freeman, 1988: 75-76	"have a stake in or claim on the firm"
Evan & Freeman, 1988: 79	"benefit from or are harmed by, and whose rights are violated or respected by, corporate actions"
Bowie, 1988: 112	"without whose support the organization would cease to exist"
Alkhafaji, 1989: 36	"groups to whom the corporation is responsible"
Carroll, 1989: 57	"asserts to have one or more of these kinds of stakes" - "ranging from an interest to a right (legal or moral) to ownership or legal title to the company's assets or property"
Freeman & Evan, 1990	contract holders
Thompson *et al.*, 1991: 209	in "relationship with an organization"
Savage *et al.*, 1991: 61	"have an interest in the actions of an organization and . . . the ability to influence it"
Hill & Jones, 1992: 133	"constituents who have a legitimate claim on the firm . . . established through the existence of an exchange relationship" who supply "the firm with critical resources (contributions) and in exchange each expects its interests to be satisfied (by inducements)"
Brenner, 1993: 205	"having some legitimate, non-trivial relationship with an organization [such as] exchange transactions, action impacts, and moral responsibilities"
Carroll, 1993: 60	"asserts to have one or more of the kinds of stakes in

	business" - may be affected or affect . . .
Freeman, 1994: 415	participants in "the human process of joint value creation"
Wicks *et al.*, 1994: 483	"interact with and give meaning and definition to the corporation"
Langtry, 1994: 433	the firm is significantly responsible for their well-being, or they held a moral or legal claim on the firm
Starik, 1994: 90	"can and are making their actual stakes known" - "are or might be influenced by, or are or potentially are influencers of, some organization"
Clarkson, 1994: 5	"hear some form of risk as a result of having invested some form of capital, human or financial, something of value, in a firm" or "are placed at risk as a result of a firm's activities"
Clarkson, 1995: 106	"have, or claim, ownership, rights, or interests in a corporation and its activities"
Nasi, 1995: 19	"interact with the firm and thus make its operation possible"
Brenner, 1995: 76	"are or which could impact or be impacted by the firm/organization"
Donaldson & Preston, 1995: 85	"persons or groups with legitimate interests in procedural and/or substantive aspects of corporate activity"

Table 2. 1: Source: Mitchell, *et al.* 1997.

Typologies

The management literature was quick to recognise that any stakeholder model in which immediacy or relevance to the organisation was not recognised would result in a model in which all stakeholders would be accorded equal weight, and hence, equal influence over strategy. Even if an organisation were to accept some element of accountability to its non-economic stakeholders, the idea that it is (or should be) equally accountable to all, is not one that has been prominent in the literature.

Freeman's (1984) definition of a stakeholder, as one who, "can affect or is affected by the achievement of the organization's (*sic.* American spelling) objectives" (Freeman, 1984: 46) appears to invite comment from critics of the stakeholder position. Sternberg (1998), for example, suggested that, with such a broad definition, stakeholders will include, "generations yet unborn, terrorists…, nameless sea creatures and vegetation" (Sternberg, 1998: 95). Her point was that it is theoretically possible for any entities, living, inanimate or yet to be born to be stakeholders. Not all of these will, Sternberg went on to contend, have a legitimate claim over the objectives of the organisation and on the contrary in fact, some stakeholders captured by Freeman's definition have a claim despite their legally-illegitimate nature (such as terrorists).

Furthermore, it is likely, in any audit of corporate stakeholders, to find that their objectives for the organisation are in part competing (and thus not in agreement). This is an intuitive statement, but a small number of empirical studies have lent weight to it (see for example Sturdivant, 1979; Cornell & Shapiro, 1987). The economic view of a business organisation would typically suggest that shareholders and other direct economic stakeholders (such as banks, executives with share options, etc) would tend to favour objectives in pursuit of maximum long term earnings. Other stakeholders, however, may seek more social goals for the organisation, some of which may, if pursued, result in sub-optimal profit earnings (and, in some cases, a threat to the existence of the organisation). Such objectives are clearly in conflict and hence the conception that all stakeholders may, or should, be accorded equal sovereignty, is fundamentally flawed.

In attempting to develop models of stakeholder theory that are more accessible and perhaps useable, a number of writers proposed methods of 'ranking' stakeholders according to their relevance or immediacy.

Evan and Freeman (1993) classified stakeholders as *narrow* and *wide* where the criteria for selection into each category is the extent to which stakeholders are affected by the organisation's policies and strategies. Narrow stakeholders (those that are the most affected) will usually include shareholders, management, employees, suppliers and customers that are dependent on the organisation's output. Wider stakeholders (those less affected) may typically include government, less-dependent customers, the wider community (as opposed to local communities) and other peripheral groups.

Clarkson (1995) drew a distinction between *primary* and *secondary* stakeholders. According to Clarkson, a primary stakeholder group is one without whose continuing participation the corporation cannot survive as a going concern. Hence, whereas Evans and Freeman viewed stakeholders as *being* (or not being) *influenced* by an organisation, Clarkson saw the important distinction as being between those that do *influence* an organisation and those that do not

Mahoney (1994) proposed that another way to divide stakeholders was between those that are *active* and those that are *passive*. Active stakeholders are those that seek to participate in the organisation's activities. These stakeholders may or may not be actually a part of the organisation's formal structure. Management and employees obviously fall into this active category but some parties from outside an organisation may also fall into this category such as regulators (in the case of UK privatised utilities) and environmental pressure groups. Passive stakeholders, in contrast, are those that do not normally seek to participate in an organisation's policy-making. This is not to say that passive stakeholders are any less interested nor any less powerful, but that they do not seek to take an active part in the organisation's strategy. Passive stakeholders will normally include most shareholders, government and local communities.

Campbell, Shrives and Bohmbach-Saager (2001) categorised stakeholders according to the direction of dependence in an extension of Clarkson's (1994) voluntary/involuntary division. Campbell, *et al* (2001) observed that Clarkson (1994), "proposed that, "Voluntary stakeholders bear some form of risk as a result of having invested some form of capital, human or financial, something of value, in a firm. Involuntary stakeholders are placed at risk as a result of a firm's activities. But without the element of risk there is no stake" (Clarkson, 1994: 5). In other words, there is a disparity in the direction of risk. Voluntary stakeholders choose to be stakeholders in an organisation and to bear some risk as a result of the organisation's activities (such as shareholders bearing financial risk and customers bearing risk of product disutility). Involuntary stakeholders engage with an organisation through no choice of their own. Their risk comprises potential social, economic or personal loss as a result of the organisation's activities. This distinction also implies a disparity in the direction of dependence." (Campbell, *et al*, 2001: 70).

2.4 The stakeholder metanarrative and accountability

Different perspectives

Deegan & Rankin (1996) wrote, "One release which, in part, addressed the issue of who are the users of corporate financial statements was *The Corporate Report* (Accounting Standards Steering Committee, 1975). This report defined users as those "having a reasonable right to information concerning the reporting entity" (p. 17). It stated that:

We consider such rights arise from the public accountability of the entity whether or not supported by legally enforceable powers to demand information. A reasonable right to information exists where the activities of an organisation impinge or may impinge on the interest of a user group (p. 17)." (Deegan & Rankin, 1996: 61)

It is this 'reasonable right', or at least the assumption of a claim to information, that links the foregoing narrative to the social accounting literature. The legal minima of information disclosure in any given country is unlikely to meet a company's obligation under its social contract. Despite the presumption that accounting documents in general and the corporate report in particular are legal documents required by statute to meet the information claims of shareholders, the recognition of multiple stakeholders necessitates the disclosure of non-mandatory and not legally-required information which, it can be argued, is a *de facto* recognition of social contract.

This recognition is not without controversy, however. Not all philosophical perspectives allow for the recognition of stakeholder rights on an organisation. Perspectives also differ in the identities of stakeholders that might (or should) be recognised or even enfranchised by the policy process.

Gray, Owen & Adams (1996) provided a summary of the various positions observed with respect to this issue. Seven types were identified. In order, from the most conservative to the most radical, they are:

1. Pristine capitalists;
2. Expedients;
3. Proponents of the social contract;
4. Social ecologists;
5. Socialists;
6. Radical feminists;
7. Deep ecologists.

The different perspectives discussed

The pristine capitalists and the expedients share the belief that economic efficiency and shareholder value-added are legitimate and desirable aims. Whereas the expedient position may reluctantly accept the need for some stakeholder dialogue in order to pursue otherwise economic objectives, the pristine capitalists see any demand for CSR as an imposition and an attack on personal liberty. Friedman himself appeared to accept the expedient position in his phrase, "...will be to make as much money as possible while conforming to the basic rules of society ... [including] those embedded in ethical custom." (Friedman, 1970). The insult to liberty that suggests the possibility of conformance to social ethical norms is thus allowable in the pursuit of higher profits. The pristine capitalist position is probably therefore a marginal perspective.

The social contract position – that which is central in this study – accepts as axiomatic the proposition that because businesses are citizens of society, businesses and society exist within an implied contractual relationship. Although expressed formally in political theory, this view underpins a substantial proportion of the legitimacy theory literature. Conformance to the terms of the contract is expressed by society in its willingness to allow the business to exist and pursue its legitimate interests unmolested and supported whilst a business signifies conformance by behaving in such a way as to gain the support of society. It follows, then, that the behaviour of business must change in sympathy with the changing ethical positions of society. Unlike the capitalist and expedient positions, contractarian thought does not accept that primacy of economic objectives are any more immutable than the moral acceptations of society. As society changes, so must business. Social disclosure is, it is suggested, one manifestation of how businesses are responding to society over and above the legitimate correspondence with shareholders.

Gray *et al* (1996) used the term 'social ecologists' to describe those who, through their recognition of a number of environmental hazards, believe that business should modify its behaviour even if such changes may render profits sub-optimal (the capitalists and the expedients) and even if not required to under the terms of the social contract. The agenda has been expressed as 'greening' business. This motivation may express itself through polemic for change and campaigning.

Socialists and radical feminists, Gray *et al*'s fifth and sixth positions, both question the order and structure in society. Socialists seek, "a significant re-adjustment in the ownership and structure of society," (ibid. p. 59) because, they argue, the capitalist model of resource allocation has failed to address many of the pressing issues that threaten society. Gray *et al* cited Schumacher. The capitalist construct, Schumacher argued, fails, "to fight pollution, to preserve wildlife, to discover new sources of energy, and to arrive at more effective agreements on peaceful co-existence." (Schumacher, 1973: 290). Socialists thus favour a prescription for the place of business in society as one subject to less-resource-intensive production and consumption and one which recognises, presumably through formal social structures and legislation, the rights of multiple constituencies and their claims upon the wealth of society.

The feminist position is more difficult to summarise in few words but appears to favour an order in society less driven by formal authority structures, "aggression, traditional success, achievement, conflict ...[and] competition..." (Gray *et al*, 1996: 59) and more by the more 'feminine' characteristics of "compassion, love, reflection... [and] co-operation." (ibid. p. 60). Accordingly, concepts such as social responsibility and social reporting inherently recognise, and thus assent and perhaps pay homage to, formal power structures in society such as capital-owned businesses that, some may argue, oppress, subjugate and abuse sections of society and the environment. Methods that describe social and environmental accounting *as it is* are thus agents of malevolence in that they do not attempt to challenge the formal 'masculine' social structures – in fact they propagate and defend them.

Finally, the 'deep ecologists' are to the political Left of all of the aforementioned. Central to their beliefs is the contention that, "human beings do not have any greater rights to existence than any form of life." (ibid. p. 60). This is a marginal position but one that informs Jainism and 'animal rights activists'. It is one of the extreme positions with regard to stakeholder recognition in that many more stakeholders should, it argues, be recognised and enfranchised.

Legitimacy theory and social contract theory

This chapter has described the development of social contract theory and has shown how this was one of the progenitors (or more probably *the* progenitor) of the modern conception of stakeholder theory. Gray *et al*'s (1996) typology, as well as showing the continuum of attitudes towards social reporting, is also a continuum of the extent to which stakeholders are recognised and enfranchised in the policy-making process. Legitimacy theory, the central theoretical emphasis of this thesis, presupposes the recognition of multiple constituencies and of a social contract between powerful social institutions and society.

It seems appropriate therefore for the author to indicate the position from which the research described in this thesis is undertaken. Those which Gray *et al* (1996) describe as 'proponents of the social contract' recognise reciprocal responsibilities from and to business and society in exchange for mutual recognition and affirmation. As a compromise between the pristine capitalists (which coerces and disenfranchises all but the capitalist elite) and the socialists and deep ecologists (which coerce other stakeholders in favour of a neo-Rawlsian egalitarianism denying investment opportunity, wealth creation and capital investment), the social contract described above argues that concord in society is possible through the recognition of mutual rights and responsibilities. This, of course, also involves some coercion – there is probably no coercion-free model of stakeholder theory – but it provides for order in society through the recognition of mutual rights and responsibilities and, importantly, the agreement by all participants in the democratic process to abide by what Rousseau called the 'general will.'

It is an inalienable right, therefore, for society to make its 'general will' known to the corporate sector. In order to facilitate this, the social contract provides for freedom of speech and peaceful protest. Similarly, businesses are free from legislative constraint to enable them to respond – or not – to the general will. Those who bring their behaviour in line with the general will continue to enjoy the support of society whilst the converse is also true.

The limitations of the social contract approach are, however, several and the extent to which it is appropriate to enter into a discussion of these in a thesis of this type is a matter of judgment. Critics from the Right would argue that capitalism is coerced whilst the 'greens' from the Left would argue that its lack of moral absolutism coerces the environment and those constituencies who cannot make their voices heard through the general will (such as future generations). It structurally rejects the concept of ethical absolutes – the 'right' or the 'good' is whatever society decides it is and this is subject to change both between societies and over time (the social contract used to allow for the keeping of slaves, for example). It also assumes that social opinion is homogeneous and can be manifest as a coherent set of concerns to observers. Whilst society may be relatively homogeneous in its view of slavery, it is probably less so on matters such as fox-hunting and human cloning (these being issues of debate at the time of the submission of this thesis).

3. Accounting instruments for discharging accountability relationships and explanatory theories

3.1 Accounting instruments for redressing the supposed accountability relationship

The more radical positions identified by Gray, *et al* (1996) contend that the orthodox accounting paradigm is inadequate as it fails to account for the full cost and impacts of business activity on a widely-defined group of constituencies. Whilst the critical Left (such as the deep ecologists) would probably argue that orthodox accounting is beyond repair, other, more moderate positions allow for business accountability to be enhanced through a range of measures designed to more meaningfully address social and environmental impact.

The radical (critical) Left (including the socialists, deep ecologists, etc) would, however, not find all of these acceptable. As believers in a radical reformulation of the accountability relationship, adherents to these positions argue that voluntary arrangements, 'half-hearted' measures and those that leave the organisation in control of any such accounting instruments, simply serve to protect and propagate the supremacy of the capitalist bourgeoisie and the consequent subjugation of the disenfranchised majority.

With this qualification in mind, it is nevertheless possible to report on the various notions that have been explored, both in academia and in business, to provide for a greater accountability relationship between business and society, particularly with regard to non-capital constituencies. Social contractarians may also adopt the view that further accountability may be necessary insofar as it may from time-to-time be necessary to restore mutuality of understanding between a business and its constituencies.

It is not the purpose of this review to provide a detail criticism of each instrument, but rather to explore the means of responsibility discharge available to businesses and how voluntary social disclosure (the subject of this research) fits into these.

Social disclosures in company communications

There is a substantial literature reporting on the phenomenon of the social content in corporate communications (see for example Patten, 1992; Gray, *et al* 1995b; Adams, *et al* 1995; Guthrie & Parker, 1989 and 1990; Campbell, 2000). The fact that many corporate communications contain social information over and above that which is required by statute or accounting standard has generated many studies both studying such disclosures and suggesting explanations for them.

Voluntary disclosures can occur in any corporate communication. Examples include those made in advertising, at AGMs and EGMs, in corporate reports, interim reports, special reports, public relations messages, in media appearances, editorials and websites, etc. Content analysis limitations, however, have made studies in written communications by far the most populous of studies in this area.

By making disclosures in addition to those required by mandate, the company is implicitly recognising its social constituencies and is thus accepting the limitations of the statutory accountability relationships. Why, for example, would a company make disclosures about its employee welfare or environmental performance (which is not required by statute or GAAP) if not in some way to recognise one or more non-capital stakeholders?

The vast majority of research into voluntary disclosure has used disclosure in regularly-produced accounting documents as the main media for content analysis. The annual corporate report has been the most widely-employed medium for these studies. A survey of other accounting instruments and themes in this context is relevant in developing this thesis.

A brief review on social discharge mechanisms other than voluntary disclosures

In addition to voluntary social and environmental disclosures as a means of responsibility discharge (to which this thesis will return), other mechanisms have been discussed and in some cases, practiced. Whilst this review is not exhaustive and is not in any particular order, it is indicative of some of the major themes in this area. Nor are the following suggested to be equivalent in their power to discharge the social accountability.

Mass balance accounts

Described by Gray, *et al.* (1996) as an 'innovative' example of environmental reporting, mass balance accounting was notable when initially advanced because it is, by its nature, quantitative. The most notable example of the use of mass balance is probably that of the Danish Steel works (Jorgensen, 1993; Gray, *et al*, 1996). The objective was for the company to present a 'true and fair view' of the environmental impact of its operations. "One way to do this was to complete a 'mass balance sheet' (or eco-balance) showing the materials supplied and how this supply ended up, for example, as finished goods, emissions, waste products which are recycled and as ordinary waste." (Jorgensen, 1993: 3).

"To make it a 'proper' mass balance..." said Gray & Bebbington (2001), "basic identification of the major elements of inputs, outputs and leakages needs to be quantified and, in an ideal world, the totals of the inputs should 'balance' with the totals of the outputs and leakages" (Gray & Bebbington, 2001: 181) presumably after any stoichiometric adjustments to account for any weight changes as a result of the conversion process.

Hence, input feed stock of x tonnes can, theoretically, be entirely accounted for. Year-to-year comparisons enable the company to chart trends in its waste and emission records over time, and if made public, the company allows itself to be held accountable for its environmental record.

Initiatives like EMAS are similar in purpose to the above. Although they have been criticised for being too managerialist, EMAS, ISO14000, 'Environmental Index' programmes, etc. have attempted to account for and manage (rather than just 'let be') corporate environmental behaviour. Insofar that emission volumes might now be quantifiable may be of little comfort to some stakeholders who would rather see such emissions reduced or eliminated, but other stakeholders have considered such developments worthwhile.

Environmental accounts

Environmental accounts are separate documents that may variously contain statements of an organisation's environmental policies, protocols, management, impact, etc.

The limitations of environmental accounts as a mechanism of accountability are several. As with all 'glossies' they are expensive to produce and companies may see them as an investment against which to make a return, possibly in terms of enhanced reputation or legitimacy. They do not enjoy a high readership although website availability may help to increase this. Companies producing them have complained that they seem to be demanded by many stakeholders but are read by few. Anecdotally, the author can report meeting the person responsible for writing the environmental report for the German chemical company BASF. He reported that it would cost £200,000 to produce and print it (year 2000), "enough," he said, "to personally take everybody who actually sent for one on a worldwide tour of BASF's operations at our expense – and we'd still do it cheaper." As a vehicle intended to reach a general audience with environmental information, the present format is probably not very effective. The final limitation is that there is no compulsory audit requirement for environmental statements. This has obvious implications for reliability.

'Full cost' accounting

Full cost accounting (FCA) seeks to allocate costs to externalities in the pursuit of a cost calculation that more accurately reflects the environmental and social costs incurred in a business operation. It is argued that net profits measured by the current understanding of business costs renders the profit figure inaccurate because such a calculation is based upon the belief that only those measurable costs incurred in the procurement of the factors of production are allowable. If the 'full cost' of a business operation is accounted for (i.e. taking account of all of the consequences of economic activity), the profit figure would be lower, or negative (i.e. the business will have made a net gain from the environment over the accounting period).

Bebbington, *et al* (2001) explained how "the policy impetus for FCA comes from the call, buried within the detail of the European Commission's Fifth Action Programme (subtitled 'Towards Sustainability'), for the accountancy profession to develop FCA so that 'the consumption and use of environmental resources are accounted for as part of the full cost of production and reflected in market prices' (European Commission, 1992, Vol. II p.67)." (Bebbington, *et al*, 2001: 5). The Brundtland Report was also employed as a basis for discussion. "FCA is, at its simplest, a system which allows current accounting and economic numbers to incorporate all potential/actual costs and benefits into the equation including environmental (and, perhaps, social) externalities to 'get the prices right'" (Bebbington, *et al*, 2001: 8)

The literature has discussed full cost accounting as a conceptual theme (see for example Bebbington, 1997, 1998) but the only attempt to discuss it in any technical detail was the ACCA report in 2001 by Bebbington, Gray, Hibbitt and Kirk (2001). This notwithstanding, technical identification and measurement difficulties remain a feature of FCA. Whilst we may establish that (for example) an airline flight has caused x tonnes of pollution of a certain sort, full cost accounting would ideally be able to attach a cost to the environmental remediation of x tonnes of pollution (e.g. the number of trees or other forms of carbon, sulphur or NOx sink that would need to be installed and the financial cost of so doing). The installation of a carbon sink may, in turn, have a social cost (a possible impact on communities nearby, for example) and this would also need to be factored in.

*Audited social accounts*The concept of audit with regard to social impact statement is not without controversy due to lack of agreement with regard to audit standard, auditor qualification and procedural protocols. Gray, *et al* (1996) suggested that, "the social audit movement has essentially concerned itself with constantly challenging and extending the actual recognised responsibilities and discharged accountabilities of business and other organisations." (Gray, *et al*, 1996: 265).

One of the claimed strengths of social audit is the active involvement of affected stakeholders in the construction of the accounts. By asking stakeholders how they may have been affected, positively or negatively, the actions of a business over the course of an accounting period, social audit advocates suggest that accountability can be expressed in more meaningful terms.

Gray, *et al* (1996: 268-269) describes an early experiment in social audit – that of Avon Rubber in 1976. A cursory glance at the contents of the statement show that categories of audit included 'Business' (including resources and investments), 'Employees' (including job security, equal pay, training, treatment of women and the disabled, race relations), 'Consumer products' (containing statements on product safety, recycling, military contracts, etc) and a statement on 'The environment and local community' (containing statements on pollution, waste disposal, energy consumption, noise, donations, health & safety, etc.). Such a long list of activities made subject to audit has the ability to substantially increase the accountability of a business to society but the drawbacks are the obvious ones – collation and production of information and publishing the accounts is expensive and from time-to-time, the statement will reveal some 'bad news' that otherwise might have remained concealed but for the publication of the social accounts.

The publication of social accounts in any systematic fashion remains a marginal activity. Initiatives such as AA1000 may have an effect, however but at the time of writing adoption appears to be marginal.

3.2 Theories to explain the phenomenon of CSR

Background

Ullman (1985) was one of the first to conduct a survey of social (responsibility) disclosures, particularly from a theoretical perspective. Roberts (1992), commenting on Ullman's research, noted that, "foremost in his [Ullman's] critique was the lack of a comprehensive social responsibility theory sufficient to explain why corporations engage in social responsibility endeavours." (Roberts, 1992: 595). Over the intervening years, the literature has reflected an increased amount of thought of theorising the link between social responsibility, societal expectations and reporting, but there is little evidence of convergence, much less closure, relating to any particular theoretical position. Puxty's (1986) comment that, "accounting research is littered with the bodies of dead and dying theories," (Puxty, 1986: 96) is testimony to both the alacrity with which theories are formulated and received, and the manner in which they are discarded. The theories to explain CSR are not equal in their coherence or predictive power and whilst they may not yet be dead or dying, some are undoubtedly more useful than others.

Gray, Owen & Adams (1996) included a review of explanatory theories in their book, *Accounting and Accountability*. Three theoretical viewpoints were discussed, stakeholder theory, legitimacy theory and political economy of accounting. Brown & Deegan (1998) provided a possible enrichment in what has become known as media agenda-setting theory. Campbell (2000) suggested that the succession of senior management officers might have an effect on disclosures (showing evidence from a longitudinal study of Marks & Spencer's social disclosures). The notion that social disclosure might have an economic objective such as risk reduction has also been advanced (discussed in, for example, Freedman & Stagliano, 1992; Trotman, 1979). Signalling theory (Morris, 1987) was used by Campbell, Shrives and Bohmbach-Saager (2001) to analyse social disclosures in company mission statements. An amended form of political costs hypotheses (Watts & Zimmerman, 1986) has been employed by Hackston & Milne (1996) and others.

It is therefore safe to suggest that several theoretical perspectives may be partial explicators of the phenomenon of CSR. Legitimacy theory was selected as the basis for analysis in this thesis, but a brief review of the most prominent other theories is appropriate here. There is little evidence in the literature that these theories compete with each other, indeed, authors commenting on one or other are usually careful to qualify their findings when they may point to one or other of the theories. Gray *et al*, (1995a) described the theories as 'mutually-enriching' rather than mutually-exclusive – a fair assessment given the disparate nature of the theories and the patchy evidence for each. Nor can it be said, therefore, that evidence in favour of one theory need be evidence against another. This resolution at different conceptual levels (the sociological, political, philosophical, competitive, etc.) of explanatory theories makes a discussion of the same problematic.

This thesis suggests that stakeholder theory is not a competitor theory to the others, but a metatheory to some (or most) of them. This is because the descriptive conceptualisation of stakeholder theory (Donaldson & Preston, 1995) provides for a model in which multiple stakeholders (constituencies or publics) are recognised. The extent to which the firm interacts with each stakeholder is not prescribed in this basic level of resolution, it simply recognises their existence. The extent to which firms interact with stakeholders then becomes the subject of debate. All of the theories discussed below (and in the main canon of SEA literature) begin by recognising (although not necessarily accepting) the claims of multiple stakeholders. In this regard, the stakeholder metanarrative is, for many in SEA research, a doctrinal imperative and the term 'stakeholder' can probably be considered a shibboleth. It is from this imperative that other positions are arrived at and developed. Stakeholder theory and its contractarian origins are described in Chapter 2 of this thesis.

Political economy of accounting theory

Gray, *et al.* (1996) explained that whilst the concept of political economy was not new, its application to accounting was relatively recent (citing Cooper & Sherer, 1984). They went on to describe the 'political economy' as "the social, political and economic framework within which human life takes place." (Gray, *et al.* 1996: 47). Hence, a political economy of accounting (PEA) conception suggests that accounting, like many other social phenomena and procedures, reflects the prevailing social, political and economic structures of society. A capitalist worldview inherent in these structures will, it suggests, be reflected in the values underpinning accounting. The idea that accounting is (merely) a value-neutral set of protocols and procedures is rejected.

PEA is resolved at the level of society and is thus difficult to employ when seeking to understand or resolve CSR patterns for an individual business or sector. It seeks to understand (in the context of CSR), how "wider, systemic factors" (ibid. p. 47) might inform the reasons for and nature of social and environmental accounting and disclosures. Tinker, *et al.* (1991), for example, described how social accounting can be considered to be a reflection of social conflicts occurring "between capital and other social interests (e.g. environmentalists, workers, consumers, women, minorities)" Tinker, *et al.* (1991:46-7). A model in which capital is assumed to be in conflict with wider societal interests is one facet of PEA.

Gray, *et al* (1996) distinguished between 'classical' and 'bourgeois' political economy theories where classical is Marxian in nature and bourgeois is, they suggest, derived from Mill and later economists. The Marxian perspective of classical PEA stresses "structural conflict, inequality and the role of the state" (ibid. p. 47, presumably the line that Tinker *et al.* (1991) adopted) whilst the bourgeois type, "tends to take these things as given," (ibid. p. 48) and is therefore, presumably less reactive in its outlook than classical PEA. Bourgeois PEA, therefore, appears to accept those things that Marxists wouldn't (structural conflict, etc.) and seeks to understand the world in terms of "interactions between groups in an essentially pluralistic world" (ibid). The use of the term 'bourgeois' was unattributed in Gray, *et al.* but may have been based on Puxty's (1986) distinction of perspectives in the 'bourgeois tradition' between 'consensus theory' and the 'conflict view of society' (homologous to Gray, *et al*'s classical and bourgeois - Puxty, 1986: 105-106)

It is argued by Gray, *et al.* that classical PEA does not offer much as a means of understanding CSR (being, "the crumbs of legitimation dropped from the table of capitalism" (ibid)). Further, Gray *et al* (1996) argued that bourgeois PEA "can be successfully employed to help explain CSR practice" (ibid) although the theory is not clearly delineated, does not provide any predictorial power and cannot be empirically tested for (as it is so loosely defined).

Signalling theory

Campbell, Shrives & Bohmbach-Saager (2001) used signalling theory to investigate voluntary social and environmental disclosures in UK mission statements published in corporate reports. Signalling theory (Spence, 1973; Morris, 1987) was originally suggested in order to explain information asymmetry in the labour markets but it has been developed in a number of other areas including disclosure of voluntary information (see for example Ross, 1977). When applied to corporate reporting the theory suggests that (because of asymmetry in the market for information) companies that believe they are 'better' than other companies signal this to investors in order to attract investment and a more favourable reputation. "The idea that the possessor of superior information or insight will signal what he knows either directly or through his actions to achieve some economic benefit has been studied in a variety of institutional settings" (Verrecchia, 1983: 180).

Companies may do this by voluntarily disclosing accounting information in excess of what is typically required by law and other regulation. Similarly, not disclosing something can be a signal in itself. However because of 'adverse selection', companies will always wish to signal that they are better than 'average'. Thus they will (according to signalling theory) tend to choose disclosure over non-disclosure. Thus in the limit, theoretically, the equilibrium position will be full disclosure as all companies will have an incentive to disclose all positive distinguishing attributes in order to maximise their own self interest. The mechanism leading to this is the 'revelation principle' (Camfferman, 1997). Managers will always disclose (or signal) in order to ensure that their companies are not undervalued. This, arguably, mitigates against non-disclosure and may lead to 'over-disclosure' (see Watts and Zimmerman, 1986). Clearly it is difficult to decide what over-disclosure is but it could be where the marginal costs of disclosure exceed marginal benefits.

Risk reduction, economic performance and market reaction studies

Although not a theory in itself, a number of authors have drawn attention to the supposition that some social and environmental disclosures may be used in part to reduce financial, political or economic risk. Thus, social disclosures may be used to pre-empt government attention by demonstrating that a particular issue has been duly noted and, in a spirit of self-regulation and to avoid or reduce the risk of legislation or regulation, voluntary disclosures may be meant in part to proactively address such issues (see for example Parker, 1986). Similarly, the reassurance of the investment community with regard to social and environmental liability may be necessary. Again, the purpose of disclosure may be to signal that the issue in question has been noted and is being acted on. Trotman & Bradley (1981) found that what they termed, 'higher systematic risk' was associated with social disclosure, possibly suggesting the use of disclosure to offset risk. Deegan & Gordon (1996) said of this "They [Trotman & Bradley] found that companies providing social responsibility information were, on average, larger in size, had higher systematic risk, and placed stronger emphasis on the longer term..." (Deegan & Gordon, 1996: 188)

Risk reduction as an explanation might also allow for disclosure intended to deflect criticism. Guthrie & Parker (1990) recognised this when suggesting that one purpose of CSR may be to, "demonstrate a constructive response to social pressure and avoid further regulation of their disclosure. In this way they may seek to pacify sociological demands made on business while attempting to win or maintain support from particular targeted constituencies." (Guthrie & Parker, 1990: 165). Similarly, Parker (1986) suggested that "...it has been argued that social [disclosure] can act as an early response to [possible] impending legislative pressure for increased disclosure and as a counter to possible government intervention or pressure from other interest groups. Thus, ... social [disclosure] might be used to anticipate or avoid social pressure." (Parker, 1986: 76).

The market reaction to social disclosure has been explored by several previous studies (see for example Belkaoui, 1976; Ingram, 1978; Anderson & Frankle, 1980; Jaggi & Freedman, 1982; Patten, 1991; Freedman & Stagliano, 1992). Bowman & Haire (1976) was one of the first studies to test for investors' reaction to social disclosures. Buzby and Falk (1978) surveyed mutual fund directors to determine if social information was considered in their investment decision. Milne & Chan (1999) examined the effects of social disclosure on investment decisions. Rockness and Williams (1988) surveyed directors of ethical mutual funds and observed a strong demand for many types of social information.

Studies comparing social disclosure with 'raw' economic or accounting data are probably under-represented in the literature. Patten's (1991) study compared the level of social disclosure with a number of accounting measures (including return on assets and return on equity). He found that whilst disclosure was associated with size and industry classification, "none of the profitability variables [when regressed against social disclosure] even approached statistical significance. " (ibid. p. 304). Social disclosure was found to be more associated with public pressure than financial performance.

Managerial succession as a cause of variability

This is not a prominent theory. The only paper to test for it was Campbell (2000) although other authors have allowed for management attitudes to be a source of influence in disclosure decisions. Campbell's method involved using a content analysis technique to chart all categories of social disclosure between 1969 and 1997. The terms of successive chairmen were then overlaid to reveal trends whose switch points were incident with the changes in chairmen. Analysis of variance (ANOVA) showed the means to be different at the statistically significant level of 0.05 (see figure 3.1).

That different managements may differently perceive the intensity of external influences has been noted by several previous authors. There is some evidence from the leadership literature of similar areas in which managerial influence can affect reporting behaviour and culture (Tattenbaum and Schmidt, 1973; Thomas, 1989) although intuitively, it is a reasonable *a priori* assumption that senior management will exert some influence over many areas of corporate behaviour, including disclosure
practice.

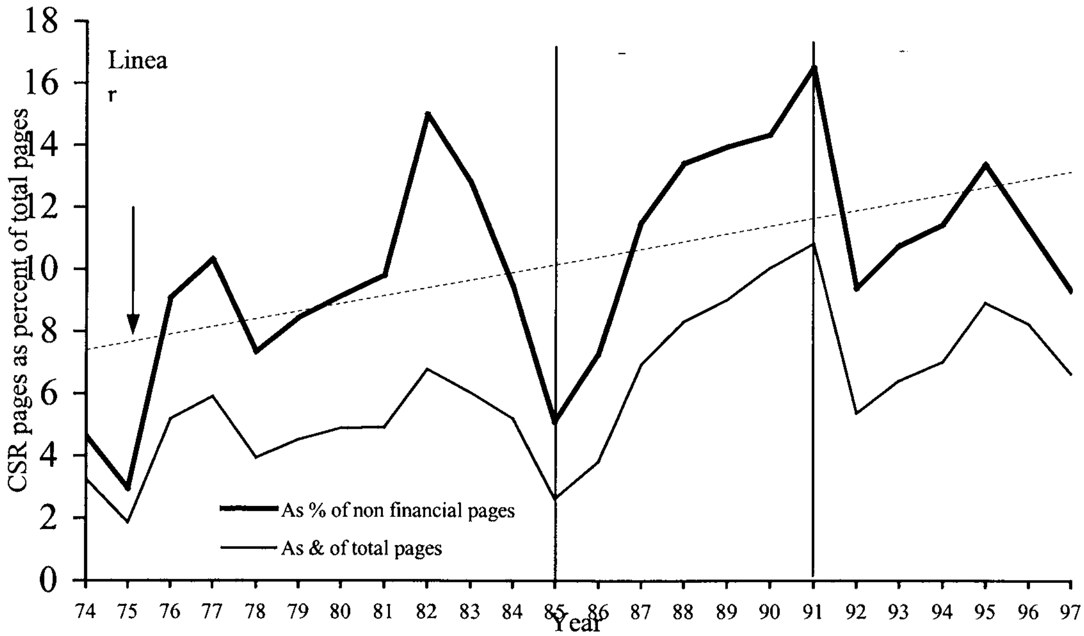

Figure 3.1 Evidence for management succession as an influence over social and environmental reporting volumes. Percentage of corporate report given to CSR by

page proportion total for Marks & Spencer plc (1974-97) with chairmanships overlaid.

Media agenda-setting theory (MAST)

There are two main references relating to this theory in the context of CSR studies (Brown & Deegan, 1998; Deegan, Rankin & Voght, 2000) although O'Donovan, 1999 also borrows heavily on the theory. MAST is linked strongly to legitimacy theory insofar as a link is drawn between public concern (or perhaps more accurately public discussion) and corporate disclosure. "Media agenda setting theory posits a relationship between the relative emphasis given by the media to various topics and the degree of salience these topics have for the general public." (ibid. p. 25). It is argued that media attention on an issue has a causal linkage to community concern on that issue, i.e. media attention is able to lead societal opinion. Deegan *et al.* (2000) argued that increased discussion of environmental issues in the press was a major cause of increased concern in society over the environment. The possibility thus exists for the media to manipulate societal concern as well should it so wish. O'Donovan (1999) identified "corporate environmental issues brought to public notice" (ibid. p. 70) by the media as the first step in society changing its attitude to environmental matters. This statement appears to suggest that media acts *in vacuo*, perhaps that it is capable of creating concerns upon which to focus *ex nihilo*.

Studies were cited by Brown & Deegan in which editorial decisions by print media editors influenced voting intentions in the 1968 US presidential election. "In choosing and displaying news, editors, news room staff and broadcasters play an important role in shaping political reality." (McCombs & Shaw, 1972: 176, cited by Brown & Deegan, 1998: 25). The essence of MAST appears to be therefore that media ownership and editorial slant represents a source of power in society insofar that it (the media) is able to influence what is considered important by society and the issues that are subjected to discussion in society.

The importance of the media as an intermediary and interpreter of the world to individuals is seen as important in MAST especially with regard to issues of which readerships have little or no direct experience. The less direct experience a person has of an issue, the more he or she will rely on the media for information on it.

Information on the environment (by which Brown & Deegan presumably meant the natural environment) was, they argued, gained largely or wholly through media sources and was an 'unobtrusive' issue for most people (i.e. one in which they had no direct contact).

The extent to which MAST can be viewed as an explicator of CSR behaviour is suspect. To be fair, Brown & Deegan made no attempt to suggest that it was a powerful or even a unique theory and their 1998 paper used MAST as only one of three hypotheses tested. They suggested that MAST would be indicated if "the media is able to influence community perceptions about unobtrusive issues such as the [natural] environment." (ibid. p. 26).

Political costs hypothesis

Underexplored in the SEA literature but relevant to two hypotheses in this study (hypotheses 2 and 3 in which it is hypothesised that community and environmental disclosure will be responsive to public profile or reputation) is political costs hypothesis (PCH). PCH has become assumed in some SEA studies and is sufficiently important to merit a brief discussion in this thesis.

Watts & Zimmerman (1986) posited the hypothesis that some features of organisations make them more (or less) exposed to the potential imposition of political costs – an effect, they argued, derived from a feature of the asymmetric loss function (Peltzman, 1974) that specifies that information provision or non-provision renders biased bureaucrats' proclivities to impose political costs on organisations *because* of the provision (or not) or certain information. Watts & Zimmerman proceeded to propose that, "large firms are more politically sensitive than small firms and, therefore, face differentials in their choice of accounting procedures." (ibid. p. 235).

They continued, "The size hypothesis is based on the assumption that large firms are more politically sensitive and have relatively larger wealth transfers imposed on them (political costs) than smaller firms." (ibid.). Political exposure is, therefore, a function of visibility and if so, then size alone is unlikely to be a good proxy for exposure (because even among large firms, some are more visible than others). Watts &

Zimmerman appeared to foreshadow this misgiving, however. Zimmerman's (1983) research is commented upon wherein it was found that, "large firms have higher tax rates [an example of a political cost] than smaller firms... but this relationship varies over time and across industries suggesting that firm size [alone] is a noisy proxy for political costs." (ibid. p 235 and 236).

The contention that visibility in some way (notwithstanding noise) varies by size and sector is, however, unchallenged. If then a sample were to control for size, sector effects could explored by visibility (see the development of hypotheses 2 and 3 in Chapter 5).

The assumption of differential visibility and reputation has been employed by a number of previous studies in social and environmental accounting. Hackston & Milne (1996), for example, divided a cross sectional sample into 'high profile' and 'low profile'. Clarke & Gibson-Sweet (1999) sorted by proximity to end user in the assumption that those companies with more prominent interests in tertiary industries would be more visible. Adams, Hill & Roberts, (1998) employed 'sensitive' and 'less-sensitive' industries as a method of sorting. Trotman (1979) observed that, "...social responsibility reporting may contribute to public image and this in turn may lead to greater public acceptance, more identification and avoidance of confrontation such as strikes and boycotts [these being examples of social and economic costs]." (Trotman, 1979: 27). Similarly, Spicer (1978) identified legislation, government regulations, judicial decisions and consumer retaliation as some of the potential costs of exposure.

The assumption is thus made that in addition to political costs (or perhaps instead of political costs), the imposition of social costs on a business can be partly defined by the position of a company to some index of reputation, sensitivity or 'fame'.

Legitimacy theory

Although legitimacy theory (LT) has, in recent years, become the most-discussed explanatory theory for variability in social and environmental disclosure, it is mentioned last in this chapter to provide a link to Chapter 4 where it is discussed in detail.

The extension of the principle of social contract to the structured formulation of legitimacy theory rests upon the shared belief that organisations must seek the approval of those whom they affect in order to continue to enjoy full participation in the society of which both the organisation and the stakeholders are a part. LT is not a comprehensive theory of social accounting and nor, as discussed above, is it a theory in isolation. It has many common features with the other theories discussed above and evidence in favour of one is not necessarily evidence counter to another. Gray, *et al*'s (1995a) observation that the theories are 'mutually enriching' is important to bear in mind when attempting to define a theory, and is salutary if tempted towards a reductionist and simplified circumscription of any one theory.

4. A review of the legitimacy theory literature – discussion and methods of analysis.

4.1 Introduction

In seeking to construct hypotheses that will enable original work to be carried out on researching into the causes of variability in social disclosure volumes, legitimacy theory (LT) was selected as the central focus of the thesis. This was for two reasons:

1. it is among the most-discussed explanations for CSR variability in the literature and has been the subject of several previous papers thus providing a literature from which to work;
2. there has been little evidence of closure or agreement with regard to empirical instruments for 'testing' for legitimacy theory as an explanation of variability in CSR and this study extends previous methods and suggests novel ones.

The rest of this chapter reviews the literature on LT. Sections 4.2 and 4.3 define and explore the themes of legitimacy, its derivation from social contract theory, legitimacy gaps and reputation management. Section 4.4 provides a review of the most relevant papers in the LT literature, specifically focussing on method, sample and conclusions. Some criticism is also entered into. Section 4.5 provides a summary, particularly with regard to the use of proxies for societal concern.

4.2 Defining and understanding legitimacy

Social contract and legitimacy

The theme of organisational legitimacy (OL) is not exclusive to the social and environmental accounting literature and some of the better discursive papers come from non-SEA sources. As a subset of the stakeholder literature, the interlinked themes of multicontractuality, contractarianism and organisational legitimacy form a coherent group of studies - mainly in the American journals.

An often unstated presupposition made in previous OL studies suggests that, as several papers in the stakeholder literature have explicitly argued, (see for example Clarkson, 1995; Freeman, 1984) stakeholders must be conceived of as having varying degrees of importance to the organisation. It is this disaggregation of the homogeneous understanding of stakeholders that makes theorising on OL coherent. Elsbach (1994) made reference to organisations legitimating their activities to "...audiences [stakeholders] capable of granting legitimacy" (Elsbach, 1994: 59). Implicit in Elsbach's construction is the conception that stakeholders that are capable of granting legitimacy must also be able to withhold it, thus making legitimating activities towards such audiences necessary. Lindblom, in one of the most cited (yet unpublished) papers in the OL literature, made reference to this disaggregation in recognising 'relevant publics' (Lindblom, 1994: 2 although see also Patten, 1992, and 1995 which also used this phrase) and citing employees and shareholders as typical relevant internal stakeholders, and customers, competitors, communities and the general public as relevant external stakeholders.

Lindblom (1994) suggested that, "the concept of legitimacy was originally defined in political science and in that context focused on the analysis of the legitimacy of political institutions" (Lindblom, 1994: 2). In this observation, she concurs with this author's understanding that legitimacy is a derivative and extension of the political construction of social contract theory (see Chapter 2). Lindblom continued, "Paralleling somewhat the development of the concept of legitimacy in political science was the extension of the concept into analysis of organisations other than those of a governmental nature" (Lindblom, 1994: 2). Brown & Deegan (1998) similarly argued, “there is a ‘social contract’ between the organisation and those affected by the organisation’s operations. the organisation is expected to comply with the terms of this ‘contract’...” (Brown & Deegan, 1998: 22). Hence, “legitimacy and [social] contract compliance go hand in hand.” (Deegan, Rankin and Voght, 2000: 105)

The shifts in power in society, particularly those associated with the increase in power resident in capital (and thus away from governments), make relevant the study of legitimacy as it relates to business. Hence, in the same way that governments had to observe obligations under the social contract, so, in the light of the rise of capitalism, did the new repositories of power (businesses).

Patten (1992), Gray *et al.* (1996) and some others found the following quotation helpful in defining legitimacy. It is from Shocker & Sethi (1974):

“Any social institution – and business is no exception – operates in society via a social contract, expressed or implied, whereby its survival and growth are based on:

(1) the delivery of some socially desirable ends to society in general, and,

(2) the distribution of economic, social or political benefits to groups from which it derives its power.

In a dynamic society, neither the sources of institutional power nor the needs for its services are permanent. Therefore, an institution must constantly meet the twin tests of legitimacy and relevance by demonstrating that society requires its services and that the groups benefiting from its rewards have society’s approval.” (Shocker & Sethi, 1974: 67)

Accordingly, organisational legitimacy stresses the accountability of businesses to society under the implied terms of the social contract. Society’s acceptance of business is expressed in its participation in product and resource markets with regard to the business, and acceding to its right to exist without molestation, obstruction or economically-damaging criticism. In exchange, business is required to pursue its operations within the parameters of society’s accepted ethical standards. Wilmhurst & Frost (2000) argued that, “Underlying [LT] is a view that stakeholders within a community deliberate on those activities which are acceptable, and companies, as members of that community, are expected to carry out their activities within the boundaries of what is deemed acceptable by that community." (Wilmhurst & Frost, 2000:11) They continue, "When activities have an adverse impact upon the environment, management...will seek to re-establish its credentials through the disclosure of additional information" (ibid).

Meeting the terms of the contract

It follows that, "legitimacy is conferred when stakeholders... endorse and support an organisation's goals and activities." (Elsbach & Sutton, 1992: 700). Furthermore, "dissatisfaction [on the part of stakeholders] may ... lead ... actors to reduce the quantity or quality of their participation in the organisation..." (Elsbach & Sutton, 1992: 700). Clearly, then, the avoidance of what Elsbach & Sutton referred to as 'dissatisfaction' is necessary in order for an organisation to continue to enjoy the tacit or active support of its constituencies. Tilt (1994) drew attention to a related theory to LT, 'social contracting theory', which appears not to have been pursued in the literature with any vigour (Mathews, 1987 being the only reference cited in support). However, in distinguishing this from LT, she suggested, LT "goes further than social contracting theory and entails behaviour where companies respond to demands of divergent interest groups, and act to legitimise their actions." (Tilt, 1994: 49). Deegan, Rankin & Voght (2000), similarly, suggested that, "when management perceives that it has operated in a manner that is contrary to society's expectations, it must, in the interests of ongoing operations [i.e. to ensure its continuing right to exist with society's approval] undertake corrective actions... However, changing operations without informing the community of the changes may not be an effective strategy," (Deegan *et al*, 2000: 105) thus providing the link between legitimacy and disclosure.

Deegan & Rankin (1996) put it thus, "Legitimacy theory posits that corporate social responsibility disclosure practices are responsive to environmental pressures (including political, social and economic). Management seeks congruence between the outside perceptions of its own social values, and what is deemed by society to be appropriate social conduct." (Deegan & Rankin, 1996: 53).

Dowling & Pfeffer (1975) drew attention to various understandings of legitimacy that subsisted in different areas of political opinion. The simplest view was that organisations were legitimate if they were economically viable, the second if they acted within the law and the third if they also acted so as to accord with the expectations of a wider range of social constituencies (Dowling & Pfeffer, 1975: 124). Patten (1991), discussed the first of these as the 'classical economic model' of legitimacy. "Economic legitimacy, was, until recent years [as at 1991], largely the only constraint placed on business by society." (Patten, 1991: 298). Tinker & Niemark (1987) noted that legitimacy became a broader societal issue as, "the public, in general became increasingly aware of the [in their view] adverse consequences of economic growth." (Tinker & Niemark, 1987: 84, quoted by Patten, 1991: 298). Patten (1995) put it thus: "social legitimacy [is] monitored through the public policy arena [which] is distinct from economic legitimacy that is monitored through the marketplace" (Patten, 1995: 277).

These different understandings of legitimacy cut to the quick of the stakeholder-stockholder debate and are reflected in the seven positions set out by Gray *et al* (1996), and discussed at the conclusion of Chapter 2 of this thesis. The belief that legitimacy can be conferred by being economically viable and law-abiding takes a strict view in sympathy with the stockholder position. The third conception represents a *de facto* recognition of stakeholder theory (see also Votaw, 1973).

Deegan & Rankin (1997) suggested that, "Until recently, economic performance was perceived by many researchers to be the best measure of an organization's legitimacy (Abbott and Monsen, 1979; Heard and Bolce, 1981; Patten, 1991; 1992). However, society no longer confines its expectations of business to profit generation and the provision of goods and services (Heard and Bolce, 1981). It also expects business to "make outlays to repair or prevent damage to the physical environment, to ensure health and safety of consumers, employees, and those who reside in the communities where products are manufactured and wastes are dumped" (Tinker and Niemark, 1987, p 84)." (Deegan & Rankin, 1997: 567)

It is not difficult to find evidence in corporate communications that companies perceive a need to be seen as legitimate by society. The following quotation from the Shell Transport & Trading corporate report from 1984 is a typical example (selected at random from the social disclosures recorded in the research).

"The most important contribution that Shell companies can make to the social and material progress of the countries in which they operate is in conducting their business operations profitably and as efficiently as possible. These form a significant part of the economic fabric of society. They provide fuel and raw material for industry; they offer employment directly and indirectly in the companies which supply them with goods and services; they also contribute to national economies through taxation and capital investment.

"Although the primary role is economic, Shell companies recognise the need to take a constructive interest in social matters that may not be directly related to the business."
(Source: Shell T&T Annual Report 1984: 11)

The narrative proceeded to describe some such initiatives. The form of this statement includes appeals for legitimacy on several fronts (which agree with Dowling & Pfeffer's (1975) analysis). The belief that continuing economic profitability is necessary is stressed and with it, the favourable social benefits (its contribution to the 'economic fabric of society'). The benefits of its normal business activity are mentioned (employment, fuel for industry, taxation and capital investment). Finally, it alludes to an acceptance of a wider social role in 'social matters that may not be directly related to the business.' Whilst no detail is included in this social disclosure, it is evidence of Shell's acceptance of the need to maintain, and possibly restore legitimacy. It is, furthermore, a *de facto* recognition of the demands (but not necessarily the rights) of non-economic constituencies, i.e. those that 'may not be directly related to the business'.

Elsbach & Sutton observed that, "The notion that an organisation will be rewarded for having a legitimate reputation is a ubiquitous theme in organisational legitimacy." (Elsbach & Sutton, 1992: 700). Shell is not untypical in recognising the economic and social benefits that can accrue to the organisation by remaining in some esteem in the views of a broad range of constituencies.

4.3 Legitimacy 'gaps' and reputation management

It is apparent from the foregoing that legitimacy is not something that can be taken for granted by business organisations. On the contrary, in fact, it must be cultivated and if lost or threatened, restored. Lindblom (1994) suggested that society (or at least the 'relevant publics') are continually making a 'legitimacy assessment' of organisations in which they have an interest. Such an assessment can result in the relevant publics finding an organisation acceptable or unacceptable at any given point in time.

"To the extent corporate performance does not reflect the expectations of the relevant publics a legitimacy gap exists. Legitimacy is dynamic in that the relevant publics continuously evaluate corporate output, methods, and goals against an ever evolving expectation. The legitimacy gap will fluctuate without any changes in action of the corporation." (Lindblom, 1994: 3). Brown and Deegan (1998) also observed that the 'bounds and norms' of society, "are not fixed, but change across time, thereby requiring the organisation to be responsive" (ibid. p. 22). Similarly, Dowling & Pfeffer (1975) argued that, "Social norms and values are not immutable" (Dowling & Pfeffer, 1975:125) and therefore, "If companies are using voluntary CSR to manage their legitimacy, disclosures can be expected to vary over time... and across industries as companies seek to manage the varying pressures on them" (Clarke & Gibson-Sweet, 1999: 5, 6)

It is the changing nature of societal opinion that makes the closing of legitimacy gaps problematic, and the historical reputation of the corporation is no guarantee of continued societal support if opinion changes. Elsbach & Sutton, 1992 observed that, "...acquiring and maintaining legitimacy are chronic difficulties for most organisations, regardless of how widely recognised they are or how widely supported they have been in the past." (Elsbach & Sutton, 1992: 700). It is thus one of the objectives in this area of reputation management to close legitimacy gaps as they appear or to reduce what Miles (1987) referred to as 'exposure' of the company to social and environmental criticism (see also Patten, 1991).

Dowling and Pfeffer (1975) argued that organisations exist within a 'superordinate social system' (see also Parsons, 1960) within which organisations enjoy legitimacy insofar as their activities are congruent with the broad goals or acceptations of the superordinate system. Accordingly, changes in the value system resident within the superordinate social system can become a cause of cultural change within organisations and of change in the manner in which the organisation relates to society. LT would suggest that social disclosure could be used to narrow the legitimacy 'gap' between how the organisation wishes to be perceived and how it actually is (Lindblom, 1994). Maurer (1971) discussed legitimacy in terms of 'justification' (of certain behaviours, presumably those ostensibly inconsistent with the values resident within the 'superordinate social system' or amongst the 'relevant publics') whilst Suchman (1995) described it in terms of 'manipulation' and 'garnering societal support'.

Similarly, Guthrie & Parker (1989) described it thus: "Legitimacy theory posits that corporate disclosure reacts to environmental factors (economic, social, political) and that disclosures legitimise actions... This theory is based upon the notion that business operates in society via a social contract where it agrees to perform various socially desired actions in return for approval of its objectives, other rewards and ultimate survival. It therefore needs to disclose enough social information for society to assess whether [or not] it is a good corporate citizen." (Guthrie & Parker, 1989: 344). They continue, "This theory is largely reactive in nature in that it suggests that organisations aim to produce congruence between the social values inherent (or implied) in their activities and societal norms. (ibid)

Similarly, "[an] organization seeks legitimacy, and this "state" of legitimacy will change over time thereby requiring ongoing modifications to the entity's operating and/or reporting policies. If the organization does not appear to operate within the bounds of what the particular society considers is appropriate then its ability to continue operating may be affected adversely. Legitimacy theory postulates that the organization must appear to consider not only the rights of its investors, but also those of the public at large." (Deegan & Rankin, 1996: 54). Furthermore, the use of social disclosure is important as it can be a mechanism by which to, "allay social pressure or [to] legitimate corporate operations" (Deegan & Rankin, 1997: 568) or "shape community perceptions about the organization's operations, the aim being to maintain or establish the view that the organization's operations are in accord with community expectations (that is, in accord with the terms of the "social contract")." (ibid. p. 579)

It can thus be argued that LT presupposes a relationship between business and society that is at best mutually suspicious in nature, and at worst, adversarial. Why would reputation management be necessary if society was generally supportive of capital and tended to give it the benefit of any doubt? Abbott & Monsen (1979) argued that increased social disclosure is in part precipitated by a decrease in public confidence in business (see also Patten, 1995). "The modern, especially large corporation is subject to pressure from both the public in general and government agencies..." (Abbott & Monsen, 1979: 508).

The supposition that organisations face a continual struggle to maintain their legitimacy is evidence for the relationship of mistrust. Deegan & Rankin (1996) suggested that, "If the organization cannot justify its continued operation, then in a sense the community may revoke its "contract" to continue its operations." (Deegan & Rankin, 1996: 54). Hence, the final sanction for illegitimacy is the denial of the right to exist (where society or the community is in the position to grant or withhold such a right). Deegan & Rankin continued, "This [revocation of the contract] may occur through consumers reducing or eliminating the demand for the products of the business, factor suppliers eliminating the supply of labour and financial capital to the business, or constituents lobbying government for increased taxes, fines or laws to prohibit those actions which do not conform with the expectations of the community." (Deegan & Rankin, 1996: 54)

Lindblom (1994), Deegan & Rankin (1996), and Brown & Deegan (1998) drew a distinction between the state of legitimacy and the process of legitimation. "Legitimacy itself can be considered to be a condition or status." (Brown & Deegan, 1998: 23). It is clearly possible for an organisation to either enjoy or not enjoy such a state of being. The opening of a legitimacy gap, however, requires legitimation, which is "a process which organisations can undertake (perhaps through particular disclosure strategies) to take them to this state [of legitimacy]." (ibid. p. 23). Lindblom (1994) argued that, "much of the voluntary social disclosure issued by corporations may be viewed as efforts at legitimation, i.e., efforts to achieve the status of legitimacy" (Lindblom, 1994: 12). She then proceeded to identify four strategies by which this process can be facilitated. A corporation may use any combination of the four. They are (descriptions are verbatim, Lindblom, 1994: 13-16):

1. bringing the organisation's outputs, methods and goals into conformity with popular views of what is appropriate... making internal adjustments to close the legitimacy gap;
2. demonstrate the appropriateness of the output, methods and goals to the public through education and information.. no adjustment... [of these output, methods and goals] is appropriate... only a change in [societal] perception;
3. identifying organisational output, methods and goals with the popular perception of what is appropriate without any attempt at actual conformity... [such as by] inviting persons of high legitimate status to serve on boards of directors;
4. attempts to bring popular views into conformity with organisational output, methods and goals. In this situation, [CSR] would be directed toward bringing relevant publics' expectations in line with corporate... [activities or values].

Lindblom is saying that legitimacy gaps can be narrowed and closed by a number of means. The organisation can actually change itself to comply with societal norms (#1), it can persuade the public of its legitimacy without the need to change internally (#2), it can manoeuvre itself to appear to be conforming to societal norms without actually doing so, such as by providing the public with signals of legitimacy which do not reflect the internal reality (#3), or it can attempt to change societal opinion itself to bring it into line with the company's values (#4 and presumably the most ambitious of the legitimation strategies). It has been noted elsewhere that disclosure can be used as a vehicle in the pursuit of any of these strategies. "Many major CSR initiatives can be traced back to one or more of Lindblom's... legitimation strategies... for example the general tendency for CSR to emphasise the positive points of organisational behaviour rather than the negative..." (Gray, *et al.* 1996: 47).

4.4 A review of previous empirical LT studies

Types of LT paper

The theme of legitimacy has been prominent in the social accounting literature since it emerged as an area of accounting research in the 1970s (see for example Shocker and Sethi, 1974). It was when empirical studies were first undertaken, however, that LT emerged as a possible explanation for cross-sectional and longitudinal variability in voluntary social disclosure.

The literature in LT falls into two broad categories:

1. theoretical and philosophical discussions about corporate legitimacy, some of which is undertaken in the context of social contractarian thinking (e.g. Donaldson & Dunfee, 1994) and some in the context of stakeholder theory (e.g. Suchman, 1995). Such discussions are usually found in the American literature, particularly in *Academy of Management Review* and the *Academy of Management Journal*;
2. empirical CSR studies wherein LT is offered as an explanation of variability in social disclosure volumes (see for example, Patten, 1992; Guthrie & Parker, 1989). The majority of such articles are published in the accounting literature, e.g. *British Accounting Review*, the *Accounting, Auditing and Accountability Journal, Accounting and Business Research, Accounting, Organisations and Society* and *Accounting Forum*.

It is this second category that is the most populated and is the focus of this part of the thesis. It is important to review previous methods of 'testing for' LT before the method employed in this study is described (Chapters 5 and 6).

Whilst a complete review of all previous papers in which legitimacy theory was examined empirically would be beyond the scope of this thesis, the sample included in this section provides a suitable underpinning for the development of the method used in this research (in chapters 5 and 6 of this thesis). The papers reported on below comprise a coherent set of studies that share some similarities (particularly their general agreement on defining LT), but which differ in the ways in which method is designed to investigate LT. The conclusions reached by the papers are broadly similar, with the exception of Guthrie & Parker, 1989.

Hogner, 1982. Eight decades of CSR at US Steel

Hogner's paper, as one of the earliest in the field, is useful as a historical review. His literature review lists Kreps (1940) as possibly the first paper to mention corporate social accounting and his other references (necessarily) are mainly those relevant at the time from the 1960s and 1970s. He rooted his study in Preston & Post's (1975) 'interpenetrating systems' model – a variant on the stakeholder understanding suggesting the active participation of both business and society in a reciprocal accountability relationship.

The sample in this study was a full set of corporate reports for US Steel (one of the USA's largest firms, hence size effects might be a factor) from 1901 to 1980. The reference to LT in the study is oblique: "In this study, corporate social accounting is viewed as an indicator of the changing institutional structure of business in response to changing societal demands." (Hogner, 1982: 244). His observation that rudimentary social disclosures were made as early as the first decade of the century, and had featured episodically ever since was, he argued, a "partial verification of the thesis… that corporate social accounting will increase or decrease depending upon the interpenetration of corporate and societal forces and behaviors [sic – US spelling]" (ibid. p. 245). In this formulation, his hypothesis accords with what later became a legitimacy understanding of the business-society relationship.

Social disclosure was defined as "reporting of extra-market activities, i.e. those activities not directly related to the production of the firm's market goods." (ibid. p. 245). His categories of disclosure reflected their content and it is an interesting historical example of how content of social disclosure has changed over the decades. In the early years of the company, for example, a prominent theme in social disclosure was the acreage made available by the company upon which employees were granted the right to grow vegetables – presumably an important employee benefit at the time. Other themes such as sanitation, help with mortgages for employees, dwellings built for workers, safety, sex composition of workforce, philanthropic contributions and pollution were reported as being disclosed in certain time periods only. No single theme was disclosed throughout the 80 years of the study. The study also found that not all disclosures reported were positive or 'good news' in content.

This study did not record volume of social disclosure. Content analysis led to the construction of tables detailing the quantitative information disclosed. For example, the figures for housing expenditure by the company (for employees' benefit) and the number of acres made available for vegetable growing were recorded. Hence, it did not adopt the volume related content analysis methods adopted by later studies and, it could be argued, is little more than a qualitatively-enriched frequency-based analysis of social disclosure (it is more similar to the Ernst & Ernst (1978) studies in this regard, although these are not referenced in the paper).

This paper's place as a possible early contribution to the LT literature rests upon its recognition that, "institutional behavior [sic]… depends on a matrix of societal forces," (ibid. p. 249) and that, "changes in reporting practices reflect a shifting of the matrix of forces affecting corporate behaviour, resulting in a concentration on the reporting of activities that society is perceived as valuing most at the time." (ibid. p. 249). Examples of this changing disclosure pattern were given. "US Steel hired women in the 1900s as well as in 1950. But it was more important that people know how many women were hired during World War II." (ibid. p. 249).

Social disclosure, the study concluded, was a "practice, dating from the turn of the century, which defines and illuminates the boundaries between the interpenetrating systems of business and the larger society." (ibid. p. 250).

Guthrie & Parker, 1989. A single company longitudinal study

In one of the first papers to have claimed to have formulated a test for LT, Guthrie & Parker proposed the notion that CSR is a 'contemporary phenomenon', i.e. that it has not always been a feature of corporate communications and that it may rise and fall over time. However, through the citation of two previous substantial longitudinal studies (Lewis, *et al*, 1984 and Hogner, 1982), they drew attention to the observation that CSR has been present in corporate reports at various episodes in the past. The second stated objective of the paper was to, "discover whether the pursuit of corporate legitimacy appears to have been a primary rationale for disclosures." (Guthrie & Parker, 1989: 343).

The paper begins by drawing upon the method and conclusions from Hogner's (1982) review of the history of social disclosure at US Steel. The Broken Hill Proprietary company (BHP – the organisation that is the subject of the paper) is then introduced, whose appropriateness rests upon the fact that it is one of Australia's largest and oldest companies (incorporated in 1885). BHP is a mining and manufacturing company.

The study analysed, by content analysis, the social content of 'reports to shareholders' (annual reports) for 100 years from 1885 onwards. Half-yearly (interim) reports were also analysed. The use of only annual reports was qualified: "it can be argued that the annual report is the one communication medium to outside parties over which corporate management has complete editorial control." (Guthrie & Parker, 1989: 344). The second reason for selecting only corporate reports was to allow results to be compared with Hogner (1982).

Their interrogation instrument was derived from Guthrie (1983) and resolved six CSR categories: environment, energy (separate from environment), human resources, products, community involvement and 'others'. Summed page proportions were used as the unit of analysis without justification of the method or comparison with others. Recognising the risk of inaccuracy in their method, however, the authors made the comment that, "the amount of CSR is not intended to be exact but to provide an indication of trend within reasonable bounds." (p. 344). This is probably meant to be a concession to the inherent 'muddiness' of social data in corporate reports (see Chapter 6).

The study found a variety of longitudinal patterns both in the total volume of disclosure and in the disaggregated categories. A detailed description of these findings is unnecessary to this review. The authors feel able, however, to contend that the findings produce 'similar observations' to those of US Steel (Hogner, 1982) by which is meant that disclosure occurs by category in episodes through history, with some being particularly associated with particular time periods. They noted, for example, that there was no significant environmental disclosure prior to 1960 and that energy disclosure was centred around two time periods – around the turn of the nineteenth century and in the 1970s and early 1980s.

Employee disclosure was the most voluminous of all categories by some distance, having featured prominently throughout almost all of the company's history. Community involvement disclosure was second, but some way behind employee disclosure. Again, community disclosure was present throughout most of the time period analysed, excepting the period from the mid 1940s to about 1970. The one time in which community disclosure exceeded one page was in the early 1940s.

In seeking to use that data to provide comment on the extent to which legitimacy theory might have caused the variations in disclosure, and bearing in mind their comments about LT being reactive to external influences, the authors constructed a database of 'all major events' relating to the company (BHP). "The longitudinal BHP disclosure frequency graphs were then related to significant concurrent events which occurred in the history of BHP and its immediate environment." (p. 347). Their method relied upon finding, "a majority of peak disclosures associated with relevant events," (p. 347) in order to provide evidence of a 'legitimising explanation'. This is the basis of Guthrie & Parker's method: conformance between disclosure volume by category with external events pertaining to that category. Evidence for LT is provided if there is a high degree of incidence between the two; contraindication would be provided if there was not.

The paper proceeded to examine the findings by category, pointing out where agreement existed between disclosure coincident with external influence, and, more frequently, where no concurrence existed. Having failed to find a high degree of agreement, the authors concluded that, "the evidence in this historical case study has failed to confirm legitimacy theory as an explanation of BHP's CSR over time." (p. 350). Furthermore, "numbers of significant events were not reported and at other times reporting occurred when no extraordinary events appeared to have occurred." (p. 351).

This paper is particularly noteworthy because it attempted to formulate a model of LT that suggested that social disclosure should respond to (and therefore reflect in disclosure volume) changes in the environment that may be perceived as a threat to legitimacy. In this regard, this paper went some way to offering a method that would be repeatable in other contexts.

Patten, 1992. Responses to the 1989 Alaskan oil spill

Patten saw an opportunity to test for LT effects in social and environmental disclosure when the 1989 Alaskan oil spill presented the oil industry with the possible opening-up of a legitimacy gap (although Patten did not use this term). The environmental impact of the oil spill had been significant and at the time of the paper, a number of social effects were also still being experienced in the region, mainly deriving from the economic effects on local communities. Patten reported that 11 million gallons of crude oil was discharged into the sea as a result of the accident and Exxon's liability had amounted to (up to that point) $2 billion.

Patten noted that in its subsequent annual report, Exxon substantially increased its social and environmental disclosure, reporting that 3.5 pages were devoted to the Exxon Valdez incident alone and a further 2.4 pages on environmental disclosure not related to the oil spill. The 1988 annual report had contained just 0.6 pages of environmental disclosure in total. The author then (quite correctly) pointed out that this finding alone suggests a strong legitimacy-based explanation for environmental disclosure in the case of Exxon.

It was argued, however, that an additional test for LT might be possible by examining the environmental disclosures made over the time period by other petrochemical companies. This was because, he argued, there had been, "a general impact of the spill on the attitude of the public towards petroleum firms." (Patten, 1992: 473). He continued, "If indeed the Alaskan oil spill has resulted in a threat to the legitimacy of the petroleum industry, legitimacy theory suggests that its companies should respond with increased environmental disclosures in their annual reports." (ibid).

Patten's sample consisted of 'before and after' (1988 and 1989) annual reports of 21 of the 23 public companies in the Fortune 500 petroleum segment, excluding Exxon from the sample. His definition of environmental disclosure, consistent with other studies, was fairly permissive and data was captured into seven categories of environmental information. Data counting was by summed page proportions, resolved to 1/100th of a page.

Data analysis was by t-test (by year) and a regression analysis to test for size effects. The mean environmental disclosure (all companies in sample) was 0.61 pages in 1988 and 1.9 in 1989 (albeit with sizeable standard deviations). A test separating disclosure into financial and non-financial showed a similar pattern (non financial environmental disclosure rose from mean = 0.46 to 1.55 pages; for financial disclosure, a rise from mean = 0.15 to 0.35). The effect on disclosure of membership of the Alyeska consortium (which was the owner of an installation in Alaska thought by some to be partly responsible for the oil spill) was also tested. It was found that membership of the Alyeska consortium was associated with a higher than mean increase in environmental disclosure over the year in question.

Patten concluded, "The increased environmental disclosures … can be interpreted as evidence in support of legitimacy theory. It appears that for environmental disclosures, threats to a firm's legitimacy do entice a firm to include more social responsibility information in its annual report." (ibid. p. 475).

Patten's study is one of the most cited studies in LT. Its 'appeal' lies in the intuitive understanding of LT and the strength of the test. Of course, event studies like this rely upon there being an event which not only represents a threat to legitimacy but also which can be clearly circumscribed within a category of social information.

Tilt, 1994. Pressure groups and social information needs

This paper begins with a review and summary of the different paradigms with which researchers approach CSR studies. Tilt lists the functionalist, interpretative and radical paradigms as being the prominent ones with regard to previous CSR research. It is then argued that all three paradigms allow for the influence of pressure groups on informing and influencing CSR behaviour. The interpretative paradigm is adopted for the study because, the author argued, it is an exploratory study (presumably meaning that she was not 'campaigning' for a change).

In discussing the issue of how society influences the decision to report on social and environmental matters, Tilt suggested that one way of so doing is through lobbying pressure groups. Hence, the identification of the 'general public' as a stakeholder was too monolithic to be meaningful. "One possibility," she argued, "is that pressure groups act on behalf of society…" (ibid. p. 50) to bring pressure to bear on corporations on social and environmental issues.

Although the paper does not discuss LT as the (or even a) theoretical basis for the research, it is relevant to this thesis nevertheless because it helps to inform the hypotheses (see chapter 5) and illuminates our understanding of the relationship between opinion-expression in society and social disclosure (although the author does suggest her research resides in the interpretative paradigm in which, curiously, she subsumes LT).

All pressure groups in Australia were included in the sample (146 organisations) although some were later excluded on technical grounds. 80.8 % of those examined were found in some way to be related to environmental campaigning. The gathering of information on pressure groups was by questionnaire. The questions generally related to what information pressure groups were seeking in corporate communications and the extent to which they felt that social and environmental disclosures were credible. Fifty-nine useable questionnaires were returned. Social disclosure data was not captured in this study although it sought to obtain the pressure groups' perceptions of CSR from a range of media (in addition to corporate reports) including interim statements, booklets about social activities; adverts and product labelling. It was an examination into the extent to which pressure groups found CSR to be adequate and useful.

The study found that pressure groups received what could be described as social information via a number of sources in addition to corporate reports and that only 18% of pressure groups considered the current (as at the early 1990s) level of corporate social disclosure to be sufficient. Advertisements were the most commonly-received form of corporate communication although annual reports were also studied by a 'substantial' number of pressure groups. The usefulness of the corporate report as a vehicle for CSR was tested by Tilt. She found that "when asked to choose the preferred medium for disclosing social information, the annual report was ranked first by 61% of respondents." (ibid. p. 57), suggesting that annual report-only studies have some validity insofar as communication with pressure groups is concerned.

Tilt was able to demonstrate three propositions: that pressure groups are a user group of CSR; that they do attempt to exert influence over companies' disclosure practices and that they (pressure groups) believe that legislation or standards requiring minimum levels of disclosure should be introduced. Other hypotheses were tested for using statistical methods of analysis.

In concluding, it is pointed out that 19% of respondents felt that the current level of CSR was sufficient. The majority of pressure groups, therefore, sought increased disclosure.

Deegan & Gordon, 1996. A longitudinal and cross-sectional Australian study

This paper reviews the history of social disclosure studies for Australian companies and briefly discusses the literature on previous explanations for CSR. It attempts, in the first instance, to improve and update the findings of Guthrie & Parker (1990). Updating, in this context, meant analysing 1991 corporate reports compared to 1983, and widening the sample (197 corporate reports instead of 50). They also sought to examine the message being conveyed in environmental reporting using the 'good news'/'bad news' measure (Guthrie & Parker, 1990 found an absence of bad news). It was also explained that a legitimisation perspective would be taken to explain changes in environmental disclosures.

An arbitrary method was used to select companies for the sample (depending upon the number of reports in an Australian archive). Data capture was by content analysis of environmental disclosure and was categorised as positive (news) or negative. Word count was used as the unit of measurement. Seventy-one of the 197 corporate reports analysed were found to contain environmental information and the authors' assessment of the good news/bad news interrogation was that there was strong support for the "contention that firms will disclose 'positive' news but will suppress 'negative' news." (Deegan & Gordon, 1996: 190).

In a separate sample, 25 companies were randomly selected from the previously randomly selected 197. The annual reports of these companies for the years 1980, 1985, 1988 and 1991 were analysed by content analysis (word count again) in order to test for longitudinal trend and to facilitate a comparison between disclosure volumes in these years and environmental group membership (these being the years that were available to the authors for memberships). The belief that environmental group membership is reflective of societal environmental opinion was described as, "an untested but reasonable assumption" (ibid. p. 192). The two variables are plotted together on the same graph against time (the years mentioned above) to show a high degree of agreement. The growth in both environmental disclosure and environmental group membership was slow until 1988. The graph shows a marked inflection at this point after which both had increased markedly by 1991.

The paper then proceeded to examine industry effects. It is argued that the motivation to increase environmental disclosure will be linked to the intensity of "attention an industry is receiving from environmental lobby groups." (ibid. p. 194). Because not all industries receive equal attention from the lobby groups, it follows that environmental disclosure should be dissimilar in a cross-sectoral analysis. A measure of environmental sensitivity is derived, constructed in part on the basis of data gathered from companies themselves on criticism by environmental groups in the previous 5 years. The 'top 10' most environmentally-sensitive industries, are, interestingly, not dissimilar from an intuitive guess at what they may have been (mining, chemicals, oil/gas, transport, etc. featuring prominently in the list). Questionnaire data was also included in the analysis.

Associations between disclosure and sensitivity were drawn using parametric and non-parametric tests. The two approaches were found to yield similar conclusions. Size effects were tested for and found (consistent with other studies, see for example Cowen, *et al.*, 1987; Trotman & Bradley, 1981; Adams, Hill & Roberts, 1998).

The paper concludes by reviewing its separate but related investigations and suggests that several findings are apparent: the volume of environmental disclosure in Australian companies is low by international standards (compared to, for example, the

UK and US); environmental statements tend to be self-laudatory and positive in nature; environmental disclosures have increased in volume over time (flagging particularly the increase between 1988 and 1991); such increases accord with commensurate increases in environmental group membership; there is a strong correlation between industry environmental sensitivity and environmental disclosure, and, size effects are evident amongst those more environmentally-sensitive industries with higher levels of disclosure.

Deegan & Rankin, 1996. Environmental disclosure in companies prosecuted under EPA

This paper begins by discussing the view that, because the decision to disclose environmental information is voluntary, companies may, as noted above, "elect to use environmental disclosures in a self-laudatory manner." (Deegan & Rankin, 1996: 51). That is, they may be selective about what environmental information to disclose, electing to disclose 'good news' so as to cultivate a favourable corporate image.

In order to test whether, and the extent to which, companies disclose meaningful environmental information, this study investigated, "the environmental reporting practices of a sample of 20 Australian companies which were subject to successful prosecution by the New South Wales, and Victorian Environmental Protection Authorities (EPA), during the period 1990-1993. That is, we are investigating the environmental reporting practices of firms which are known, *ex ante*, to have bad news available to report." (ibid). It also investigated whether there were any systematic variations in environmental reporting practices around the time of the proven EPA prosecutions. In this regard, it is similar to Patten, 1992, whose sample also had, *ex ante*, a reason to increase their environmental disclosure volumes.

The test for LT in this paper derives from the contention that the sample consists of a set of companies with a demonstrable legitimacy gap to close (Lindblom, 1994 – this author's interpretation). "We utilize legitimacy theory in an attempt to explain any systematic changes in corporate environmental disclosure policies around the time of proven environmental prosecutions [i.e. a legitimacy gap]" (ibid. p. 53). They continued, "Specifically, we investigate whether, at a time when the social performance and integrity of the firm may be under scrutiny (perhaps as a result of the proven EPA prosecutions), the firm will provide information to the users of the accounts to justify, or legitimize, the firm's continued operation within that society." (ibid)

The 20 companies' corporate reports (or their parent if a subsidiary) were analysed for the years 1990-93 and a control sample, matching industry and size but which were not prosecuted under the EPA, was also analysed. The entire annual reports were analysed for any disclosures pertaining to the organizations' interaction with the environment. Word count was used as the unit of measurement and a positive/negative query was included, where, "Positive disclosures are defined as information which presents the company as operating in harmony with the environment. Negative disclosures are defined as disclosures that present the company as operating to the detriment of the natural environment." (ibid. p. 56)

Eighteen of the 20 companies were found to disclose environmental information during the period of the study and the news communicated was overwhelmingly positive: "firms will disclose "positive" news, but will suppress "negative" news... even when the firms did have "negative" news to report" (ibid. p. 57). Furthermore, they found that there was, "a significant difference... in the total disclosures [before and after the EPA prosecution], with the disclosures being greater in the years of prosecution." (ibid. p. 58). This, they argued, "is consistent with a view that the companies may increase their disclosures to offset, at least in part, the effects of any EPA prosecution." (ibid.). They also found that the sample firms which were prosecuted by the EPA disclosed 'significantly' more environmental information than those which had not been prosecuted successfully during the period covered by the study.

They proceed, on the basis of these findings, to show that when a successful EPA prosecution is brought, "It would appear that the legitimacy of the firm is deemed, by management, to be in question and, as a reaction to this perception, a process of legitimation is undertaken. In the annual reports examined in this study the firms appear to be aiming for legitimacy by deflecting attention from the proven fines, which typically are not mentioned within the annual reports, and towards the positive environmental policies the firm is adopting." (ibid: 59).

The findings, the authors argue, are, "consistent with a legitimation motive." (ibid. p. 62). This is based on the finding that environmental disclosure seems to respond (in the sample) to a legitimacy gap and that the control sample felt no such need (having no legitimacy gap in the area of environmental prosecution to close). The supposition that environmental legitimacy gaps may be more easily identifiable than gaps in other areas of social concern may be one reason for such apparently clear results in this case.

Adams, Hill & Roberts, 1998. A trans-European multivariate study

This paper sought to identify some of the sources of variations in social reporting. By selecting and analysing 150 corporate reports, the authors identified differences by size (by turnover), industry grouping, country of origin and 'sensitivity' (drawing on Cowen *et al*, 1987 – a measure of proximity to end user). Three categories of social disclosure were analysed - environmental, employee issues and 'ethical' reporting where the latter category was defined as, "any information, except employee or environmental, that was concerned directly or indirectly with giving an impression of corporate ethical values." (Adams, *et al.* 1998: 4).

Sample selection was the top 25 companies in each of six European countries under analysis in 1993. Data collection was by content analysis using three interrogations of each disclosure: number of items disclosed, a quantitative and/or financial interrogation of the data and an estimation of total page proportions per category. Although the paper argues for an increased resolution of the qualitative nature of content, it concedes that its analysis concerns only the quantity of disclosures (ibid. p. 6).

This paper analyses its findings using statistical techniques (particularly relying on analysis of variance – ANOVA). The findings included a significant difference in disclosure levels between 'sensitive' and 'less-sensitive' industries, providing some reinforcement to the view that disclosure is partly a function of visibility and proximity to the end user. Environmental disclosure was found to vary widely: from a mean of 0.21 pages in the service-retail industries to 1.31 pages in the raw materials sector. In addition to volume, data was captured by number of items disclosed within each category. Similar variations were found in items disclosed to volumes of disclosure. No significant differences in 'ethical' disclosure was found with regard to industry membership. Size was found to relate strongly to all measures of disclosure and differences between countries were also noted.

The paper concludes that legitimacy theory may be a partial cause of variability of social disclosure in the sample studied. "With regard to disclosures concerning employment issues," the paper argues, "it may be that some industries attempt to mitigate against, for example: pressures regarding the nature of the employment contract...trade union activity; and media attention [which may all be linked to changing opinion in society]. This discussion of possible reasons for a size-industry-disclosure effect on corporate social disclosure supports the legitimacy theory of corporate social disclosure patterns." (ibid. p. 16). When observing disclosure patterns across countries, however, the findings are less supportive of LT. "...when it comes to identifying the reasons for differences across countries, the situation is more complex, and legitimacy theory alone appears to be inadequate in explaining them." (ibid).

Although this paper offers a coherent set of tests for LT, it could be argued that its definition of LT could be made more explicit in order to be sure that legitimacy-driven effects in disclosure could be clearly identified. Its broad cross-sectional sample provides a snapshot of the state of disclosure in the one year of the study but it is unable to provide comment on any longitudinal trend.

Brown & Deegan, 1998. A dual test of media agenda setting theory and legitimacy theory

This paper set out to test for LT by examining the extent to which companies responded to print media attention with environmental disclosures. Described as a 'dual test of media agenda setting theory [MAST] and legitimacy theory' the study sought to consider "whether corporate management react to changes in the extent of media attention given to their industry's environmental impact, with the reaction taking the form of corresponding changes in the level of corporate environmental disclosures made within the annual report." (Brown & Deegan, 1998: 21). In this regard, it is similar in its method to Deegan & Gordon (1996) except the proxy for societal concern is taken to be media attention rather than memberships of environmental lobbying organisations (see also Tilt, 1994).

In redefining legitimacy theory as part of the paper's literature review, Brown & Deegan cited a number of quotations from corporate managers which, they claimed, indicated recognition of a social contract by corporates. The use of the phrase 'public licence to operate' in the environmental statement by WMC Ltd (a large Australian company) is particularly noted for its apparent recognition of society's right to withdraw support from activities if such support is not earned. They proceeded to differentiate between legitimacy and legitimation. "Legitimacy itself can be considered to be a condition or status. Legitimation... is a process which organisations can undertake (perhaps through particular disclosure strategies) to take them to this state." (ibid. p. 23). Some previous studies in legitimacy theory were then reviewed.

The novel contribution of this paper was its borrowing of the idea of media agenda-setting and applying it to social and environmental disclosure studies. MAST, "posits a relationship between the relative emphasis given by the media to various topics and the degree of salience these topics have for the general public." (ibid. p. 25)." The media, they argued, was able to cause changes in societal opinion by affecting proprietorial or editorial policy decisions on which issues to highlight and discuss. 'Obtrusive' and 'unobtrusive' issues were distinguished between. Obtrusive issues were those of which people had personal experience whilst unobtrusive issues were those that were remote (from Zucker, 1978). The natural environment was identified as an unobtrusive issue – one with which the majority have little direct experience and whose views of the same are largely influenced (or maybe even determined) by the media.

Two hypotheses were explored in the paper concerning LT and media agenda setting theory. The agenda set by the media was seen as being a necessary prerequisite for (and cause of) any change in societal opinion. "It can be argued that if there is increased community concern about environmental issues, driven by increased media attention, then the increased concern should be matched by increased [environmental] disclosures (if, consistent with legitimacy theory, disclosure policies are a function of community concern)" (ibid. p. 26). Accordingly, the hypotheses were framed so as to explore linkages between the level of print media coverage of an industry's environmental situation and the level of disclosures made, presumably in response. The paper also sought to investigate whether negative (i.e. critical of the industry) print media coverage stimulated increased environmental disclosure in the industries criticised (drawing on Patten's (1992) findings). The fact and direction of causality is not questioned in the paper except to cite a study (Griffin, 1994) in which a challenge to the supposition was made.

The nature of the hypotheses necessitated a longitudinal element in addition to cross-sectionality to test for industry effects. The years studied were 1981/2, 1984/5, 1987/8, 1990/1, 1993/4. Key words pertaining to the environment were selected for interrogation of a CD based record of Australian media publications (ABIX). Captured media entries were examined for positive/negative good news or bad news quality in order to make the testing of the second hypothesis possible. The quantitative measure was number of articles by industry. The dependent variable (environmental disclosure in corporate reports) was captured by word count for the same years as the years in which media data was captured. The companies selected for analysis within each industry were those that had annual reports lodged in a particular archive (the AGSM). The limitation of this is acknowledged but the authors say that over 50% of each industry's members were captured from the archive (typically between one and four companies per sector – nine sectors in total).

The results noted that both environmental disclosure and media reporting of environmental issues increased over the time period in question (this is consistent with other studies showing an increase in environmental disclosure over time – see for example Gray, *et al.* 1996 and Deegan & Gordon, 1996). It was reported that six of the nine industries showed a significant correlation between the levels of media attention and the quantity of environmental disclosures (at a significance level of 0.1 – somewhat higher than the more usual 0.05, and this employing a non-parametric Spearman rank test). They concluded that hypothesis 1 (that media exposure and environmental disclosure will be associated) is supported. Hypothesis 2 (that environmental disclosure will respond to bad news media exposure) was less supported. Five of the nine sectors showed statistically significant levels of response to negative media coverage. Limitations on the overall significance of the findings is conceded given the sample size (particularly with regard to the non-consecutive and short longitudinal sample). The fact that lag effects were not tested for (which would not have been possible anyway given the non-consecutive years, unless a crude attempt was made to do so using the non-linear time data) was identified as a possible weakness.

Limitations notwithstanding, the authors are able to conclude that the six sectors that exhibited responsiveness to the media agenda are, in so doing, demonstrating a "legitimation motive" (ibid. p. 33). Similarly, for hypothesis 2, they concluded that a legitimation motive was evident only in those five sectors that showed responsiveness to bad news media coverage (presumably conceding that a legitimation motive was not observable in the other four).

Insofar as this study attempts to advance the empirical discussion pertaining to LT, it is valuable. The extent to which media exposure leads, lags, is synchronous with or is completely unrelated to societal opinion is, however, a substantial question in this context that is not discussed in any detail in the paper. The strength of Brown & Deegan's empirical instrument rests upon the premise that media attention is a semi-accurate form of proxy for societal concern. This must be accepted for the conclusions to hold any validity

Clarke & Gibson-Sweet, 1999. FTSE 100 companies in 1997.
This paper is one of the few studies in this area to have been published outwith the accounting literature (in the ethics literature in fact, although it draws most of its references from the major social accounting journals). It briefly reviews a sample of the literature on LT, drawing on a small number of sources from the ethics journals.

Its stated objective is to, "provide more information about whether and how CSR is being used as a legitimation tool by reviewing voluntary reporting by the top 100 UK companies in two areas, community involvement and environmental issues." (Clarke & Gibson-Sweet, 1999: 7). The authors argue that companies operating in industries with a "high public profile will have to pay the greatest attention to community relations [thus becoming manifest in higher community disclosures]." (ibid: 7). This belief seems to be based on *a priori* assumptions about the nature of LT rather than on any rigorous argument (which is elusive in this paper), although it may nevertheless be a reasonable assumption.

Their observations on testing for LT using environmental data are more defensible, however. "It is hypothesised," they argue, "that companies operating in sectors that have a high environmental impact will use environmental disclosures... to manage the legitimacy and reputation problems that arise because of the perceived damaging impact of their operations." (ibid. p. 7). In this regard, they concur with the findings of Patten (1992) and others. The liability to criticism renders more likely the disclosure of information (in this case environmental) to reduce such criticism.

Data was captured on community and environmental disclosures from 95 of the corporate reports of the 1997 Times Top 100 UK companies. The paper does not enter into a review of previous methods of content analysis and adopts one based on 'mentioned' or 'not mentioned' thus giving no measure of volume or the quality of content.

The proximity to end user measure (Adams, *et al.* 1998; Waddock & Graves, 1997) was employed as a proxy for public profile. This framework suggests that companies that deal with retail consumers will be better known publicly than those that do not. The paper does not enter into a detailed discussion on the criteria used for selection into 'nearer-to' or 'further-from' but selects its three categories (no link with final consumer; known brand sold to consumer; direct selling relationship with final consumer) in a way which could be defended assuming the authors were in possession of the product portfolios of each company in the sample.

The paper found that 'only mention of CCI' (corporate charitable involvement) in annual reports increased as the company became nearer to the final consumer whilst the opposite was true for 'only mentions environment'. 'Mentions both' (CCI and environment) did not show any meaningful change with proximity to end user (50% for 'no link'; 65% for 'known brand' and 59% for 'direct selling relationship').

The paper concedes that, "the methodology [sic] used in this paper only provides a very limited insight into the issues raised..." (ibid. p 11). The author of this thesis agrees.

Wilmhurst & Frost, 2000. Environmental disclosure by Australian companies
Wilmhurst & Frost (2000) centred their study around motives for disclosing specifically environmental information in Australian companies. They pointed out the importance of management perception in understanding external factors and on formulating responses in the form of environmental disclosure. This concept, a form of noise, may be an important reason why companies within similar environments differ in such matters.

In seeking to establish why companies voluntarily disclosed environmental information, the authors established a research instrument involving mailing the chief financial officers of a sample taken from the Australian top 500 listed companies in 1994-5. Industry sectors were selected on the basis that it was believed they would have more reason to disclose environmental information than some others (described as 'environmentally sensitive industries'). The sectors selected were chemical, mining and resources; oil, gas and petroleum; transport and tourism; manufacturing; construction; food and household (note that it could be readily argued that these sectors are not equally environmentally-sensitive). Basing their selection on Deegan & Gordon's (1996) assignment of Likert scale values to environmental sensitivity, Wilmhurst & Frost selected their sample based on a mean score of 3.4 in the hope that this would capture those industries considered to be the most environmentally sensitive.

The 1995 corporate reports of the 62 companies who responded to a questionnaire were analysed using word count of environmental disclosure. The questionnaire asked respondents to rate the importance of 11 motivations for disclosing environmental information. They found 'shareholder/investor rights to information' to be the most popular motivation, followed by 'to meet legal obligations' in second place (apparently in response to an increase in environmental legislation in Australia). 'Community concerns' with operations was rated the third most popular motivation whilst 'environmental lobby group concerns' was rated seventh of the eleven. The study then found statistically *some* significant correlations between stated motivations and volume of environmental disclosures. Hence, the study was not examining environmental disclosure on its own, but rather alongside stated (by FDs) motivations (the paper does not detail how such correlations are drawn). The study concludes by saying, "this study provides limited support for the applicability of legitimacy theory as an explanation to disclose environmental information [in corporate reports]. Results offer some support for the contention that management is responding to the perceived importance of stakeholders, for example, the greater the perceived importance of shareholders' information needs and community concerns, the higher the level of environmental disclosures that were observed in the annual report." (Wilmhurst & Frost, 2000: 22)

Deegan, Rankin & Voght, 2000. Disclosure responses to specific events.
This paper sought to examine legitimacy theory by analysing the responses of Australian firms to five specific 'disasters', three of which occurred in Australia and two of which did not. The method was based upon that employed by Patten (1992), that is, it used an event study approach to the five events.

'Disasters' are selected for the multiple event study because, "a major incident, such as an oil spill or gas explosion, can occur with little warning, often with high social, ecological and/or financial consequences for communities, business and/or the environment." (ibid. p. 106). It is argued that if LT holds, corporations will be expected to act in a certain way in response to the event. Local (i.e. Australian) response to non-Australian events would be expected because of media reporting and global communications. "Local [i.e. Australian] organisations will arguably need to distance themselves from the overseas incident, perhaps by disclosing how their safety, emergency response plans, and the like, are superior to those in place where the incident occurred. Alternatively, they may need to implement mechanisms (with associated disclosure thereof) to ensure a similar event does not occur within the particular country." (ibid.). A link is thus expected between a 'disaster' affecting a certain industry and some kind of disclosure-based response to the incident, even if the incident happened to a different company (in the same sector) and in another country.

Discreet events were selected for analysis. The 'before and after' method, borrowed from Patten (1992) meant that some continuing campaigns were excluded even though they may have social and environmental impact which may trigger legitimating disclosure. The five events were:

1. Union Carbide at Bhopal, India, 1984 – emission of methyl isocyanate;
2. Exxon Valdez oil spill, Alaska, USA, 1989;
3. Kirki oil spill, Western Australia, 1991;
4. Moura mine disaster, Queensland, Australia, 1994 – 11 dead in mining accident;
5. Iron Baron disaster, Tasmania, 1995 – manganese ore and 300 tonnes of fuel spilled.

In the first instance, the number of press articles relating to each incident was recorded from a sample of Australian papers following each incident (Bhopal precipitated 83 articles; Exxon Valdez, 49; Kirki, 8; Maura, 49 and Iron Baron, 70). It is then argued that each of the companies affected by the incidents will have reasons to make increased social disclosures in order to address and offset legitimacy problems precipitated by the incident. Three hypotheses were proposed, very similar in form to those employed by Brown & Deegan (1998). The first two concerned responses to the incidents (disclosure will increase as a result of... and the disclosure of *positive* news will increase as a result of...). Because not every incident was concerned solely with environmental threat, it was suggested that response would be sensitive to category, i.e. category of social disclosure will be the same as that most affected by the legitimacy-threatening event.

Companies were selected by affected sector from the Australian Stock Exchange only (even although two of the incidents did not occur on Australian land or territorial sea). Between 7 and 10 companies were selected for each incident, covering a period of four years in each case (two before the event and two after). Content analysis of annual reports was used for data collection. The unit of measurement was sentence count (a change from previous studies by Deegan - perhaps persuaded by Milne & Adler, 1999 who strongly argued for sentence counting).

Each incident was analysed for the type of social disclosure that would be needed to restore legitimacy if the affected companies chose so to do through voluntary disclosures. Five categories were employed: environment, health & safety, human resources (employees), community and 'other' which in this case was defined as information relating specifically to the incident in question. Hence, "a mention of oil recovery procedures would be considered to relate to an incident involving an oil leak." (ibid. p. 119).

Findings showed that in the earlier events (Bhopal was 1984, Exxon Valdez was 1989) disclosure was lower both before and after than in those incidents that occurred in the 1990s. With the exception of the Kirki incident, significant increases in relevant disclosure volumes were recorded 'after' when compared to the 'before' volumes. Hypothesis 2 (regarding the disclosure of positive news) was also confirmed although findings by previous studies (Hackston & Milne, 1996; Deegan & Rankin, 1996) that almost all disclosure is positive disclosure, renders this finding unsurprising (it is almost identical to hypothesis 1). A third hypothesis, suggesting the BHP's (Broken Hill Proprietary. Ltd) disclosure would rise faster than other companies in the sample (because it was associated with two of the incidents) was also confirmed.

The study, not surprisingly, concludes by suggesting that the findings are consistent with a legitimacy explanation of CSR. It is interesting because it showed that legitimacy-threatening effects can be felt by industry participants completely unrelated to the incident itself and in a completely different continent to where it occurred. The idea that industries might respond in concert to a perceived legitimacy threat is one of the themes that informed the sample selection for this thesis – see chapters 5 and 6.

Summary of key themes in previous empirical studies

The foregoing discussion of previous studies shows the range of different conceptions of legitimacy theory and a number of empirical instruments for exploring it. Any attempt to summarise a body of literature is susceptible to at least two vulnerabilities, *viz*, misunderstanding and misinterpretation of intended meaning and inadequacy of sampling (meaning that important studies may have been omitted whilst less important studies may have been included).

In order to make progress possible, however, four propositions are suggested. These are themes common, for the most part, to the previous studies.

Proposition 1: Corporate attitudes can be (at least in part) established by an examination of voluntary disclosures. There is little argument that voluntary disclosures have no meaning, and the semiotic understanding of narrative disclosure allows for the belief that disclosure is indicative of meaning and importance.

Proposition 2: Companies are concerned about their reputation. There is reason to believe that companies may wish to make self-justifying and/or explanatory disclosures in order to restore and/or maintain good reputation and legitimacy.

Proposition 3: Legitimacy theory is capable of hypothesis generation and empirical testing. 'Agreement' (however defined) between legitimacy gaps and corporate responses to such gaps can be taken to be indicative of a legitimacy-based explanation but need not be the only such explanation.

Proposition 4: Proxies can be used for changes in social opinion. Where direct observation and measurement of an external change in attitudes or opinion is not possible, it is allowable to establish proxies for the same. Examples of suitable proxies include defendable assumptions that a company's strategic position will in part determine its vulnerability to certain types of criticism and the use of lobby groups memberships (where the longitudinal change in lobby group membership may be indicative of society's overall concern over the area addressed by the lobby group).

In the next section, the issues surrounding proposition 4 are discussed. It is a necessary discussion prior to the formal discussion of hypotheses in Chapter 5.

4.5 Recording social opinion and the use of proxies

Measurement of social concern and proxies

Chapter 3 reviewed the most frequently discussed explanatory theories for CSR and it was evident from that discussion that there was little sense of theory closure, although there is perhaps some sense of convergence around legitimacy-based explanations. The discussion in this chapter has shown that although there is some agreement on defining legitimacy, methods for examining its various features are disparate and do not show agreement.

A number of themes are worthy of note on reviewing the previous empirical studies. There is general agreement that social and environmental disclosures can be used as a proxy for corporate response to changing opinions in society. There is less agreement on the extent to which changes in such reporting actually reflect changes in corporate culture or the attitudes of the corporates in question to social responsibility. It is probably safe to say that a change in reporting can be taken to record just that – there is no way to infer from this any underlying intent or change in corporate personality. Higher resolution of meaning or a richer qualitative analysis may go some way to informing this enquiry, but frequency-based or volume measures cannot.

Most previous studies have therefore taken the view that the 'testing of' LT provides a challenge to researchers to resolve two issues – how external legitimacy-threatening events will be measured and how company response (if that it be) is measured. The majority of previous studies have assumed that corporate response can be measured using some variant on content analysis of corporate communications (word count, page proportion count, present/not present, high/low and their variants) and this is discussed in some depth in Chapter 6 on method.

Whilst these issues are not without controversy, the measurement of changing societal concern has exercised the minds of SEA researchers rather more. Because 'societal concern' is so rarely directly researchable, previous writers have employed a range of proxies or analogues. This study employs two types of proxy for corporate exposure to social criticism – industry membership and the use of lobby group membership figures as analogues for changing opinion. These are reviewed along with the other main methods in the following sections.

Direct observation of external events

Some studies have adopted the view that external events can be studied directly. These appear to fall into two types – event studies and longitudinal studies. Firstly, event studies directly observe an event which, it is hypothesised, will influence reporting behaviour (Patten, 1992, Deegan *et al*, 2000). The actual change in state that, it is believed, will trigger a change in social disclosure is directly observable. In the two studies mentioned, these include oil spills, chemical leaks and mining accidents. Secondly, some studies have generated longitudinal social disclosure data and then attempted to 'find' external events around the times of inflections on the graphs by way of explanation. Guthrie & Parker (1989) and Hogner (1982) are good examples of studies of this type.

Event studies are useful when attempting to understand corporate responses to single events but of course this means that such studies are only possible when major events happen. Such events are always (in the literature) of a 'bad news' nature. The studies hypothesised that companies involved or, by virtue of industry membership, are associated with such events will make higher disclosures to legitimate reputation afterwards. These are powerful LT studies nevertheless. The more *ad hoc* approaches of Guthrie & Parker (1989) and Hogner (1982) are less useful as they are subject to the structural problem of having to 'find' a reason for a blip in disclosure which assumes, a.) there is a reason for the blip; and b.), the reason for it can be found, even although it may have happened many decades previously.

Presumed analogues as proxies

Analogous data is that which can be observed or recorded in the belief that it (the analogue) is a direct analogue (perhaps a parallel or reflection) of the real state of that which cannot be directly observed. The LT literature has used lobby group memberships and media exposure (on an issue) as analogues for changes in social opinion.

Two papers (Deegan & Gordon, 1996; Tilt, 1994) made the assumption that memberships of social and environmental pressure groups could be assumed to be a proxy for societal concern in selected areas. Brown & Deegan (1998) sought to use media exposure of environmental issues as a proxy for societal concern, based on media agenda setting theory which suggests that for some issues, media coverage leads and causes changes in societal opinion. Deegan, *et al*, (2000) and O'Donovan (1999) also used media exposure in this way.

Industry membership as presumed proxies

The use of industry membership as a proxy for exposure to changing concern in society is not without controversy. It rests upon the belief that industry membership is an indicator (perhaps an analogue) of exposure to social pressure in certain areas of opinion. The use of this measure in previous studies appears to rely on intuitive assumptions about industry exposure.

The suggestion that industry types will experience different levels of societal scrutiny and pressure in the various areas of social and environmental concern was explored by Wilmhurst & Frost (2000), Adams, Hill & Roberts (1998, albeit indirectly), Brown & Deegan (1998), Deegan & Rankin, (1996), Clarke & Gibson-Sweet (1999), Deegan, *et al.* (2000) and others. There is agreement that industry effects should be observable in responding to societal pressure and there is some empirical evidence to suggest that it does.

The way in which previous studies have selected for difference varies. The notion that some sectors will experience varying degrees of environmental 'sensitivity' is a common theme (Wilmhurst & Frost, 2000; Deegan & Gordon, 1996), although proximity to end user as a proxy for exposure has also been explored (Adams, *et al.*, 1998; Clarke & Gibson-Sweet, 1999). This is easier to resolve for some types of social pressure than others. Environmental pressure and the corporate response to it has been prominent in this (see for example Deegan & Gordon, 1996). This is because environmental concerns are a more cohesive set than employee or community concerns. The various issues concerned can be more easily circumscribed and understood, and there are, unlike for other types of social concern, demonstrable gradations in the exposure that some sectors will experience in this area than others.

The usefulness of exposure-by-industry studies relies upon the accuracy with which industry sectors are presumed to be vulnerable to specific social pressure. In the case of environmental-sensitivity, for example, selection was made (in Wilmhurst & Frost, 2000 and Deegan & Gordon, 1996) using an approximate measure, allocating sectors based on lobby-group attention and producing a ranking that was, in any event, intuitive (mining and oil sectors – both of which are employed in this study – see Chapter 6 - were both amongst the most environmentally-sensitive sectors). Similarly, proximity to end user assumes that firms can be readily ranked in order when in reality many firms are vertically integrated and thus participate in several activities at different 'distances' from the end user. Accordingly, whilst presumptions about industry membership may have some value, industry allocation to presumed positions of exposure must usually be made on relatively intuitive (if not arbitrary) grounds.

Public policy changes as proxy

This area is the least populated in the LT literature. The major study of this type is Patten (1995). Changes in public policy under the 1981-89 Reagan administration was recorded and a net reduction in social disclosure was noted in 1985 compared to 1977. Reduced volumes of social disclosure was taken to be evidence for LT because of, "the decreased policy actions of the Reagan administration." The quality of information also decreased between the two years analysed.

The basis of Patten's (1995) method has not been repeated or further developed. Its crude presumption that public policy change is capable of providing an explanation of volumetric changes in social disclosure is difficult to defend given the many other possible influences on disclosure behaviour (see the other issues raised in this chapter). Patten's conclusion that this (reduction in disclosure) was, "certainly consistent with the legitimacy theory arguments for corporate social disclosure." (Patten, 1995: 183) is an unfortunate one.

This chapter has reviewed legitimacy theory, its links to social contract theory and some of the most prominent previous empirical studies that have sought to 'test' and explore it. The four propositions based upon the previous studies have been partly explored, in particular the ways in which proxies for changing social concern have been employed. The other propositions are discussed with regard to this study in Chapter 6. In Chapter 5 the thesis proceeds to develop the central hypotheses.

5. Methodology and hypotheses

5.1 A note on methodology

The discussion and method in this thesis are largely derived from a positivist methodology. The method is described in detailed in Chapter 6 and a comprehensive statement of limitations is provided. In order to place the functionalist/positivist paradigm within its epistemological perspective, however, this section briefly reviews other possible approaches, with particular reference to methodologies in social and environmental accounting studies.

A study of the paradigms informing approaches to social disclosure studies was provided by Tilt (1994). Three paradigms within which researchers approach this area of research were identified (adapted from Burrell & Morgan, 1979).

In the first instance, the functionalist paradigm, "contains theories based on structured views of the world." (Tilt, 1994: 48). It is assumed by researchers that the world is ordered and that certain presuppositions can be made with regard to defining independent variables against which to measure or discuss CSR. Typical studies within the functionalist paradigm, assuming the efficient market hypothesis to hold, might test for CSR responses to share price, profitability or one or more of a number of other financial or economic figures (Cooper, 1980). Tilt gave the example of investor usefulness studies (of CSR) to illustrate this kind of paradigm (Hopper & Powell, 1985). Implicit in the functionalist paradigm is an acceptance of the values resident within the capitalist system and possibly even a belief that the 'truth' (however defined) can be found within the Western capitalist worldview. It is the intrinsic agreement with this model that makes testing CSR against economic or accounting variables worthwhile. CSR might be seen, for example, as a way in which to minimise risk, maximise long-run market value, returns on capital or some other desirable economic outcome. In accepting the virtue of these outcomes, CSR studies are useful insofar that they explore one of the ways in which such economic performance indicators can be optimised (see for example Bowman and Haire, 1975; Abbott and Monsen, 1979).

Secondly, Tilt identified the interpretative paradigm which, "considers human nature as important and recognises the existence of the social world and a pluralistic set of users of [social disclosures]." (ibid. p. 48). This paradigm, Tilt argued, "is considered to be a middle-of-the-road approach, in that the status quo is neither rejected nor reinforced (Gray, [Owen & Maunders]. 1987). This means that ... [the capitalist structure] is accepted as given." (ibid. p. 49). She went on to argue that 'social contracting theory', legitimacy theory and 'accountability theory' are examples of explanatory theories for CSR within the interpretative paradigm. In essence, this paradigm appears to accept a more complex view of the world than the relatively narrow views of the functionalist paradigm and seeks explanations for CSR from a broader range of possible influences. A broader view of stakeholders is accepted, particularly an acceptance of 'society' as a stakeholder, against the changing opinions of which, social disclosure may be partly explained.

Third, Tilt referred to the radical paradigm and suggested that 'political economy of accounting' is the dominant theory in this paradigm. This, she argued, "rejects market related solutions and considers that the structure of society shapes all that goes on within it." (ibid. p. 49). This paradigm gave rise to the critical perspective (Tinker, 1980, 1985; Tinker, Lehman & Neimark, 1991), which is reluctant to recognise the legitimacy of a market-related accounting model. Society reflects the "basic organising principles" and "institutional structures" within it. Because, in the radical paradigm, capitalist structures are seen to dominate society, and society adopts this worldview as its default perspective, research may be biased if it does not question the capitalist paradigm. Accordingly, "research which [unquestioningly] accepts the nature of society, supports that nature of society, ... is merely a reflection of the power of large institutions." (ibid. p. 49). Implicit in the radical perspective (although not argued by Tilt) is that the structure of society is flawed because of the dominance of capitalism and, hence, its insidious influence on society is not benign.

Other perspectives notwithstanding, many SEA studies and the majority of previous empirical studies in LT have taken the view that a positivist approach can be taken, notwithstanding Tilt's belief that legitimacy theory is resident within the interpretative paradigm. Limitations on the quality of the data and particularly its ability to lend itself to detailed statistical analysis is acknowledged in many studies and this thesis adopts a similar approach. It is not claimed that observations obtained by, for example content analysis, have the same robustness as observable data in some branches of the natural sciences. Accordingly, the employment of statistically-powerful parametric methods of data manipulation and analysis are inconsistent with the qualities of the data.

These limitations constrain the language with which conclusions can be drawn from the research. It is not possible, for example, to provide 'proofs', to rebut or confirm hypotheses with absolute certainty. The most-cited empirical studies in LT employ a positivist approach with appropriate qualification of any findings. It is probably fair to suggest that Deegan's empirical work in this area is amongst the most distinguished. He has developed a number of approaches to the empirical analysis of LT, all of which rely to varying degrees on numerical observation, interpretation and data analysis (Deegan & Rankin, 1996; Deegan & Gordon, 1996; Brown & Deegan, 1998; Deegan, Rankin & Voght, 2000). The use of phrases like, "It would *appear* that..." and, "the firms *appear* to be aiming for legitimacy by deflecting attention..." (Deegan & Rankin, 1996: 59 – emphasis added) are typical of conclusions drawn from such studies.

There is, therefore, a broad acceptation that figures generated in disclosure studies are at best indicative of a company's attitude to social responsibility and in the worst case, may be entirely unrelated to the actual social attitudes of the reporting organisation (it is a random expression for sundry purposes such as public relations). Accordingly, it is not universally accepted that a positivist method is appropriate to social accounting studies because of the uncertainty over the intentions underlying social disclosures (see for example Deegan & Rankin, 1996).

Content analysis studies in social and environmental accounting have, however, taken it somewhat for granted that 'truth' can be explored using a positivist methodology. This is partly because content analysis tends to generate (or at least is capable of generating) numerical data. Trend and cross-sectional analysis tends to be performed using a numerical and sometimes statistical instrument (see for example Wiseman, 1982, Guthrie & Parker, 1989, Adams, *et al*, 1998; Gray, *et al*, 2001).

The limitation of a positivist approach in this context derives from the intrinsically 'muddy' nature of numerical data extracted from disclosures. This was discussed at length by Milne & Adler (1999) and Unerman (2000) where the accuracy of content coding is seen as a primary consideration in content analysis and the method of counting is thus a less important part of the research instrument (the latter being the part of the instrument generating numerical data).

Such important discussions notwithstanding, researchers have nevertheless continued to adopt a positivist method in SEA studies (an example recent to the submission of this thesis being Gray, *et al*, 2001 in which social content data in FTSE 100 companies was presented, captured by page proportion count and analysed statistically against corporate characteristics). The present author recognises the limitations of the positivist method. It would be intellectually dishonest, for example, to make claims against results inconsistent with the quality of the data input. Insofar that social and environmental content does not have the quality of measurable scientific data (such as dimension, temperature, velocity, mass, etc.), it is not possible to make claims on results to the same confidence one might derive from scientific studies.

The feared limitation of positivism in SEA studies has precipitated a small number of studies adopting a less scientifically-rigorous but perhaps more content-rich approach. The most prominent studies of this type have taken the view that soliciting a discourse with a company's culture, reporting procedures and/or management attitudes may be a more reliable means of establishing its attitude to social responsibility and its reporting. Woodward, Edwards and Birkin (2001), for example, sought to examine attitudes to social responsibility by interviewing executives. O'Donovan (1999) employed semi-structured interviews in an attempt to reduce dependency on content analysis to underpin his enquiry into legitimacy theory. Buhr's (1998) study of the environmental performance of a Canadian mining company also employed semi-structured interviews. Dey (2000) presented a case for ethnographic research (by observing behaviour over a period of time as an 'insider' or 'fly-on-the-wall').

Whilst acknowledging the value of these exceptions, it was concluded that given the numerical quality of the outcomes of the research, a positivist approach would be the most appropriate methodology. It is intended that the all limitations to the method be identified (see below) and that conclusions drawn are not inconsistent with the quality of the data analysis and input.

In accepting the limitations of a positivist approach to SEA content studies, the discussion undertaken in Chapter 8 of this thesis is rather more discursive than may be considered necessary. The inability of the data to yield 'hard' fact in evidence means that conclusions must be drawn with appropriate qualification and using appropriate language.

5.2 Hypotheses 1-6 for testing LT

Introduction

The construction of hypotheses to 'test for' LT as an explicator of variability in CSR relies upon the development of the concept of legitimacy into a testable formulation. Central to this is the challenge to construct a picture of what legitimacy theory would 'look like' if CSR were to respond to changes in societal opinion in an attempt to close a perceived legitimacy gap (Lindblom, 1994).

Previous studies have made the assumption that (if LT is a partial explicator of CSR) disclosure would rise and fall in sympathy with changing concerns in society (see for example Patten, 1992; Deegan & Rankin, 1996; Deegan & Gordon, 1996). Furthermore, previous studies have made the assumption that: "quantity of disclosure signifies the importance of the item being disclosed." (Unerman, 2000: 669. See also Deegan, Rankin & Voght, 2000). Hence, higher disclosure signifies that the item being disclosed is important and conversely, low or no disclosure signifies that it is of little importance to the reporting company.

A legitimacy understanding of CSR suggests that businesses disclosing social information are seeking to close legitimacy gaps (Lindblom, 1994; Gray, *et al*, 1995a) as they appear. However, given the problems in charting societal opinion (see Section 4.5 above), any testable hypothesis would suffer from the structural errors in one of the key variables (i.e. societal opinion, although see hypothesis 7 later in this chapter). Hence, any discourse on refining such a method, such as a discussion of lag effects, would be largely irrelevant.

Accordingly, the method underlying this investigation takes as its starting point the supposition that it is difficult to test for LT by a simple comparative method of association between the two variables (of CSR and societal opinion). A method which, at least in large part, avoids the need to chart societal opinion directly, is a key thread in the following discussion.

Defining the hypothesis outlines

Based upon the premise that "one of the key assumptions underlying all quantitative content analysis studies is that quantity of disclosure within a category signifies the importance of that category," (Unerman, 2000: 674, see also Deegan & Rankin, 1996; Neu, *et al.* 1998; Deegan, *et al*, 2000), and assuming that legitimacy theory would suggest that higher disclosure would indicate a felt-need to restore a perceived legitimacy gap, it should be possible to 'test for' LT by comparing disclosure volumes within and between sectors in a manner akin to an F-test.

Similar patterns of disclosure within sectors would indicate that companies in similar environments are responding similarly to changing societal opinion thus reinforcing the evidence for LT. Deegan, *et al*, (2000) found industry effects in responses to 'disasters'. They found that companies in industries not individually involved but which felt affected by environmental incidents increased their relevant social disclosure in response to the incidents. Hence, the belief that all companies in an industry might respond in a similar manner to legitimacy-threatening events and/or changes in societal opinion is not unreasonable.

Similarly, sectors experiencing different types of legitimacy-threatening influence would be expected to respond differently. Some sectors would be expected to exhibit higher disclosure volumes than others, thus signifying the greater importance of social and environmental concern in those sectors when faced with different levels of societal pressure.

However, 'social' disclosure has been taken to mean several things in previous CSR studies (see the detailed discussion of the area of categories of social disclosure in Chapter 6). Milne & Chan (1999: 439) noted that, "many of these [previous] studies show that most of the social information... relates to employees, the environment and the community." Hence, 'social' disclosure refers to the sum of disclosures in these three areas of concern. It is thus possible to resolve social disclosure on at least four levels:

- total disclosure (including all three categories);
- disclosure of information on employees only;
- disclosure of information on the (natural) environment only;
- disclosure of information on the community only.

It is suggested that all four of these measures of disclosure could be employed in the analysis if framed in a coherent suite of testable hypotheses although the difficulty in establishing a proxy for societal opinion against which 'total disclosure' could be associated renders this measure less useful – see the discussion later in this chapter.

'Within' and 'between' tests

In each category and in the total 'social' category, an approach is proposed that rests upon two suppositions:

- companies in different sectors will experience different levels of legitimacy-threatening influence (see discussion of sector effects below – 'between tests');
- companies within the same sector will experience, at any point in time, similar legitimacy-threatening influences owing to the similarity of their stakeholders and their (stakeholders') agendas (see 'within tests' discussion below). This effect will be most marked where disclosure is high (i.e. where signal to noise is lowest).

Hence, each category can be tested for by employing within and between sector analyses. This tests for similarity or difference in corporate response (via CSR) and avoids the need for direct observation of those events to which the companies are (or are not) responding providing that appropriate proxies for societal concern by sector can be generated

Demonstration of all hypotheses is not necessary to show that LT is a possible explanation of variability in CSR. It may be, for example, that within or between results are demonstrable in one or more than one categories of disclosure. This would be sufficient to suggest that LT has some validity as an explicator of CSR variability in the case of that disclosure category only. Many of the previous papers have selected only one category of social disclosure and this thesis includes some of those (e.g. environmental information) but also seeks to explore LT as an explicator using three categories (those described above).

Between tests

The argument that suggests that companies within sectors will respond similarly to environmental factors also suggests that companies that experience different influences will exhibit different disclosure records (see for example Adams, Hill & Roberts, 1998 which found industry effects in some areas of social disclosure). Petrochemical companies, for example, would be expected to exhibit different disclosure records in some categories than brewers and retailers and the resolution of categories of social information will, it is suggested, add power to tests for such differences. Whilst both petrochemicals and brewers experience similar influence with regard to employee welfare (companies in both sectors employ large numbers of people), they might be expected to experience different level of societal threat with regard to environmental concern (their environmental impacts are demonstrably different). Similarity in environmental disclosure records between petrochemicals companies and brewers would, accordingly, challenge legitimacy theory as a cause of variations in environmental disclosure.

There are a number of previous studies that have employed criteria for selecting industries with a view to examining behaviour in response to position or reputation of sector.

Sorting by *proximity to end-user* and its variants is one such selection method (Clarke & Gibson-Sweet, 1999; Waddock & Graves, 1997; Adams, Hill & Roberts, 1998; Hackston & Milne, 1996). It can be argued that the nearer a business is positioned with regard to the end user (typically retail customer or similar) then the more visible the company will be to the greater number of people. In most cases, this means, for example, that retailers or those with a retail component to their business portfolio, will be more publicly-visible (or perhaps more 'famous') than those businesses mainly concerned with primary and/or secondary activities such as extraction, assembly or intermediate production. Hackston & Milne (1996) divided their sample (47 top New Zealand companies) into the binary categories of 'high profile' and 'low profile' – a distinction open to the criticism of arbitrariness but nevertheless drawing upon the same or similar industry-sorting method as here described.

Adams, Hill & Roberts (1998) adopted a similar method when categorising 150 European companies into four industrial groupings. Although not categorised according to primary/secondary/tertiary, Adams, *et al* explained that their four groupings have, "a somewhat different orientation and they may be characterised in terms of being based on raw material and natural resource exploitation; mass production for the consumer; production for a customised market, and, operating in direct proximity to the final customers." (Adams, *et al*, 1998:7)

This thesis suggests that community disclosure, for example, might be thought of intuitively to be responsive to proximity to end user. Given that the content of community disclosure is mainly concerned with how the business relates to society, its charitable and philanthropic initiatives, etc., then it may be that those with the highest public profile would have the most reason to demonstrate benevolence in this area than those less well-known. In this case, proximity to end-user is taken as a proxy for public exposure. This hypothesis is consistent with testing for legitimacy theory insofar that legitimacy gaps are more likely to arise between society and those businesses that are best-known to society. A lesser-known company involved in primary industrial activities would have less reason to justify its existence to society using community disclosures than one with a very high public profile. Hence, community disclosure correlating with proximity to end user may lend some support to LT as an explicator of variability of community disclosure.

Cowen, Ferreri & Parker (1987), suggested 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: 113). Hence, even if the motive for disclosure is primarily economic, tertiary and/or those companies best-known or with a high degree of interaction with consumers are expected to be more sensitive to some forms of legitimacy threatening criticism (such as community concerns) than those companies whose major activities are less well-known to society.

Similarly, Patten (1991) argued that political visibility is influenced by industry group. Observing that previous studies had found that, "some industry classifications were significant explanatory variables" (Patten, 1991: 300) for differences in social disclosure, he proceeded to employ industry classification as a proxy for differing exposures, of sectors, to social and environmental pressure. He found that "both size and industry classification are significantly associated with the level of social disclosure." (ibid. p. 304).

Sorting by *reputation* or perceived sensitivity to criticism is the second criteria (Deegan & Gordon, 1996, Wilmhurst & Frost, 2000). The previous literature in this area has been mainly concerned with environmental disclosure (i.e. reputation as a polluter or resource excavator/extractor).

Based upon the findings of Patten (1992), Deegan & Gordon (1996) based their categorisation of environmental sensitivity on the amount of attention a particular industry received from environmental lobby groups. Those with more attention were considered to be more environmentally-sensitive whilst those receiving less attention were less environmentally-sensitive. Patten's (1991) intersectoral study selected some 'high profile' sectors that, he argued, had particular challenges to face when it came to reputation (namely petroleum, chemical, forest and paper).

Clarke & Gibson-Sweet (1999) suggested that, "it would seem logical to expect variations in the level and nature of social disclosures across different industry sectors as their public responsibilities and level of public exposure vary." (Clarke & Gibson-Sweet, 1999: 6) They chose to highlight industries such as mining and oil extraction as industries with a, "very obvious environmental impact," who, "may choose to provide environmental information voluntarily in order to diffuse stakeholder concerns..." (ibid. p. 6).

This study thus selects environmental disclosure as the major category that would be expected to respond to cross-sectional reputation (borrowing from the use of environmental sensitivity as a proxy for reputation – amended from Wilmhurst & Frost, 2000 and Deegan & Gordon, 1996).

Some observations on employee welfare disclosures

Whereas, therefore, community disclosure would be expected to be responsive to proximity to end user and environmental disclosure would be expected to respond to a measure of environmental sensitivity, employee welfare disclosure would not be expected to be responsive to either. Legitimacy theory, in its insistence that social disclosures are designed to close legitimacy gaps, would offer few reasons why one sector might experience a legitimacy gap wider than any other with regard to employee disclosure.

Insofar that the sample employed in this thesis (Chapter 6) controls for size by selecting only from the FTSE 100, all companies selected are large with each one employing a large number of people. Intersectoral agreement would be expected for a number of reasons:

- all large companies employ many people (the difference in legitimacy gaps between a company employing 10,000 and another employing 20,000 would be small);
- any social trends affecting the ways in which employers might be expected to relate to or deal with employees would affect all large employers equally;
- the majority of instruments of employment law would affect all employers more-or-less equally.

There are, however some employee influences that may discriminate by sector. Health and safety legislation (e.g. HaSaWA, 1974), the Control of Substances Hazardous to Health (1989) and Environmental Protection Acts (1990) may affect 'more environmentally sensitive' industries or those that handle higher volumes of potentially polluting or hazardous materials more than others. Prior research reported in Gray, *et al* (1996: 197) suggests, however, that health & safety disclosure does not comprise a prominent proportion of employee disclosure but – and possibly significantly – the sample reported upon (in Gray, *et al*) was for the whole FTSE 100 and did not resolve for sector and made no suggestion as to the distribution of health and safety disclosure/total employee disclosure ratio in the sample. So whilst there is some reason to doubt strong intersectoral health and safety effects, Gray, *et al*'s sample does leave room for a test of intersectoral health and safety disclosure variability.

The value of a 'between' test that suggests that employee disclosure will not be discriminatory of sector thus rests upon the premise that those employee disclosures that are discriminatory of sector will comprise only a marginal proportion of those employee disclosures made by those against which the discriminatory influences discriminate. If this can be assumed, it can be hypothesised that employee welfare disclosures, unlike community and environmental disclosures, will not be discriminatory of sector. It is possible to test for sector response to employee issues using the high/low environmental sensitivity measure, however (see later), and this is included as an adjunct to hypothesis 1.

The 'between' tests hypotheses

The between tests can thus be designed according to the category of social disclosure. It is argued that different sectors will, if legitimacy theory is to be accepted as a plausible explanator for variability in social disclosure, disclose differently depending upon the category of social disclosure being examined and the nature of the industry (and particularly its position with regard to criticism with regard to the disclosure category).

It is thus hypothesised that:

H1 Employee disclosure will not respond to sector (or intersectoral disclosure records over time will be ostensibly 'random' in appearance). There is no *a priori* reason why different sectors should disclose different volumes of employee-welfare disclosure.

H1(a) (adjunct). Employee disclosure, because of its inclusion of health and safety disclosure, will respond to a measure of environmental sensitivity insofar that 'more-environmentally-sensitive' sectors are more likely to handle substances or include processes potentially hazardous to health (such as chemicals and mining or reactor processes).

(H1(a) is a variant rendering of H1 and whilst appearing to be contradictory to H1 is in fact an enrichment of it. Whilst there is no reason to suggest that companies would exhibit difference in the totality of employee disclosure (this being the basis of hypothesis 1), the notion that one component of employee disclosure (health and safety) may be responsible for intersectoral differences in response to environmental sensitivity, represents a test for LT. It is conceded that this is not a strong test because of the lack of knowledge of the proportion of employee disclosure given over to health and safety issues.)

H2 Community disclosure will respond to the proximity to end user measure. The content of community-related disclosures would suggest that such matters would be of more concern to those companies in sectors that have a higher profile (Hackston & Milne, 1996) with the general public (and hence they would be of less concern to sectors and companies that have a lower profile – those less well-known, i.e. with less or no interaction with consumers).

H3 Environmental disclosure will respond to the environmental sensitivity measure (a reputation measure). Those companies and sectors that are directly involved in processes or products that extract, pollute or have other actual or potential environmental impacts will be more environmentally-sensitive than those that do not.

It is unclear how we might expect 'total' undisaggregated social disclosure to respond by sector. The totality of social disclosure can be seen as little more than a general indication of corporate response to a whole range of possible social legitimacy threats. It is therefore not possible to hypothesise a sector response to the undisaggregated social disclosure measure, although this theme will be referred to in the conclusions section of this thesis (Chapters 8 and 9).

In summary therefore, the between hypothesis can be expressed thus:

Hypothesis	Category of social information	Statement of hypothesis
H1	Employee welfare	Because all sectors are equally affected by employee welfare issues, there will be no intersectoral difference in disclosure volume.
H1(a)	Employee welfare	Disclosure will be higher in companies in sectors with higher environmental sensitivity (because of their higher health and safety risk) and lower in sectors with lower environmental sensitivity.
H2	Community	Disclosure will be higher in sectors closer to the end user and lower in sectors further from the end user.
H3	Natural environment	Disclosure will be higher in companies in sectors with higher environmental sensitivity and lower in sectors with lower environmental sensitivity.

Within tests

The central premise of legitimacy theory, i.e. that businesses respond to societal pressure in their disclosures, lends meaning to this test and in turn, hypotheses 4-6. It is suggested that companies within similar industry environments should (if LT is an explicator of disclosure variations) experience broadly similar perceived threats to their legitimacy (although all categories may not be equally discriminatory of sector). Accordingly, broadly similar disclosure records would be expected within any given sector. The more similar the two companies are in terms of size (a proxy for political exposure) product and market portfolio, the more similar the disclosure records would be expected to be. It is for this reason that pairings were selected in each sector.

Two oil companies, for example, would, *a priori*, be expected to experience some similarity in societal perceptions of their activities (Patten, 1992, Deegan, *et al.* 2000). If, for example, the natural environment was to become increasingly important in society's relations to the petrochemicals industry, then (if LT holds) both companies should have experienced the legitimacy gap opening and made moves (in this case via environmental disclosure) to close it. If one company exhibits a substantial change in environmental disclosure (clearly perceiving a legitimacy gap which it feels it needs to close) then so ought the other. Marked dissimilarities in the longitudinal records of two competitors in the same industry would indicate that they are not perceiving societal opinion in the same way or have chosen not to respond to the threat via social disclosure – both being indications that legitimacy theory is not a good explicator of variability in social disclosure. The meaning of 'marked dissimilarities' is, of course, a matter of judgment. One may argue that similarity in disclosure volume might be needed to demonstrate agreement whereas another might believe the two moving in the same direction (up or down) at a given point in time to be evidence. The previous studies support the second of these – Patten (1992) and Deegan, *et al* (2000) both looked for increases – not for similarity in volume. They concluded that companies were seeking to legitimate their activities if they (in those cases) increased their disclosure at all. The absolute volumes were not a key theme in their conclusions.

Although the method by which 'similarity' or 'difference' might be measured is problematic (see Chapter 6), the principle that agreement should be observable stands, although greater year-to-year (or perhaps period-to-period) agreement should be observable where the signal-to-noise ratio is highest, i.e. where disclosure is highest.

Accordingly, hypotheses 4-6 can be expressed thus.

Hypothesis	Category of social information	Statement of hypothesis
H4	Employee welfare	Two companies within a sector will demonstrate similar longitudinal records of disclosure. 'Agreement' will be higher when disclosure is higher.*
H5	Community	Two companies within a sector will demonstrate similar longitudinal records of disclosure. 'Agreement' will be higher when disclosure is higher.*
H6	Natural environment	Two companies within a sector will demonstrate similar longitudinal records of disclosure. 'Agreement' will be higher when disclosure is higher.*

* because signal to noise effects will make agreement less likely at low levels of disclosure.

5.3 Hypothesis 7 and 8 – testing disclosure against lobby group membership

Analogues for societal opinion

This thesis has adopted the view that LT can be investigated meaningfully by internal analysis of social disclosure data in corporate reports and the testing of inter and intrasectoral variability against proxy-by-sector classification. The belief that LT would be demonstrated by corporate response to external changes in opinion is shared by a number of previous papers (see for example Guthrie & Parker, 1989; Deegan & Rankin, 1996; Deegan & Gordon, 1996; Ullman, 1976). As a repeatable method of evaluating LT, however (as has been argued elsewhere in this thesis), it relies upon the availability of accurate measures of societal opinion against which to correlate social and environmental disclosure, and the presence of a change in either of the variables (a no change-no change result would be unlikely to be meaningful).

The scarcity of systematic longitudinal surveys of relevant social opinion renders direct comparison between social concern and disclosure problematic (those who have attempted to do so, such as Guthrie & Parker, 1989, have resulted in an incomplete record of external opinion). Accordingly, this could not be used as a major element in the method of this thesis (hence the less direct hypotheses described above).

If, however, some evidence of social opinion change were available over some of the period of the study, it may serve to enrich our understanding of how disclosure responds to social change in any specific area or category of concern.

In order to gather social opinion data for this purpose, data would be needed on changing opinions in one or more of the three categories used in this research, *to wit*, environmental, employee welfare or community. Environmental opinion has the advantage that it is probably a more cohesive area of concern, easier to understand and with clearly identifiable implications. Furthermore, it is, or can be, associated with lobbying or pressure group organisations who have made environmental concern a substantial part of their remits. Accordingly (and as Deegan & Rankin, 1996, noted), environmental opinion is probably the best candidate for comparison of voluntary disclosure and societal opinion.

Deegan & Gordon's (1996) use of environmental lobby group memberships as a proxy for social concern on the environment provides a basis for the development of hypotheses 7 and 8. Detail relating to the method of data collection for hypotheses 7 and 8 is contained in Section 6.5.

Expected effects

Effect one

Any key changes of opinion in society should be reflected in the volume of corporate disclosures in the same area of concern as the change in opinion. Hence, an increase in environmental concern in society should (if LT holds) be reflected in an increase, synchronous with or shortly lagged after, a commensurate increase in environmental disclosure. Lindblom's (1994) suggestion that a legitimacy gap can be opened by no change in business practice (but by a change in societal opinion) means that businesses will see it as an important part of their reputation management to become apprised of any change in the opinion of any of its their major stakeholder groups.

H7 Environmental disclosure will change over time in sympathy with changing societal opinion on environmental concern (environmental lobby group membership is a suitable proxy for societal opinion on environmental concern).

Effect two

In addition to 'more sensitive' companies disclosing more than 'less sensitive' companies (H3), the correlation between disclosure and opinion (using the lobby group membership proxy) should be higher for the 'more sensitive' companies/sectors. Legitimacy theory would suggest a corporate response to a clearly circumscribable threat, especially among companies more likely to be affected by that threat.

H8 The correlation coefficient between lobby group membership and environmental disclosure will be higher for 'more sensitive' than for 'less sensitive' companies.

6. Method

6.1 Limitations of the method employed

The method adopted in this study rests upon content analysis as a means to establishing reporting intent on the part of reporting organisations. Krippendorf (1980) defined content analysis as, "a research technique for making replicable and valid inferences from data according to their content." (Krippendorf, 1980: 21) In collecting data by this method, a number of misgivings and suggested limitations need to be addressed.

The limitations identified are as follows.

The problem of disagreement on the unit of analysis
The literature reflects several approaches to unit of analysis. For those studies that measure volume of social disclosure (as opposed to qualitative content), four approaches have been taken. The simplest record the binary measure of present (in the document or communication)/not present (Ernst & Ernst 1978) whilst others record page proportions (e.g. Gray, *et al*, 1995b; Campbell, 2000), sentences of social disclosure (e.g. Milne & Adler, 1999; Williams & Pei, 1999; Deegan, Rankin & Voght, 2000) or words (e.g. Deegan & Rankin, 1996; Deegan & Gordon, 1996). One study, uniquely, employed a 'high disclosure'/'low disclosure' measure (Patten, 1991).

It is probable that each of these ways of measurement would return slightly different results if used to analyse the same data, although there would probably be reasonable correlation (see Campbell, 2001 – a work in progress paper. See Appendix 4). Statistical testing of cross-sectional or trend data would, it is argued, have limited meaning if only one unit of analysis was employed. The pros and cons of the different units of analysis are discussed at length later in this chapter.

The problem of identifying 'social' information

Recording information that requires some discretion on the part of researchers will, it is argued, be subject to greater error in data capture than data types that can be more rigorously measured or 'scientifically' observed.

Whereas scientific data can be measured with some degree of certainty (such as measures of velocity, temperature, dimension, etc.) there is an epistemological challenge to researchers in social accounting studies (and in many other areas of social science). That there will be measurement differences between researchers is perhaps self-evident but it is also likely that the same researcher may record some disclosure as being 'social' in nature whilst other, similar, disclosure will not be counted. This effect is most marked when the meaning of disclosure is not immediately obvious (this being the essence of Milne & Adler's (1999) discussion of coding errors – see later in this chapter).

In order to illustrate this difficulty, three disclosures from the ICI 1988 (a report selected at random) are reported.

Statement A is unambiguously social disclosure:

A. "ICI's policy on the environment is to manage its activities so that they are acceptable to the community." (ICI, 1988: 33)

Statement B is unambiguously not social disclosure:

B. "The Group's olefines plants made a major contribution to profit by producing record output at a time of high world demand." (ICI, 1988: 21)

Statement C, however, might be deemed by some researchers as 'social' whilst others may not.

C. "The bonus earned by most UK employees is calculated according to a pre-determined scale based on the ratio of added value to employee costs." (ICI, 1988: 29)

The ambiguity in statement C arises from two of its qualities. First, it does contain information that could be construed as social (that of employee benefits). Second, the sentence was recorded from the company's financial review and is explicitly intended to explain part of the company's costs to shareholders and creditors. Its reference to employees is to explain an element of cost.

If the objective is to establish the volume of social disclosure in ICI's 1988 corporate report (which it is) then it seems improbable that any method of data capture would arrive at an objective and incontrovertible figure upon which meaningful statistical analysis could be performed. It is argued that the problems with arriving at the figure render the data 'muddy' and inexact. It is therefore likely that a volume figure is only indicative of the social content of the document and this is a limitation when it comes to extracting meaning from it that the method of data capture does not merit (although this has not stopped some writers from expressing conclusions incommensurable with the quality of the data – see for example Guthrie & Parker, 1989, who claimed to have 'rebutted' legitimacy theory. Milne & Adler, 1999 provides a good commentary on the limitations of previous content analysis methods).

In addition to the possible errors arising from mis-selection of content, errors in the actual counting of words are also possible. This error becomes more significant as the total volume falls (because the error will comprise a greater proportion of the total). This error is partly controlled for by internal stability checks (see next section).

Content analysis errors

Krippendorf (1980), discussed in Milne & Adler (1999: 239-240), identified three sources of error when considering the reliability of data coded from content analysis: stability, reproducibility and accuracy.

Stability refers to the extent to which the same data is coded over time. The longer the duration of the content analysis study, the greater the possibility of stability errors occurring. A simple test-retest procedure is one way to test for stability errors.

Reproducibility refers to the extent of errors between different content analysts (analysing the same content). Clearly, a sample captured by several coders in which reproducibility could not be guaranteed, would suffer from a substantial deficit in reliability. Adams, Hill & Roberts (1998) addressed this issue by having each report in a pilot sample analysed by each of the three authors prior to the authors' agreeing on a common approach developed in the light of the pilot exercise. Their approach has been adopted elsewhere.

Accuracy refers to content analysis against a predetermined standard. If, for example, it could be objectively determined (by whatever hypothetical measure) that a document contained 'n' amount of social disclosure, accuracy could be measured by comparison between n and the actual amount found by the content analyst.

In this study, reproducibility and accuracy are not relevant errors that need to be discussed. Reproducibility is controlled for by the fact that all of the content analysis was carried out by the same researcher (the author). Accuracy errors, similarly, are not relevant since, in this case, no standard disclosure volume exists. This is not to say, of course, that there are no coding errors. Checking procedures adopted by some previous studies, involving a second content analyst, were not open to this researcher given the fact that it would have been in breach of the rules for the PhD (being all one's own work). Typical of this checking safeguard was that adopted by Deegan, *et al*, (2000) who had an 'independent' researcher conduct a content analysis on a sample of those annual reports used in the main body of the research, with any differences being subsequently reconciled. Patten (1991) took a similar approach.

Stability errors, are, however, applicable in this study. Two instruments were used to address this source of error – a test-retest instrument and the use of data capture 'rules'.

A sample of companies was taken for retest at the end of the study period to assess the size of any coding or counting errors.

In order to represent all media used for data capture, one company was taken from each of microfiche, printed media and Acrobat file (.pdf). The printed media test (Marks & Spencer 1998) showed a counting error of 0.1%. The microfiche test (Shell T&T, 1984) showed a counting error of 2.5%. The Acrobat file (BOC, 2000) showed zero counting error (because counting was performed electronically). No significant coding errors were found (i.e. errors of classification of disclosures).

Stability errors were also addressed by the imposition of a set of 'rules' which were developed during the course of the research. Whenever a dilemma arose, a rule was instituted that would ensure that all subsequent analysis of such content was recorded in a similar manner. The rules are detailed later in this chapter.

Disagreement on methods of statistical analysis.

The use of statistical analysis of volume data in previous LT studies is inconsistent. Where volume figures are reported (e.g. Guthrie & Parker, 1989, Gray, *et al*, 2001), data is often analysed in a descriptive manner and is sometimes not subjected to detailed statistical analysis.

Part of the reason for this is certainly because of doubts as to the 'quality' of the data (see above criticism) and whether it can, in any intellectually-honest way, be made subject to statistical analysis. If the data recorded by the content analysis is at best indicative and at worst vacuous of meaning, then any attempt to analyse such data would be pointless. Previous empirical studies have made the working assumption that volume does accord with importance (Unerman, 2000) and this assumption is adopted in this study (see also Deegan, *et al.*(2000) who suggested that "space allocated [to a subject will be] on the basis of some perception of [the] importance of the information [being communicated]" (ibid. p. 118)).

The other reason, however, is that it is not at all obvious which approach to take in data analysis. In turn, the lack of well-developed hypotheses in previous research (which would suggest which tests to employ) have hindered the development of statistical analysis in LT studies.

Regression and correlation are sparingly used, to test for correlation coefficient and, in places, comparative intercept and gradients (see for example the discussion on Blue Circle's environmental data later in this chapter). Hypotheses 7 and 8 were subject to regression analysis in order to generate correlation coefficients and confidence limits. In each case, the outcomes of the tests are treated as indicative. A more detailed statement on these methods is included later in this chapter.

The problem of charting changes in societal opinion and/or establishing an analogue for it.

Given the limitations of imputing absolute numerical character to volume figures, the methods for analysing data must be constructed carefully and in a way that does not 'read into' meaning that is not there.

Previous studies have made working assumptions about LT in seeking to employ it as an explicator of variability in CSR. Insofar that it describes the relationship between business and society as one in which the business needs to continually act in such a way that legitimacy gaps are identified and closed, previous studies have looked for convergence between the concerns of society and disclosure (to address that concern). This research objective in turn suggests two sub-objectives: seeking a metric that will measure social disclosure (which is addressed in the 'problems' above) and seeking a metric to measure changes in the opinions of society.

Whilst the first of these offers a substantial challenge, the second - charting societal opinion over a longitudinal period - offers one that is even greater. This is for several reasons:

1. although several social opinion surveys exist (e.g. Social Trends, British Social Attitudes Survey, Euromonitor), the trend data contained in them is patchy and not of a systematic format that would make it useable (this being a limitation of Deegan & Gordon's (1996) use of such data when describing lobby group memberships);
2. very few trends are reported (in these sources) for more than a decade thus in a longitudinal sample of any more than this, the data is not useable as a comparator;
3. the methods of reporting make use of the data in correlating against social disclosure problematic (the use of non-parametric representation, for example);
4. deciding upon which measures of social opinion to employ, especially as many reported in the above sources do not directly compare with the areas of social disclosure in corporate reports;
5. society is demonstrably heterogeneous and there is little evidence of convergence of opinion towards any area in which a business organisation might report. The concept of 'societal opinion' is likely to have only superficial meaning.

Patten (1991) argued that, "a major problem with attempting to model the impact of public pressure on firms is that no pure measure of this pressure exists. [Hence]... researchers must rely on proxies that are, at best, imprecise indicators of the public pressures companies face." (Patten, 1991: 302). In Chapter 4 a range of such proxies were discussed in the context of previous LT empirical studies. Media attention, memberships of lobbying organisations and industry classification (in the belief that sectors will experience different levels of exposure) are examples of such proxies.

In recognition of these problems, previous studies that have explored LT have approached it with relatively limited objectives (such as 'before and after' event studies, see for example Patten, 1992 and Deegan, *et al.* 2000; examination of single social disclosure categories, see for example Adams, *et al*, 1995; Deegan & Rankin, 1996). It would be an extravagant claim to suggest that this thesis could succeed in meaningfully charting any one feature of 'societal opinion' over a period of 26 years (see Section 6.2 for reasons for selection of this longitudinal period).

This study employs several proxies for societal concern (see the comment on this in Chapter 4). The assumption that community disclosure will respond to proximity to end user is used in hypothesis 2, the assumption that environmental disclosure will respond to a measure of environmental sensitivity is used in hypothesis 3 and the assumption that environmental lobby group membership reflects the intensity of public concern for the environment is made in hypothesis 7. The fact that proxies are used, however, gives rise to problems of reliability and this limitation is acknowledged.

6.2 Sample selection

The sample selected for the research was designed to facilitate the addressing of the hypotheses raised in the previous chapter.

Longitudinal sample

A lengthy longitudinal sample was needed in order to maximise confidence in any findings. The more years analysed, the greater would be the number of observations both between and within industries. A one year or 'few years' study would restrict comment on both the inter and intrasectoral hypotheses.

Whilst in theory 'as long a period as possible' would be ideal, it was necessary in practice to select a start and finish date. The archived collection of corporate reports at the University of Northumbria library contained a range of start points but these were typically in the 1970s or 1980s. In order to 'fill the gaps' in the corporate report record, microfiches were ordered from Companies House in Cardiff and it was its microfiche-recording start date of 1974 that was adopted as a practical starting point. The final year of the study was selected as 2000, this being a date towards the end of the research when, by the end of the process, all 2000 corporate reports would be certain to be filed. Hence, the normal longitudinal period adopted was 26 years.

Corporate reports were accessed from three sources in order of priority. Firstly, the corporate reports archive at the University of Northumbria was accessed. For those that were missing from that record, the company was contacted to furnish the gaps. Not all companies in the sample were entirely helpful in this regard, especially for the earlier reports (such as those in the early to mid 1970s). Finally, microfiches were used but this was a last resort owing to the inconvenience of recording data from this source. Some of the reports toward the end of the period were available from company websites as Adobe Acrobat .pdf files from which social information could be copied into a word processing package thus facilitating a precise word count.

Despite this, some gaps remained in the record.

- Whitbread 1974 was not present in the University of Northumbria archive nor in the weeded Companies House microfiches (the start date of 1974 seems to have been generously interpreted by Companies House - some started at 1972 whilst other started in 1975). Attempts to gain a copy directly from the company were unsuccessful.

- Boots 1974 was not present in the Northumbria archive nor in the weeded Companies House microfiches. Attempts to gain a copy directly from the company were unsuccessful.
- BOC 1978 was not present in the Northumbria archive nor in the weeded Companies House microfiches. A note was entered at the end of the BOC 1977 report in the microfiche record stating that Companies House did not have a copy of the document for copying (i.e. it was missing, without explanation). Attempts to gain a copy directly from the company were unsuccessful.
- Shell 1979, 1982 and 1986 reports were not present in the Northumbria archive. The weeded Companies House microfiche record of these years was incomplete, containing the financial statements but not the rest of the annual report. Several attempts at acquiring the documents directly from the company were met with the suggestion to obtain them from Companies House. Pointing-out that the Companies House record was incomplete was met with email silence by the Shell librarian. Telephone calls were not returned.

Cross-sectional sample

The sample selection was determined by the hypotheses discussed in Chapter 5. The 'between' hypotheses required that more than one industry was selected. The 'within' hypotheses required that at least two companies from each sector be selected in order to test for similar behaviour by companies in similar environments.

Selection by size was informed by previous studies that suggested size effects in disclosure (Trotman & Bradley, 1981; Guthrie & Parker, 1990; Patten, 1991; Hackston & Milne, 1996; Adams, *et al,* 1998). Larger organisations have been found to disclose more than smaller organisations. This effect can be readily observed by taking a random sample of large (e.g. in the FTSE 100) and small companies (e.g. from the bottom quintile of the FTSE 500) and performing even a cursory examination. The smaller company is likely to contain no social information other than the minimum required to comply with the relevant legislation in this area (see later in this chapter). Furthermore, such statements are almost always 'cut and paste' from the previous year's document.

Citing Cowen, *et al.* (1987) and Patten (1991), Clarke & Gibson-Sweet (1999) concluded that, "Size was a significant explanatory factor [for variability in CSR volume]: larger companies are more likely to receive attention from the public... [and] smaller companies may not need to rely [mainly or totally] on the annual report or other formal channels to communicate information about their social performance..." (Clarke & Gibson-Sweet, 1999: 6)

Accordingly, it was decided that the sample should be taken from amongst larger companies so that a data set could be collected in which some level of social disclosure would be observable within the main categories employed in this research. The FTSE 100 was selected as a reasonable sample of 'larger' companies (precedents for this being Gray, *et al,* 1995b, Gray, *et al,* 2001 and Clarke & Gibson-Sweet, 1999).

In order to select those companies from the FTSE 100 eligible for inclusion in the sample, Datastream was used to select the FTSE 100 by market value as at 30 June, 1998 (an appropriate point during the course of the research) and at 1st January, 1974 (the year in which Companies House microfiche records began). Fifty-eight companies were selected in the current FTSE 100 (at 1998) that existed on both dates.

From this selection of 58 companies, a smaller sample was considered that would provide sufficient data to enable the testing of hypotheses 1 to 6. Because hypotheses 3-6 required the studied sectors to have two companies in them, all sectors with just one company were eliminated.

In selecting cross-sectionally for independent variables, the literature, as noted above, has used several instruments. Clarke & Gibson-Sweet (1999), Adams, *et al.* (1998) and some others used proximity to end user as a part of their study. Hackston & Milne (1996) divided their sample (47 top New Zealand companies) into the binary categories of 'high profile' and 'low profile'. Roberts (1992) adopted a similar method (from which Hackston & Milne borrowed their method). Brown & Deegan (1998) selected industries in a 'fairly arbitrary' manner to arrive at what they considered to be a suitable cross-section of industries, albeit stressing those that, *a priori*, should have a certain degree of environmental sensitivity. Patten (1991) selected four sectors that he assumed would have particular sensitivity (with all other sectors acting as a control). Deegan & Rankin (1996) and Deegan & Gordon (1996) both employed an instrument including an element of 'sensitivity' to certain criticisms (which, in both cases, was of an environmental nature).

For the purposes of this research it was necessary to select such sectors that would make the hypotheses testable. Hypothesis 1 would be testable using any selection of sectors but the sample needed to contain sufficiently dissimilar sectors to represent a range of industry environments. Hypotheses 2 and 3 necessitated a sample that could be ranked or divided according to proximity to end user (hypothesis 2) and environmental sensitivity (hypothesis 3).

Companies within sectors were selected on the basis of similarity of market value although in the cases of chemicals, petrochemicals and aggregates, the FTSE 100 listing contained only two companies in the sectors. Accordingly, the imposition of the selection criteria was only necessary in the retailing and brewing sectors.

The following sectors and companies were selected:

- retailing (Marks & Spencer and Boots);
- brewing (and restaurants) (Bass and Whitbread);
- chemicals (ICI and BOC);
- oil, gas and petrochemicals (Shell T&T and BP),
- aggregates (RMC and BCI).

With regard to why five sectors were selected (and not more or fewer), a sufficient number of sectors had to be selected so as to make possible the intersectoral tests contained in hypotheses 1, 2, 3 and 8. The cross sectional sample had to be capable of sorting by both environmental sensitivity and proximity to end user. The five selected sectors satisfied all of the intersectoral hypothesis criteria. When the longitudinality of the sample is also considered, the value of the totality of the sample is suggested to be adequate. Given that the five sectors, when considered alongside the 26 year longitinality of the sample, satisfied the sampling requirements of all hypotheses, there was considered to be no logic in increasing beyond this.

	Turnover at year 75/85/2000 (£billion)	**Products and activities**
Bass	0.65/2.4/5.15	Brewing, pubs, restaurants, hotels, leisure
Whitbread	0.34/1.44/2.59	Brewing, pubs, restaurants, hotels, leisure
M&S	0.72/3.2/8.19	Food and clothing retailing
Boots	0.53/2.03/5.19	Pharmacy, health care and consumer product retailing.
ICI	3.1/10.7/6.4	Bulk chemicals, paints, agrochemicals, intermediates, medicines, solvents.
BOC	0.49/1.9/3.88	Industrial gases
BP	9.53/41/ca 60 (reported in $US for yr 2000)	Petrochemicals inc. extraction, refinement, manufacturing and solvents.
Shell	NA (Shell T&T plc reported on income from shares in Shell Royal Dutch)	Petrochemicals inc. extraction, refinement, manufacturing and solvents.
BCI	0.29/0.95/2.13	Mineral extraction, concrete and cement manufacturing. Paints.
RMC	0.41/1.38/5.4	Mineral extraction, concrete and cement manufacturing

Table 6.1. A summary of the companies included in the sample.

Proximity to end user measure for hypothesis 2

When ranked in order of proximity to the end-consumer, the selected sectors were:

1. Retailers (most of the company's activities are concerned with interaction with the public - almost exclusively tertiary)
2. Brewing and leisure (some of the company's activities are tertiary but a substantial part is concerned with secondary activities)
3. Petrochemicals (most of the company's activities are secondary industry with interests in primary - oil extraction, and, in some cases, retailing, although this is often done through franchise agreements and not directly).
4. Chemicals (essentially secondary industries - producing chemical intermediates, with interests and important linkages into primary industries). Note, however, that Patten (1991) selected both petroleum and chemicals as 'high profile' industries with a "greater incentive… [to project] a positive social image" (ibid. p. 303).
5. Aggregates (almost entirely concerned with primary industry - extraction, etc. with minority interests in other areas).

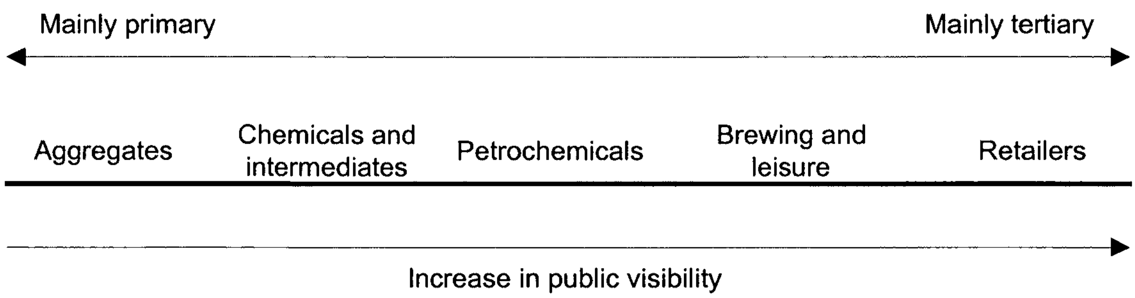

Figure 6.1.

If proximity to end user is a measure of 'fame', it could be argued that petrochemical companies such as BP and Shell are well-known to the public owing to the usage of their company names on franchised petrol stations (although the companies themselves are vertically integrated and have little direct involvement with retailing). Accordingly, the division of the sectors into binary categories is arguably a better way to 'rank' using the proximity to end user measure. The point at which companies are selected into one or the other category is open to challenge – it was an intuitive assessment and the author accepts the limitations of this part of the method.

'Nearer to' the end user sectors are defined as those that are 'better known' and which have some interaction with final consumer. In this study, 'nearer to' companies comprise retailers, brewers and petrochemical companies – the names of the companies would be known to most members of the public. 'Further from' the end user sectors and are less 'well-known' with no substantive direct contact with final consumer. In this study, 'further from' companies comprise chemicals and aggregates companies. The division into 'types' is similar to Hackston & Milne's (1996) use of high and low profile.

Both ways of ranking according to proximity to end user will be employed in the results and discussion chapters (Chapters 7 and 8).

Environmental-sensitivity measure for hypothesis 3

Borrowing from Deegan & Gordon (1996), Wilmhurst & Frost (2000) and Patten (1991), and deciding to select on a binary basis rather than as a continuum, the sectors used in the analyses were divided into two types for hypothesis 2. 'Less sensitive' sectors were those with, *ex ante*, little or no risk of being criticised for environmental misdemeanours. In this study, brewers and retailers represent 'less sensitive' sectors. 'More sensitive' sectors were those with, *ex ante*, more risk of being criticised in environmental matters because of their activities involving potential environmental malpractice, natural resource extraction or pollution. In this study, 'more sensitive' companies were represented by aggregates, chemicals and petrochemicals. Two of the sectors identified in this study as 'more sensitive' were identified in Deegan & Gordon's (1996) classification of 'top 10' most environmentally-sensitive industries (these being oil & gas and chemicals). Aggregates were not identified by Deegan & Gordon but may have been subsumed within another industry classification – it is not possible to say from their paper).

In summary, therefore,

Less environmentally-sensitive

Retailers: Marks & Spencer and Boots

Brewing: Bass and Whitbread

More environmentally-sensitive

Petrochemicals: Shell T&T and BP

Chemicals: ICI and BOC

Aggregates: Blue Circle (BCI) and Ready-Mixed Concrete (RMC)

6.3 Content analysis

Document selection

The question of which company communications to include in an analysis is one of the most problematic in any CSR study. Ideally, it has been argued, a study of CSR would include all forms of data reaching the public (see Gray, *et al*, 1995b), but in practice, this is rarely possible within normal resource constraints. The overwhelming majority of researchers have taken the pragmatic view that the annual corporate report can be accepted as an appropriate source of a company's attitudes towards social reporting. This is for three reasons:

1. The company has almost total editorial control over the document (excluding the audited sections);
2. It is usually the most widely distributed of all the regularly-produced public documents published by the company and thus has the potential to reach almost all of the company's constituences.
3. Although it is true that many companies produce environmental reports, these usually have to be separately sent for. It can be argued that those matters that are considered most important would be disclosed in the document that is the most universally circulated (i.e. the corporate report).

There is some precedent for the method of capturing only from the corporate report.

"... the annual report is used as the principal focus of reporting. There is some justification for this. The annual report not only is a statutory document, produced regularly, but it also represents what is probably the most important document in terms of the organisation's construction of its own social imagery." (Gray, *et al*, 1995b: 83)

Similarly,

"While care should be taken when relying on the annual report as the only source of disclosure, since companies do use a number of other reporting mediums (such as media releases, stand-alone environmental reports, internet home pages), the annual report [is an appropriate medium because]... First, it is a statutory report incorporating both statutory and voluntary disclosures, which is produced regularly, and one over which management exercises editorial control. Second, it can be easily accessed. Finally... [quoting Wiseman, 1982: 55] "it is widely recognised as the principal means for corporate communications of activities..."" (Wilmhurst & Frost, 2000: 16).

Advocates of this position can also point to the ASSC's (Accounting Standards Steering Committee) 1975 review, 'The Corporate Report'. The 'users' of corporate reports were a subject of this review and were defined as those groups "having a reasonable right to information concerning the reporting entity" (p. 17).

"We consider such rights arise from the public accountability of the entity whether or not supported by legally enforceable powers to demand information. A reasonable right to information exists where the activities of an organisation impinge or may impinge on the interest of a user group." (ASSC, 1975: 17).

Deegan & Rankin (1996) provided further comment on this. "The user groups identified in *The Corporate Report* were equity investors, creditors, employees, analysts/advisers, business contact groups, government and the public. The public was deemed to include taxpayers, ratepayers, consumers and other community and special interest groups such as political parties, consumer and environmental protection societies and regional pressure groups." (Deegan & Rankin, 1996: 61). Hence, there is a case that corporate reports are intended for a wide readership and that several user groups may be reasonably expected to use them to gain information about a company. Tilt (1994) found that the corporate report was the preferred medium for the conveyance of social and environmental information by 61% of the pressure groups surveyed in her sample. She concluded that, "overall, the... [medium] of disclosure with the highest considered credibility is the annual report," and that it was' "the most acceptable form." for the user groups (pressure groups) in question (Tilt, 1994: 64). Other studies appear to use annual reports for purely pragmatic reasons. Brown & Deegan (1998) selected annual reports because they were, "the most readily-available data source" (ibid. p. 28) although some further justification was also offered for the selection.

Some research has reinforced the belief that the annual report is used by several user groups and that social and environmental disclosures made therein are material to decision-making. In particular, Deegan & Rankin (1997) examined users of solely environmental disclosures in corporate reports (i.e. not the other two categories used in this study). Their conclusion included the following: "Conclusions drawn by prior research, [such as Guthrie & Parker, 1989, Deegan & Rankin, 1996; Deegan & Gordon, 1996] which indicate that changes in environmental disclosure practices are driven by attempts by organizations to legitimate their operations, rely on an assumption that various groups do use the environmental information contained within the annual report. As a result of undertaking this study, the evidence would suggest that such an assumption is valid. Some groups within society do perceive environmental issues to be material to their decision-making processes, and they seek information concerning these activities from the annual report." (Deegan & Rankin, 1997: 580)

Arguments against the selection of only the corporate report are, however (and admittedly) convincing. Unerman (2000), in his longitudinal study of disclosures in the totality of corporate communications by Shell Transport and Trading plc demonstrated that in many years of his study, disclosure of social information in the annual report represented a small proportion of the company's total CSR. Furthermore, the amount of disclosure in the annual corporate report did not represent a consistent proportion or total disclosure (in all communication) such that it can be taken to be a reliable surrogate for the totality of reporting intentions (see also Simpson, 2000 for a general critique of annual reports).

This is not the point, however. Unerman's findings, though worthwhile, need not inform the method employed in this research. That a company may elect to disclose social information through a variety of media does not render analysis of the corporate report less powerful as a means of establishing attitudes towards social constituencies. For the reasons detailed above, there is every reason why companies would select their annual report to disclose social information precisely because it is the annual report. Ad hoc, occasional and exceptional disclosures using different media may be a subject worthy of study but need not be seen as a challenge to the method used in this research.

Categories of social disclosure information

Literature and pilot study

The issue of what to consider to be social disclosure, in terms of categories, was largely informed by previous empirical studies in the area (see for example Gray, *et al,* 1995b, Milne & Chan, 1999; Adams, *et al,* 1998; Guthrie & Parker, 1989, 1990; Deegan & Gordon, 1996; Patten, 1991). Milne & Chan (1999) noted that previous studies analysed data in three categories: environmental concern, employee welfare and community relations. Adams, *et al.* (1998) analysed social disclosure under the categories of environmental, employee issues and 'ethical' reporting where the latter category was defined as, "any information, except employee or environmental, that was concerned directly or indirectly with giving an impression of corporate ethical values." (Adams, *et al*, 1998: 4). This appears to be a *de facto* 'other' category and included, "customer relations, community involvement, equal opportunities, investment policies, charitable and political activities and product safety." (ibid. p. 5). Guthrie & Parker (1989 and 1990) both used environment, energy, human resources, products, community involvement and 'other'. Deegan & Gordon (1996) suggested that, "Social responsibility reporting may include information about environment, energy, human resources and community involvement." (Deegan & Gordon, 1996: 187).

Milne & Chan's (1999) observation (above) summarises the history of social disclosure studies, which, when examined chronologically, shows a record of some confusion as researchers sought to resolve a collection (canon?) of categories that would serve all social disclosure studies. Ernst & Ernst (1978), for example, examined (although not volumetrically) 'themes' including environment, energy, products/consumers, community, employee/human resources, fair business practice and general/other. Patten (1991) also employed these categories. Later writers tended to merge categories into areas of similar theme. Guthrie (1982) for example, merged 'fair business practice' with 'human resource' disclosure. Although Gray, *et al.* (1995b) attempted to employ multiple sub-categories of social information, their database is based around the three major categories identified by Milne & Chan (1999).

In addition to the research history in social information categories, the pilot study that was undertaken at the beginning of this research project found that the three major categories were more-or-less self-suggesting. It was frequently the case that disclosing companies identified these categories themselves (often using the same names to describe them). During the initial (pilot) Marks & Spencer study (1969-1997), no social information was encountered that could not reasonably be entered into one of the three categories. Accordingly, the three categories were 'firmed up' at the conclusion of the pilot study.

The three categories defined

Environmental disclosure comprises disclosure relating to the company's attitude, policy or behaviour towards its environmental impact, emissions, pollution, cleaning up (after pollution), relandscaping or energy efficiency (that is not intended as an explicit economic message). Disclosures concerning energy efficiency were examined on a case-by-case basis (some studies have captured energy disclosures as a separate category, see for example Guthrie & Parker, 1989; 1990). If the primary motive for energy efficiency was considered, in context, to be economic, the disclosure was not counted. If it was considered to contain environmental protection as a substantial motivation, it was included (some finely balanced decisions were involved).

The definition of environmental disclosure was relatively unmodified from Deegan & Rankin's (1996) characterisation of the same. In their study of 20 Australian firms that had been prosecuted under environmental protection laws, they defined environmental disclosure as, "any disclosures pertaining to the organizations' [sic.] interaction with the environment. This may have included the installation of environmentally friendly machinery; undertaking site rehabilitation; recycling activities; admission of pollution emissions; incurrence of fines relating to environmental misdemeanours, and the like." (Deegan & Rankin, 1996: 56). In other words, a permissive definition was adopted so as to maximise data captured under this definition.

Employee welfare disclosure comprised disclosure relating to the company's attitude, policy or behaviour towards its employees, in particular with regard to disabled employees, equal opportunities, training, development, recruitment, minorities (in the labour market, e.g. ethnic minorities, etc.), redundancy, redeployment, women in senior positions, communication (with employees), consultation (with employees), care of employees, care of retired employees, pensions, employee share schemes, remuneration, terms of employment, promotion, health, safety, conformance with legal employment regulation, trades unions and education (of employees).

A good review of the history of employee reporting was provided by Adams, *et al.* (1998). "... some of the earliest research into corporate social disclosure, carried out in the 1970s, shows that reporting on employment issues was more extensive in Canada than the USA where it was largely limited to the treatment of minority groups (Maxwell & Mason, 1976; Preston, *et al.* 1978). Later, Roberts (1990) study of the top 200 multinational corporations worldwide, found that European and South African firms were the most likely to disclose information on employment issues. Lewis, *et al.* (1984) document the changing interest in the subject of reporting to employees over the period since 1917; Adams & Harte (1995) [later published as Adams & Harte, 1998], the changing portrayal of women in UK banking and retail companies since 1935 ..." (Adams, Hill & Roberts, 1998: 3)

Clearly then, employee disclosure has been studied from a number of angles. In order to gain the fullest picture possible in this research, a generous view of employee disclosure was taken. Some, however were excluded (see the rules later in this chapter) on the basis that the pilot study showed them to have little or no meaning or value as indicators of intent towards employees. These were the token and perfunctory thanks paid by (usually) the chairman in his annual statement and the accounting treatment of employee pensions in the notes to the accounts. Other statements on employee pensions (typically in the directors' report) were counted.

Community disclosure comprised disclosure relating to the company's attitude, policy or behaviour towards its non-economic stakeholders, particularly with regard to education (of those other than employees), charitable support, sponsorship (e.g. of sporting activities), secondment (of employees for the purposes of community support), job creation (in other than the company itself) and community support. The term 'community' is somewhat amorphously defined - more so than the other categories of social disclosure. In addition to the above-listed categories of community disclosure, the category was taken to include all other disclosures relating to social responsibility that did not fit readily into either of the other two categories (of which there were only a handful).

The problem of changing legal and company law requirements

There were a number of problems in deciding what disclosures to actually count as recordable disclosure (in addition to the debate discussed above about defining social disclosure). The legal prescription of social disclosure has changed over the course of the longitudinal study. These are summarised here.

Prior to 1974: White paper on 'Wages and conditions of African workers employed by British firms in South Africa'. UK firms with direct investments in South Africa were required to disclose conditions of employment (including pay) of employees in the RSA. This white paper triggered disclosure in Blue Circle reports and in Marks & Spencer. In both cases, the word volume was small (28 words in M&S reports for several years in the mid to late 1970s).

The Heath and Safety at Work Act (1974) triggered some disclosure (usually to show how the company is complying with the Act). The only measurable disclosure with regard to HaSaWA is two pages (pp30, 31) in the 1975 Blue Circle report.

The Employment Act (1982) was referred to in the 1985 Blue Circle report (p 22, triggering a small amount of disclosure) but was not a prominent legal instrument in any other report in the sample.

Disclosure on disabled persons was partly informed by The Disabled Persons Act 1944 and The Disabled Persons Act 1958 which provided that companies of more than 20 employees must employ registered disabled persons at a rate of 3% of the workforce. Some companies elected to provided voluntary disclosures on these issues prior to 1980 when The Companies Regulations Act 1980 provided that businesses of more than 250 employees (all companies in this sample) must provide a statement in their annual report on the actions they have taken in appointing, training, promoting, developing disabled people. Most companies in the sample made this an item in the directors' report although it was typically 'copied and pasted' from year to year.

There was no statutory requirement for companies to report on equal opportunities during the period of the study. A number of legal and voluntary instruments were introduced during the period, however, to constrain companies to observe equal opportunities in their behaviour (the Sex Discrimination Act, 1975 being the most prominent) but not in disclosure. This notwithstanding, it became a convention for companies to include a statement about not discriminating on grounds of gender, race, etc. This was typically appended to the compulsory statement on disabled persons and was 'copied and pasted' from year to year.

It was decided to include all compulsory disclosures in the study. This was for two reasons. First, it was demonstrably social in nature, even although it was required. Second, although it was required to make a disclosure on the subject in question, the actual volume was within the editorial control of the company. The legal minimum could be met with very little disclosure yet most companies chose to use such disclosures to indicate their benevolence in the areas in question.

6.4 Data capture

Summary of previous approaches

A number of methods of data capture have been employed in previous social and environmental accounting studies. Table 6.2 provides a sample of selected previous empirical studies in social and environmental research to illustrate the different approaches.

Reference	Sample	Years in sample	Data capture method
Ness & Mirza (1991)	131 of Top 150 UK companies by turnover	1984	Frequency of disclosures in annual report
Rockness (1985)	26 of the largest US firms by turnover in the steel, oil, pulp & paper industries	1984	Page proportion (including pictures) in annual reports
Guthrie & Parker (1989)	The Broken Hill Proprietary Co. Ltd. (Australian mining company)	1880 to 1980	Page proportion (Did not include pictures or graphics) in annual reports
Lyall (1982)	60 companies randomly selected from the Times top 1000.	1981	Checked disclosure in annual reports against employee concerns raised from earlier research
Bowman & Haire (1975)	82 randomly selected companies in the UK food processing industry	1973	Sentence count
Booth, Moores & McNamara (1987)	60 companies selected from 7 strike prone industries in Australia.	1986	Page proportion of annual reports
Andrew, Gul, Guthrie & Teoh (1989)	119 Plcs randomly selected in Malaysia & Singapore	1988	Page proportion of annual reports
Cowen, Ferreri & Parker (1987)	134 Companies randomly selected from 10 industries within the Fortune 500	1986	Page proportion of annual reports
Singh & Ahuja (1983)	40 randomly selected "public sector undertakings" in India	1982	Assigned weightings to various social disclosures made in annual reports
Roberts (1992)	130 companies from the Fortune 500 that were investigated by the Council on Economic Priorities	1991	Companies were rated; Poor, good or excellent for social disclosure in annual reports
Trotman & Bradley (1981)	207 companies randomly selected from the Australian Stock Exchange	1967-77	Percentage of lines of text devoted to CSR as a percentage of total lines in annual reports
Campbell (2000)	One company (Marks & Spencer plc) over 28 years	1969-1997	Page proportions
Clarke & Gibson-Sweet (1999)	95 Companies from the Times top 100 UK companies by turnover	1997	Scanned to see if community & environmental issues were mentioned in annual and environmental reports
Guthrie & Parker (1990)	50 largest companies by turnover in UK, USA & Australia	1983	Page proportion from annual reports
Milne & Adler (1999)	49 companies selected at random. Experiment designed to test inter-coder reliability.	N/A	Sentence count
Adams, Hill & Roberts, 1998	150 companies' annual reports in 6 countries	1993	Page proportion (with an additional quantitative and/or financial nature of data interrogation)
Deegan & Gordon (1996)	197 Australian companies	1991	Word count

Patten (1992)	21 of the 23 Plcs in the petroleum sector of the Fortune 500	1991	Page proportion
Hackston & Milne (1996)	47 of Top 50 New Zealand companies on NZ Stock Exchange	1995	Sentence count & page proportion
Deegan & Rankin (1996)	20 companies that were prosecuted by the New South Wales & Victorian environmental protection authorities & 20 companies that had not been prosecuted but matched the former by industry and size	1995	Word count
Harte & Owen (1991)	30 UK companies selected from previous research who were *"regarded as consistently good at disclosing ethical & environmental information"*	1989	Page proportion
Gray, Kouhy & Lavers (1995b)	UK companies, largely from Times Top 1000	1979 to 1991	Page proportion
Roberts (1991)	110 companies from France, Germany, The Netherlands, Sweden & Switzerland	1988	Annual reports were scanned against a checklist of 54 specific items
Yamagami & Kokubu (1991)	49 largest Japanese owned companies from the Fortune 500	1985	Annual reports were scanned against a checklist of 5 specific topics
Freedman & Jaggi (1988)	108 American companies selected from the paper & pulp, oil refining, steel, chemical and electrical industries	1973 & 1974	Assigned weightings to various social disclosures made in annual reports
Wilmhurst & Frost (2000)	62 Australian companies.	1995	Word count (of environmental disclosure.
Zeghal & Ahmed (1990)	6 largest Canadian banks & 9 largest Canadian petroleum companies	1981 & 1982	Word count

Table 6.2. selected previous studies in social disclosure studies including comment on data capture method.

'Coding' and 'counting' narrative disclosures

One of the most useful papers on the problems of content analysis in social and environmental disclosure studies is Milne & Adler (1999). The authors contended that data counting method is less important than coding decisions.

The idea that narrative disclosure volumes can be numerically coded for is not an uncontroversial one. Several potential errors have been identified that might render problematic any conclusions drawn from such studies.

Any content analysis exercise is faced with such problems. Milne & Adler (1999: 237) succinctly defined content analysis as, "a method of codifying the text (or content) of a piece of writing into various groups (or categories) depending on selected criteria." Krippendorf's (1980: 21) discussion of this suggested that content analysis method should be such that "valid inferences" could be made from the codification of the narrative. The validity of any inferences drawn will depend upon the reliability of the codification instrument.

Milne & Adler (1999: 238) went on to challenge content analysts to, "demonstrate the reliability of their instruments and/or reliability of the data collected using those instruments to permit replicable and valid inferences to be drawn..." This is a point overlooked by many researchers in social and environmental accounting empirical studies. The usefulness of the codified data therefore rests upon an understanding of the sources of error (i.e. the sources of unreliability)

The potential errors in SEA content analysis were discussed by Milne & Adler (1999) and are relevant to this study. Having argued that, in previous studies, "measurement reliability [has been] confused with coding reliability." (Milne & Adler, 1999: 238), they go on to argue that coding error is the more important error with which to be concerned. If the data being measured is not a reliable expression of social disclosure, the matter as to how it is measured becomes less relevant.

One way in which coding reliability can be enhanced, according to Milne & Adler (1999) is by subjecting the document under analysis to multiple coders. The thinking behind this is that the coders can agree and disagree on various disclosures thus arriving at a more reliable consensus-based definition. This approach is, however, resource-intensive and has been taken by very few previous researchers in this area (Milne & Adler, 1999, being a notable exception). The use of multiple coders, whilst possibly reducing errors over the definition of social content may introduce other inter-coder disagreement errors when the data becomes subject to measurement (counting errors instead of coding errors).

The debate over data capture (data counting) method

The fact that there has been little agreement amongst previous researchers on data capture method implies that there is still a debate to be had as to which method is the 'best' way to count social disclosure data. This section presents a perspective on the debate by considering the two most commonly-used methods of data counting. Table 6.2 shows a sample of previous studies (albeit an indicative sample only) in which page proportion counting appears to have been a more popular counting method than word or sentence count. Unerman's (2000) similarly 'selective' sample shows a similar split (Unerman, 2000: 668).

The purpose of this section is to review the arguments for and against the two most frequently-used data counting methods: word count and page proportion count. Variations in these methods such as sentence count (arguably a variant of word count) and pages count (a variant of page proportion count) can be considered as falling within the parameters of the discussion.

Measurement by page proportion count

Page proportion counting has been used by Gray, *et al.* (1995b), Unerman (2000), Adams, *et al* (1995) and others. The main advantages and disadvantages are mentioned briefly.

Advantages of page proportion count

First, page proportion count is quicker (per document) than word counting and it can be said to provide a good indication of a company's attitude to social disclosure as the amount of space given over to any disclosure in a corporate report has an associated financial cost (in design, typesetting and printing). A company would (the argument goes) be unlikely to commit space to matters it cares nothing or little about. Hence, the more space that is committed to social disclosure, the more we can say that it 'cares' about social issues.

Second, page proportions, when summed for an entire document (typically the company's annual report), can be expressed as a proportion of either the total pages in the report or as a percentage of the non-financial (and hence non-mandatory) pages (see Campbell, 2000). This quality is unique to page proportion count as it would be an ambitious task to record word count against total words in a corporate report (although the recent trend in publishing electronic corporate reports on websites may make this possible for word count measures). In addition to expressing disclosure as an absolute number (of total page proportions), this quality can be used to express the proportion of a corporate report (by area) that is given over to social disclosure.

Disadvantages of page proportion count

There are two major arguments against using page proportion count to measure social disclosure:

First, a social disclosure such as a photograph need not involve any intellectual commitment by the company to explain its attitudes to social matters. Such disclosures would register using page proportion counts but would not register using word or sentence count. Some company reports, for example, include one or two pages of photographs showing children throwing bottles into a recycling bin in a supermarket car park whilst others contain photographs of relandscaped quarries. Both of these would technically count as environmental disclosure (one of the categories of social information), but are relatively costless in intellectual terms to the company. No serious thought nor time investment would necessarily be required in preparing such a disclosure (they do not require environmental measurement or policy formulation, for example).

Second, the typesetting of the corporate report would normally have an influence on the total page proportion count of social disclosure. Many (especially larger) companies are known to subcontract the formatting and design of their corporate report to external organisations. How, then, can page proportions be considered to be a good indicator of social disclosure when it is due in part to the approach to design of people who have nothing directly to do with the reporting company? A related criticism to this is the problem of font size and text formatting. A small (in word count) social disclosure in a large font might register the same page proportion as a large (in word count) disclosure in a smaller font.

Measurement by word count

Word count measure is a slower and more exacting measure of recording social disclosure, especially if, as is normally the case, the hard copy of the report is being used. It involves counting the words in narrative disclosures that would also be counted using page proportion measures but it does not measure photographs on social issues (tables are problematic as 'counting' the words in such disclosures can sometimes mean counting numbers, etc.). Like page proportion counting, word count has both advantages and disadvantages as a measure of social disclosure.

Advantages of word count

The major point in its favour is that word count measures only those disclosures that the company has made an investment in the disclosures' construction. It relies hardly at all upon the vagaries of typesetting and third party design formatting. Accordingly, the reporting company has had to 'think' about what to say, thus providing a more robust expression of its social intentions (than page proportion count).

The absolute numbers generated by word count enable direct comparisons of disclosure volumes between companies and over time without the need to qualify the data with reference to the 'muddiness' of page formatting, varying font sizes, etc. (although this is not to claim that word count data is not 'muddy' with regard to capturing meaning).

In their defence of sentence count as the unit of measurement, Hackston & Milne (1996) suggested that, "Sentences, as a measurement unit, overcome the problems of portions of pages and remove the need to account for, or standardise, the number of words." (Hackston & Milne, 1996: 84). This argument can equally be made for word count measurement versus page proportion counting.

Wilmhurst & Frost (2000), drawing upon Zeghal & Ahmed (1990) and Krippendorf (1980) suggested 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." Wilmhurst & Frost (2000: 16). Furthermore, they argued 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 (ibid, p.17). Similarly, Deegan & 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 & Gordon, 1996: 189)

Disadvantages of word count

Arguments against word count include the following.

First, some parts of what word count measures are actually the same year on year. This problem applies particularly to standard statements on equal opportunities and disabled employees (both of which are required by statute in UK accounts anyway). The company can effectively 'cut and paste' such disclosures from one year to the next, thus somewhat undermining the intellectual investment argument for these particular disclosures (note: this phenomenon would not show up in longitudinal samples of only one year - an argument for greater longitudinality in social disclosure studies). Statements in some sections are less prone to this phenomenon: the chairman's statement is typically written from a zero-base each year as the performance and environment of the business changes from year to year. Social disclosure in chairmen's statements may thus be an alternative (although depleted in volume) measure of social disclosure as it usually avoids the 'cut and paste' effect.

Second, and at the risk of stating the obvious, it overlooks any disclosure that is not in a narrative form. Accordingly, photographs do not show in a word count measure. Whilst many photographs in corporate reports are relatively 'costless' insofar as they are perfunctory or trivial in content, others may not be. It is possible, therefore, that a word count measure in some corporate reports provides a false impression of the company's social reporting volume of meaningful social information in those years. Wilmhurst & Frost (2000), for example, conceded that "pictures reflecting environmental [or social] activities were excluded due to measurement difficulties…" (Wilmhurst & Frost, 2000:17)

In their argument in favour of using sentence counting as the unit of codification, Hackston & Milne (1996) argued that, "measuring [corporate social disclosure] by the number of words… leaves the researcher pondering which individual word is a [social disclosure] and which is not." (Hackston & Milne, 1996: 84). This is an unsatisfactory defence, however, as the same argument would apply to deciding which individual sentence should be counted as social disclosure or not. Furthermore, the impact on total disclosure volume of 'wrongly' counting a whole sentence as social disclosure will be greater than that for a word or collection of words (i.e. sentence count carries a risk of error multiplication – word count reduces error to the level of the individual word).

A comparison to illustrate the potential conflict

The debate can perhaps be best illustrated by considering an example. In each of the years 1990 to 1998, Blue Circle Industries plc (one of the ten companies in this research) committed corporate report space to what it termed its 'Environmental Review' or 'Environmental Statement'. This statement comprised a summary of its environmental policy and a review of the year in question's company activity as it related to environmental matters.

Year	Pages in environmental review	Words in environmental review	Word density (words per page)
1990	2	462	231
1991	2	488	244
1992	2	895	447.5
1993	1	518	518
1994	2	1066	533
1995	2	976	488
1996	3	793	264
1997	3	1426	475
1998	3	1331	444

Table 6.3. Blue Circle Environment Statements recorded by page proportion totals and words count.

What is clear from Table 6.3 is that the two measures would yield a quite different view of BCI's environmental disclosure pattern over the longitudinal period in question. The third column shows the differences in the number of words per page in the Environmental Statement, ranging from a low of 231 to a high of 533.

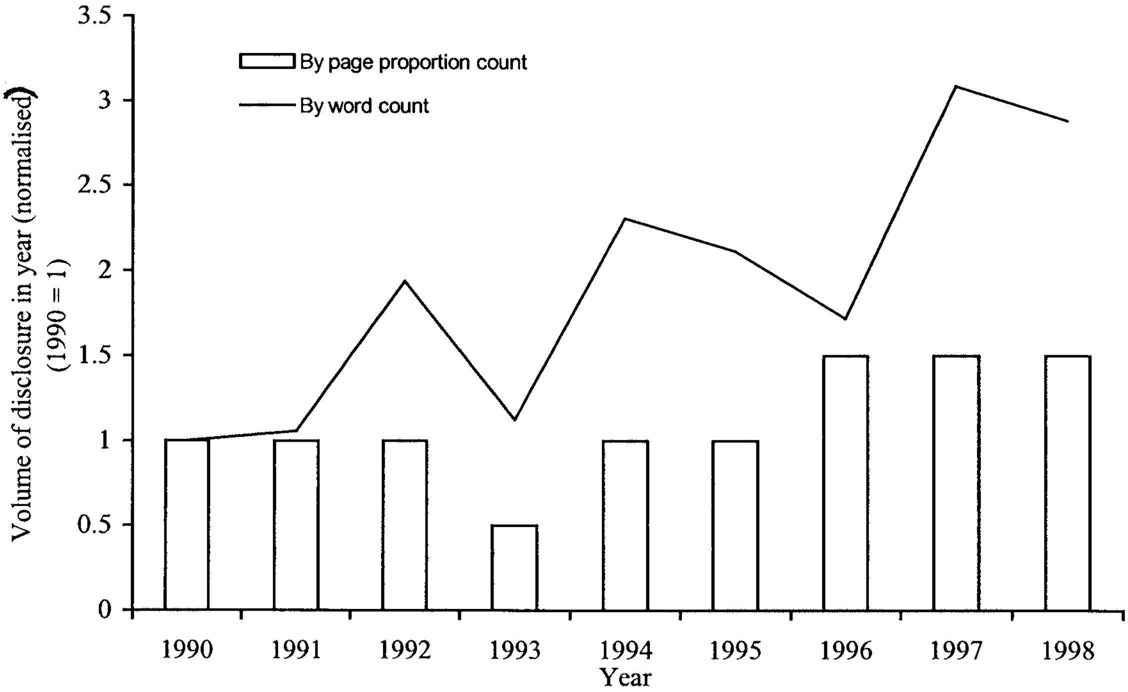

Figure 6.2. Blue Circle environment statements recorded by page proportion totals and words count. (1990=1)

A regression analysis of the two trends further highlights the difference in the two data capture methods.

Regression of normalised page proportion data
Gradient = 0.083
Intercept = 0.69

Regression of normalised word count data
Gradient = 0.73
Intercept = 0.24

Hence, a quite different record of longitudinal disclosure is indicated by the two methods. Both show an increase but the gradient on page proportion data is little more than flat whilst it is appreciably more for the word count data. If only the page proportion measure was recorded, one might come to the conclusion that BCI's Environmental Statement grew little over the decade. The overlay of the word count data somewhat enriches our understanding of the longitudinal pattern of disclosure.

Criticisms of volume recording generally

Volume measures of social disclosures, by whichever method, have their limitations when it comes to ascertaining the 'true' picture of a company's attitude to social disclosure. Both word count and page proportion counts, in themselves, measure only the volume of social disclosure. A more detailed method would be required to measure the content of disclosures (the 'what is said' rather than the 'how much is said'). Whilst two companies in any given year might show a very similar volume of social disclosure, it might be that one company treats the process as a chore, communicating trivial information in a banal manner and in a form that does not lend itself to external verification. The other company might disclose deeply meaningful information containing several substantial social undertakings and inviting third parties to hold it to account for its social behaviour. Clearly, these two companies have substantially different attitudes to social disclosure but a volume measure will fail to detect such a difference.

"The number of words disclosed is not assumed to be representative of the quality of disclosure, although it is assumed to be representative of the overall responsiveness by corporate management in regard to legitimising environmental performance [note: this being the central theme in the Wilmhurst & Frost paper]... Annual reports are time-consuming and costly to produce, and management must rationalise the competing demands for space [note: a volume measure]. As a result, space must be allocated on the basis of some perception of the importance of information to report users." (Wilmhurst & Frost, 2000:17)

Deegan & Gordon (1996) accepted as a limitation the fact that it had to be, "assumed that the significance of a disclosure can be meaningfully represented by the quantity of disclosure (MacArthur, 1988)." (Deegan & Gordon, 1996: 189) They were, however, able to assume that this limitation would be, "unlikely to significantly affect the validity of the study's findings." (ibid., p. 189)

A common way of dealing with this limitation in the literature is to qualify the meaningfulness of the data. In attempting to not claim meaning for data that is not there, a range of approaches have been taken. Deegan & Gordon (1996) who used a word count volumetric measure of environmental disclosure qualified their findings by suggesting, "What should be stressed, however, is that the method of measurement being employed here [word count] is not undertaken to yield figures that are exact or precise in any manner, but rather to provide an indication of systematic trends ..." (Deegan & Gordon, 1996: 189)

The literature is not strong in advancing content analysis methods for recording qualitative information. Some researchers have attempted to enrich the meaning of the data by creating sub-classifications into which to enter numerical data (see for example Zeghal & Ahmed, 1990; Gray, *et al,* 1995b). Gray, *et al.* (1995b) divided environmental disclosure into several sub-categories: environmental policy, environmental audit, waste, packaging, pollution, etc., financially-related data (on the environment), sustainability and environmental 'other'.

Recording by location (in the annual report) is another, but less powerful way of adding additional meaning to the numerical data (this approach was undertaken by Hackston & Milne, 1996 and Gray, *et al.* 1995b). In defence of this method is that it is generally true that narrative in the directors' report is generally factual, repetitive (from one year to the next) and includes the majority of the mandatory disclosures. Other locations in the annual report are more likely to include more 'one-off' and discretionary disclosures which may convey more meaning and intent.

Finally, some studies have attempted to record qualitative content by categorising each disclosure according to whether the 'news' communicated by the disclosure was 'good' or 'bad'. Hackston & Milne, 1996, for example, categorised news as 'good', 'bad' or 'neutral', finding that of 914 disclosures in their sample, 710 were 'good' (78% of total), 57 were 'bad' (6%) and 147 were 'neutral' (16%). Deegan & Rankin (1996) included a positive or negative content query in addition to their word count unit of measurement, where, "Positive disclosures are defined as information which presents the company as operating in harmony with the environment. Negative disclosures are defined as disclosures that present the company as operating to the detriment of the natural environment" (Deegan & Rankin, 1996: 56). They found that the news communicated in corporate reports was overwhelmingly positive: "firms will disclose "positive" news, but will suppress "negative" news... even when the firms did have "negative" news to report." (ibid. p. 57). This finding casts some doubt as the value of interrogating data for 'good news/bad news' as, in all but a few isolated cases, the news is likely to be positive or favourable to the reporting organisation. Deegan & Gordon (1996) used a 'positive aspects' - 'negative aspects' query when interrogating environmental disclosures between 1980 and 1991 in Australian companies. A similar method was adopted by Deegan, Rankin & Voght (2000).

Other studies seemed to simply accept the limitations presented by a volume-only approach. Wilmhurst & Frost (2000) for example, conceded that "This study is limited in that legitimisation is interpreted from the quantity of environmental information disclosed rather than from an assessment of the 'quality' of what is actually being disclosed..." (Wilmhurst & Frost, 2000:17)

The problem was well-summarised by Deegan & Rankin (1996):
"As indicated in Deegan and Gordon (1996) there are two major limitations associated with the use of content analysis to measure disclosure quantity. First, there is a necessary element of subjectivity involved in determining what constitutes a particular type of disclosure in each ease (Zéghal and Ahmed, 1990). Second, it is assumed that the significance of a disclosure can be represented meaningfully by the quantity of disclosure (MacArthur, 1988). Zéghal and Ahmed (1990) also point out that the difficulties associated with content analysis are maximised when a small sample of disclosures is examined. Given the number of annual reports being reviewed in this study it is felt that this would be sufficient to overcome the effect of any potential measurement error or bias – the results of this study, however, should be considered in the light of these limitations. It should also be emphasized that we do not take the position that word counts will provide any exact or precise measurement, but rather they will provide the means of determining whether there appears to be any systematic variations in disclosure policies" (Deegan & Rankin, 1996: 56).

Unit of analysis used in this study

Whilst conceding the limitations of the method, it was decided that word count should be employed as the method of data capture in this research for the following reasons:

- its usefulness as a data capture method had been demonstrated in several previous studies (see above);
- it was capable of generating quantitative volumetric data by category;
- data could more reliably be captured from microfiches using word count than the major alternative (page proportion count – it would be difficult to estimate page proportions on a page on a microfiche screen). Microfiches were used to analyse some documents.

It was furthermore decided to record data in volumetric terms only. The findings of studies recording 'news' have been mixed and ample evidence from previous studies suggests that 'bad news' is an exception in social reporting. Nor, necessarily, would a knowledge of news value be of any help in informing the hypotheses set out in Chapter 5 unless 'bad news' was taken to represent a higher quality of disclosure than 'good news'.

6.5 Proxy data collection for hypotheses 7 and 8

The nature of hypotheses 7 and 8

Hypotheses 1-3 are intended to 'test for' legitimacy theory as an explicator of variability in social and environmental disclosure volume by making defendable assumptions about vulnerability to criticism by virtue of a sector's position. Hypotheses 4-6 enquire as to the extent to which legitimacy theory is indicated by intrasectoral agreement by category. Hypotheses 7 and 8 adopt a different approach, testing for the extent to which environmental disclosures (only) correlate with an assumed proxy for the intensity of societal environmental concern, environmental lobby group memberships (idea derived from Deegan & Gordon, 1996).

In order to make the testing of hypotheses 7 and 8 possible, it was necessary to formulate a method for the gathering of lobby group memberships.

Publicly-available proxy data sources

A number of publicly-available sources exist of changes in social attitudes. Those that contain information on UK social attitudes are contained in three major sources. Social Trends (HMSO), the British Social Attitudes Survey and Euromonitor provide selected surveys of economic and social data. They suffer from two structural errors that render their usefulness sub-optimal.

1. The subjects of the data sets are at the discretion of the editors. Social data comprises only a part of the body of data in these sources and the subjects tend to be less than useful owing to their lack of specificity.
2. Longitudinal records are erratic and incomplete. Records tend to contain selected years, sometimes coinciding with census data (i.e. ten-yearly). Accordingly, there is insufficient resolution for year-to-year correlation against disclosure volumes.

For some limited longitudinal studies with limited content analysis objectives, such sources may, however, be of some value. Deegan & Gordon (1996) employed such a method when correlating environmental disclosure against membership of selected Australian environmental organisations (Greenpeace, Australian Conservation Foundation, Wilderness Society, World Wide Fund for Nature). Their source for this data was *The Green Pages 1991-1992: Directory of Environmental Groups in Australia*, published by the Australian Conservation Foundation and this suffered from the limitation that the only years reported were 1975, 1980, 1985, 1988 and 1991. Note that intervals between years are irregular and at the discretion of the editors of *Green Pages*. It is not possible, without data interpolation, to construct a meaningful linear scale x-axis using this data and indeed, Deegan & Gordon's (1996) representation of the data does not attempt to do so. This limitation notwithstanding, it remains the case that data of this type is an acceptable analogue for environmental opinion and can be used if suitable qualification is made to any conclusions drawn.

Organisations capable of providing analogue data

In addition to publicly-available sources of membership data, it is, of course, possible to contact environmental organisations themselves in order to ask for their membership statistics. Organisations approached for this purpose were those that the author was aware of as being prominent in the environmental debate: Greenpeace, Friends of the Earth (FOE) and (less directly concerned with the environment and more concerned with specifically English rural concerns), the Campaign for the Protection of Rural England (CPRE). The Worldwide Fund for Nature (WWF) were contacted but were unable to provide membership statistics. Smaller groups may also have been a useful source of membership statistics but if the data is intended to be used as an analogue for environmental opinion, less well-known and more obscure organisations may be less indicative of general trend in societal opinion.

In contacting these organisation, it was important to gain membership figures for as long a period as possible aligning to the years of the disclosure study (i.e. 1974-2000). The following data was obtained

Greenpeace: 1990-2000
CPRE: 1987-2000
FOE: 1977-2000

The Greenpeace statistics, despite the fact that the organisation was much older than 1990, reflected the various restructurings that had been undergone and the implementation of IT in the early 1990s. The ten year record was considered to be too longitudinally shallow to be useful (given the key period of the late 1980s in environmental disclosure – see figure 7.24). The Campaign for the Protection of Rural England may be considered to be less of an environmental organisation and perhaps one more concerned with conservation. In this regard, its membership statistics as an analogue for environmental concern should be taken with some caution. Its figures are more useful than those of Greenpeace, however as they include years in the late 1980s (a key period in environmental disclosure). Friends of the Earth was able to provide memberships figures from 1977 to the present, thus making by some distance the most useful source of analogue data.

6.6 Pilot study

Objectives

Prior to the commencement of the main research project, a pilot study was undertaken. A number of objectives were identified for this:

1. clarification of the categories of social disclosure to be captured;
2. testing of the proposed method of data capture and comparison of the two major approaches (word count and page proportion count);
3. deciding what other content in the corporate report that it might be appropriate to record in pursuit of the research objectives;
4. rehearsing the techniques for data collection and analysis;
5. providing a longitudinal data set that might provide indicative insight on the 'testability' of the central hypotheses.

Sample and method

The corporate reports archive at the University of Northumbria was inspected in order to select a company with a longitudinal period sufficient to provide a sufficiently rigorous pilot study. It was found that the corporate reports for Marks & Spencer plc were present between 1969 and 1997 (excluding the years 1972 and 1973) and these were used for the pilot study.

Because the author was unsure as to which fields to include, more data was collected in this experiment than was eventually employed in the main body of the research (after the method was refined). Accordingly, the fields entered in the pilot database were more-or-less self suggesting or speculative (insofar that the fields may prove useful in the final method).

Given the previous studies' divided use of the two main data capture methods of word count and page proportion count, it was decided that the pilot study should record the social content of the annual reports by both methods.

The fields used in the pilot study were as follows (all were recorded for each annual corporate report).

1. Year of corporate report
2. Pages in corporate report
3. Financial pages (containing the compulsory financial data and accompanying notes)
4. Non financial pages in corporate report (those in which the company chooses the content)
5. Total page proportion of social disclosure - self calculating
6. Total page proportions social disclosure as percentage of non financial pages - self calculating
7. Total page proportions social disclosure as percentage of total pages - self calculating
8. Non financial pages as percentage of total pages
9. Turnover (UK £ billions)
10. Operating profit (profit before interest and tax) (UK £ billions)
11. Balance sheet value (UK £ billions)
12. Return on sales = operating profit/turnover (%) - self calculating
13. Return on assets = operating profit/balance sheet value (%) - self calculating
14. Charitable donations (UK £ millions)
15. Charitable donations/operating profit (%) - self calculating
16. Political donations (UK £ thousands)
17. Political party/beneficiary of political donations
18. Number of UK employees
19. Number of UK employees expressed as full-time equivalents
20. Total UK wage bill (UK £ millions)
21. Mean pay per FTE - self calculating
22. Year on year increase in mean pay per FTE (%) - self calculating
23. Number of executive directors
24. Number of women executive directors
25. Number of non-executive directors
26. Number of women non executive directors
27. Environmental disclosure in chairman's statement (words)
28. Environmental disclosure in directors' statement/report of the directors (words)

29. Environmental disclosure in other locations within corporate report (words)
30. Total page proportions of environmental disclosure in the above locations (entered at the same time as the words were recorded)
31. Total words of environmental disclosure - self calculating
32. Employee welfare disclosure in chairman's statement (words)
33. Employee welfare disclosure in directors' statement/report of the directors (words)
34. Employee welfare disclosure in other locations within corporate report (words)
35. Total page proportions of employee welfare disclosure in the above locations (entered at the same time as the words were recorded)
36. Total words of employee welfare disclosure - self calculating
37. Community disclosure in chairman's statement (words)
38. Community disclosure in directors' statement/report of the directors (words)
39. Community disclosure in other locations within corporate report (words)
40. Total page proportions of community disclosure in the above locations (entered at the same time as the words were recorded)
41. Total words of community disclosure - self calculating
42. Total words of social disclosure (all categories) - self calculating
43. Pages social disclosure (all categories)/total pages (%)
44. Pages social disclosure (all categories)/total non financial pages (%)
45. Name of chairman
46. Pay of Chairman
47. Year on year change in emoluments of chairman (%) - self calculating

The large number of fields recorded was due to the (at the time) lack of refinement in method. It was felt that by recording many fields of data, the pilot study might suggest that some should be retained and some could be dropped.

Rules

As the pilot study progressed, it became evident that, so as to minimise stability errors, rules should be introduced to ensure consistency. A rule was devised whenever it was felt necessary. Although the list would lengthen as the main research eventually progressed, a small number were introduced during the pilot study (which were subsequently carried through to the main research). Some judgements made in the 'rules' were probably subjective but were deemed to be necessary in order to ensure consistency.

1. Community disclosures includes arts and sports sponsorship.
2. Do not count words in tables but do count them as page proportions.
3. Directors' statement disclosure on number of employees, charity and political donations do not count as measurable disclosure.
4. Employee welfare disclosure does not include pensions in Notes to the Accounts nor perfunctory thanks, but does include employee share schemes and any statements on pensioner welfare.
5. Executive pay does not include pensions, but does include bonuses.
6. Financial pages do not include x year summaries nor financial calendar, but DO include auditor's statement, current cost accounts, statutory info under Cadbury (Remunerations committee report) and accounting policies.
7. General comments on social responsibility should be counted as community disclosures
8. Operating profit is PBIT after exceptional items.
9. 'Other' disclosures (not in chairman's statement nor directors' statement) includes disclosure in CEO's review, FD's report and any special internal (to the document) reports.
10. Page proportion is defined as proportion on printed area of page (i.e. subtract margin before you start), unless there is space at the bottom of the page, in which case, count as proportion of total page.
11. Do not word count legends on photos or tables, but do count them as page proportions.
12. Count honorary 'presidents' as non executive directors.
13. Do count social disclosure in mission statements.
14. Charitable donations records only those directly given by the Group - not by employee fundraising activities organised.
15. Do not count disclosure in the notes to the accounts unless it is clearly over-and-above that required to clarify the accounts.

Outcomes

A method of analysing each document was refined. For word count recording, it was found that for each hard copy, data could be efficiently counted by marking social data in blocks of ten, marked off with a pencil. The tens were then summed to arrive at the final figure (plus any remainders, of course). It was required to read all of the corporate report in each instance, but as experience was gained, it became possible to predict the sections in which social disclosure was most likely to appear. The following became evident:

- it would rarely or never appear in a financial review or notes to the accounts;
- operating reviews or review of activities tended to contain social disclosure only in 'snippets';
- social disclosure in the directors' report tended to be very similar from year to year (but were counted individually nevertheless).

Page proportion count was more problematic. Identification of the social data for page proportion counting was slightly more complex than the word count measure because it included additional social disclosure in the form of graphs, tables and photographs. Previous studies involving page proportion count have recorded to hundredths of a page (i.e. to two decimal points). An acetate grid marked off in segments was used by Rob Gray and his researchers at CSEAR (Gray, *et al.* 1995b) whilst other researchers failed to disclose the means of measurement. In this analysis, a judgment was made of each disclosure's volume by page proportion, using a ruler where it was felt appropriate.

Outputs

The pilot study provided sufficient data for a presentation at the CSEAR summer school at Dundee University in September 1998. The paper was subsequently written up into a paper and published in a special edition of Accounting Forum (Campbell, 2000 – the paper is reproduced in Appendix 1).

Final version of rules

Based upon the rules developed for the pilot study, the follows rules were adopted to reduce stability errors. These developed as time passed – a new one was added whenever it became necessary.

The rules imposed were as follows.

Rule 1. Analyse ALL of document including any value-added statement or employee report IF they are part of the same submission to the shareholders - the totality of the year end communication with shareholders.

This became necessary as the year-end communication with shareholders varied from company-to-company and sometimes from year-to-year. Whilst some companies sent out a single document (typically called the 'annual report and accounts'), others sent out two documents (typically the 'annual review and summary financial statements' and the 'annual report and accounts'). The inclusion of a value added statement was fashionable in the mid 1980s and this was included in the analysis if present. Employee reports were also sometimes included in a company's year-end communication - sometimes within the annual report and sometimes in a separate document (which was, in some cases, in a thin tabloid format). In both cases, data was captured from these if included. This takes a generous view of the 'annual report' but because not all companies in all years sent out the 'annual report' in a single volume, such generous interpretations became necessary.

Rule 2. Community disclosures includes arts and sports sponsorship.

Whilst the recognition of employee and environmental was relatively straightforward, 'community' was a somewhat more amorphous category to define. It became necessary to interpret it fairly generously in terms of involvement in society in what can generally be considered a benevolent way. Critics may argue that some disclosure included in this category are actually part of the company's marketing disclosure (especially sponsorships). There may be some validity in this but it could be pointed out that all community involvement disclosure is part of the company's reputation management and/or marketing communications effort. The empirical instrument employed in this research did not have a facility for resolving the 'quality' of disclosure. This is not unprecedented in the literature (see for example Wilmhurst & Frost, 2000).

Rule 3. Do not count words in tables

A small amount of social disclosure was contained in tables and charts. Because much of this was numerical data, it was decided to exclude this data in all cases.

Rule 4. Directors' statement comments on number of employees, charitable donations and political donations do not count as measurable disclosure

In all cases this was small. However, any additional voluntary disclosure adding detail to, say, the company's charitable involvement *was* included (as community disclosure).

Rule 5. Employee disclosure does not include pensions in Notes to the Accounts nor perfunctory thanks, but does include employee share schemes and any statements on pensioner welfare.

The notes to the accounts are mainly intended to clarify accounting figures in the main accounting documents and are thus aimed at fairly sophisticated users. Much of the 'notes' are inaccessible to the casual and/or uninitiated reader. It was decided to exclude disclosure in this part of the document unless it was over and above that required for clarification purposes (one such example being some disclosure in Marks & Spencer accounts in some years relating to pay for South African employees).

Perfunctory thanks to employees were typically included in the chairman's statement, occasionally with an additional statement about how well they had coped with difficult conditions, etc. These disclosures were excluded as they were deemed to be a weak example of social disclosure and a poor indicator as to attitudes to employee welfare.

Employee share schemes were typically an item in the directors' statement. Although somewhat cumbersome and tediously detailed, this disclosure was counted as it is a voluntary item. The same applied to pensioner welfare.

Rule 6. Credit any general comments on social responsibility as community disclosure.

A small amount of disclosure was difficult to resolve into any of the three categories. Typically, this was disclosure reporting on how the company considered itself to be socially-responsible. Although a fourth category could have been created, it was decided, given the marginal volumes of such disclosures, to include it in the community relations category.

6.7 Data collection and analysis

Fields

The fields in the database were informed by the pilot study and the decision to use only word count data. This notwithstanding, some refinement occurred over the course of the main research – mainly the deletion of fields. The refinement of method precipitated the deletion of the following fields:

1. Pages in corporate report
2. Financial pages (containing the compulsory financial data and accompanying notes)
3. Non financial pages in corporate report (those in which the company chooses the content)
4. Total page proportion of social disclosure - self calculating
5. Total page proportions social disclosure as percentage of non financial pages - self calculating
6. Total page proportions social disclosure as percentage of total pages - self calculating
7. Non financial pages as percentage of total pages
8. Turnover (UK £ billions)
9. Operating profit (profit before interest and tax) (UK £ billions)
10. Balance sheet value (UK £ billions)
11. Return on sales = operating profit/turnover (%) - self calculating
12. Return on assets = operating profit/balance sheet value (%) - self calculating

13. Charitable donations (UK £ millions)
14. Charitable donations/operating profit (%) - self calculating
15. Political donations (UK £ thousands)
16. Political party/beneficiary of political donations
17. Number of UK employees
18. Number of UK employees expressed as full-time equivalents
19. Total UK wage bill (UK £ millions)
20. Mean pay per FTE - self calculating
21. Year on year increase in mean pay per FTE (%) - self calculating
22. Number of executive directors
23. Number of women executive directors
24. Number of non-executive directors
25. Number of women non executive directors
26. Total page proportions of environmental disclosure in the above locations (entered at the same time as the words were recorded)
27. Total page proportions of employee welfare disclosure in the above locations (entered at the same time as the words were recorded)
28. Total page proportions of community disclosure in the above locations (entered at the same time as the words were recorded)
29. Pages social disclosure (all categories)/total pages (%)
30. Pages social disclosure (all categories)/total non financial pages (%)
31. Name of chairman
32. Pay of Chairman
33. Year on year change in emoluments of chairman (%) - self calculating

Accordingly, the following fields were retained for the main thrust of the study.

1. Year of corporate report
2. Environmental disclosure in chairman's statement (words)
3. Environmental disclosure in directors' statement/report of the directors (words)
4. Environmental disclosure in other locations within corporate report (words)
5. Total words of environmental disclosure - self calculating
6. Employee welfare disclosure in chairman's statement (words)
7. Employee welfare disclosure in directors' statement/report of the directors (words)

8. Employee welfare disclosure in other locations within corporate report (words)
9. Total words of employee welfare disclosure - self calculating
10. Community disclosure in chairman's statement (words)
11. Community disclosure in directors' statement/report of the directors (words)
12. Community disclosure in other locations within corporate report (words)
13. Total words of community disclosure - self calculating
14. Total word of social disclosure (all categories) - self calculating

Software

The data was entered into a database set up by the author in Microsoft Excel. The fields were entered in the x direction (across the top) whilst the longitudinal depth (years) was recorded in the downward direction. The choice of Excel was for four reasons:

1. The author was familiar with the application from previous use (including research);
2. It was more transparent as a database than some of the 'database' packages, e.g. Microsoft Access. Because the fields are all visible on the desktop (unlike in a conventional relational database package), cross-sectional and longitudinal variations in disclosure would be more visible during the course of the data entry;
3. The application is capable of relatively complex statistical analysis, graphic generation, etc.
4. The .xls format is capable of export into dedicated statistical analysis applications such as SPSS (which was used for some of the statistical analysis and graph generation – see Chapter 7).

Methods of analysis

Notwithstanding the limitations of relying on statistical 'proofs' and bearing in mind misgivings on the 'quality' of the data, the hypotheses are capable of being analysed as following.

Hypotheses 1 to 3 (inter-sectoral differences) are capable of analysis using F test (for the totality of observations in any category) although this is only appropriate in the case of hypothesis 1 where 'between' variability is sought without reference to any ranking measure. For hypothesis 2, the proximity to end user continuum measure can be analysed using means of longitudinal records by company and by sector. When hypothesis 2 is expressed using the two binary categories ('nearer to' and 'further from'), a t-test can be used to examine means by type with confidence limits. This method (stacked-data t-test) is also suitable for hypothesis 3 which is expressed only in terms of binary categories ('more' and 'less' sensitive to environmental criticism) and the adjunct to hypothesis 1 (H1(a)). In addition, however, emphasis will be placed upon visual inspection of time-series by sector (and company) charts. Error bar charts, showing the mean and 95% confidence interval are used to demonstrate differences in Chapter 7.

Hypotheses 4-6 are analysed using visual inspection of longitudinal graph representations to test for agreements between companies with sectors (this being akin to the methods of Patten, 1992 and Deegan, *et al.* 2000). Regression analysis can also be used insofar as 26 observations will provide low P values and that high longitudinal agreement will be indicated by high correlation coefficients. Low R values, conversely will indicate scatter and accordingly, little overall agreement on how to respond to changing threats, by category, in the environment. Higher correlation would logically be expected where disclosure is higher overall, i.e. where signal to noise is at its highest.

Hypotheses 7 and 8, the comparisons between environmental disclosure and environmental group membership, are capable of analysis using correlation and regression. The generation of correlation coefficient figures will provide a measure of agreement between the two variables. Visual inspection of graphs will also be used.

In each case, reliance on statistical 'proof' for demonstration of the hypotheses is avoided. Instead, the combination of visual and statistical evidence is discussed in support of, or contraindicating, each hypothesis.

7 Results and findings

This chapter contains a systematic report on results by hypothesis. In each case, the hypothesis is considered by a graphical representation of the relevant findings followed by a statistical analysis of the data. The hypothesis is considered to have been demonstrated if both types of report support the hypothesis.

7.1 Hypothesis 1

H1	Employee welfare	Because all sectors are equally affected by employee welfare issues, there will be no intersectoral difference in disclosure volume.
H1(a)	Employee welfare	Disclosure will be higher in companies in sectors with higher environmental sensitivity (because of their higher health and safety risk) and lower in sectors with lower environmental sensitivity.

7.1.1 Employee disclosure by company and sector

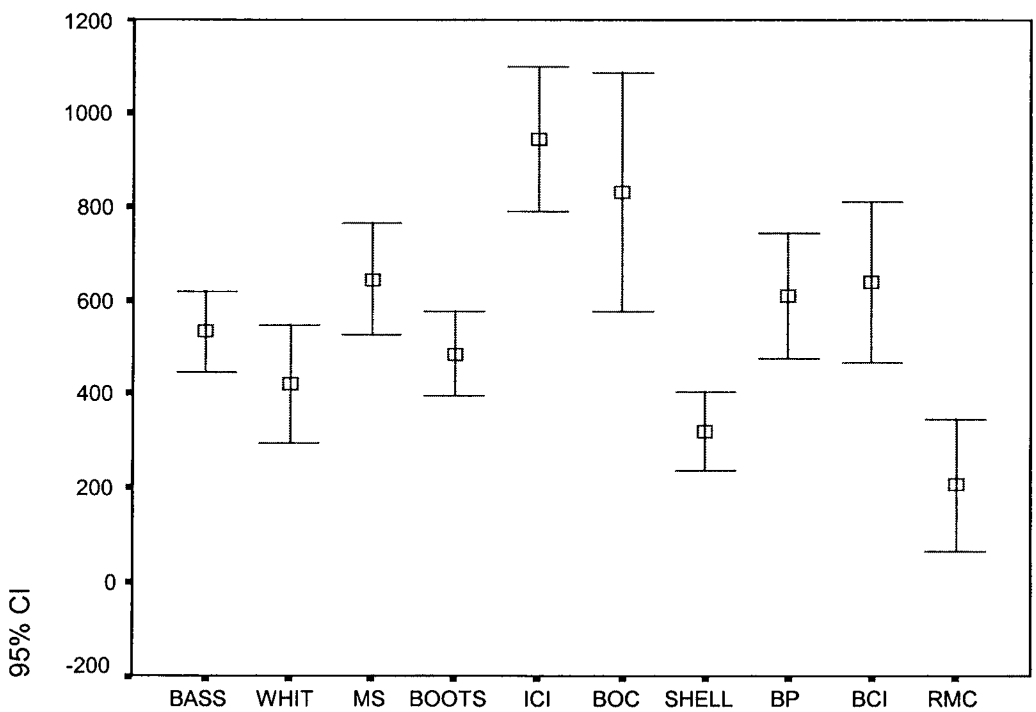

Figure 7.1: Employee disclosure, mean by company, all years. Error bars are 95% confidence intervals. Central 'square' is mean. Y axis is longitudinal mean word count by company.

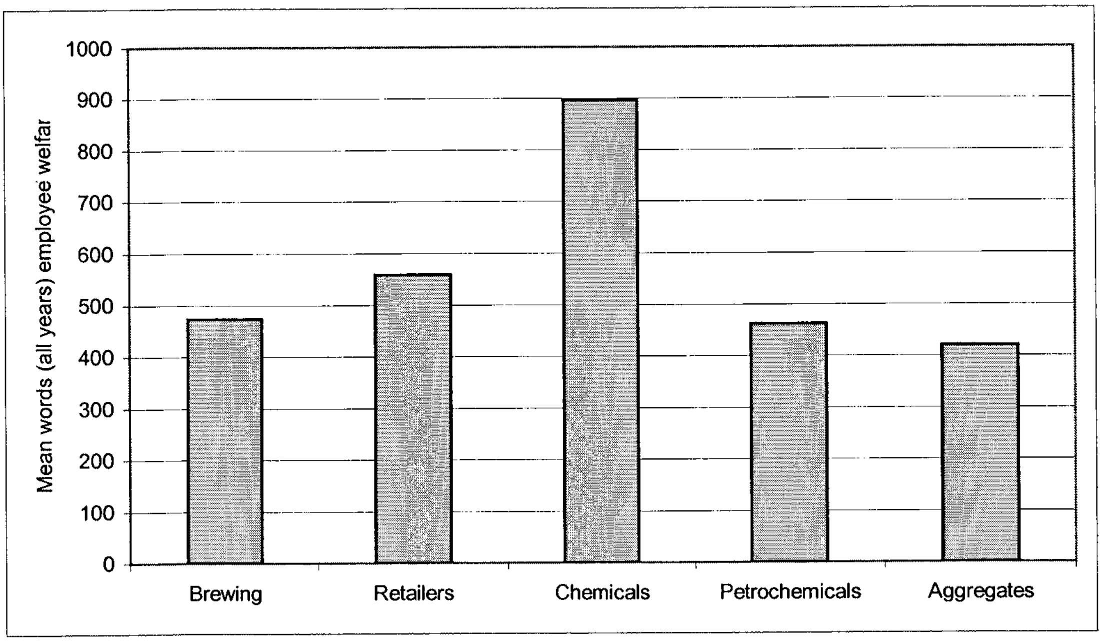

Figure 7.2: Employee disclosure, mean by sector by year, all years.

Figure 7.1 shows the differences in mean annual disclosure (all years) for all companies in the sample. Although taking the sector mean by year is of questionable value given the intrasectoral disagreements by mean, figure 7.2 nevertheless indicates the differences by mean (all years) by sector.

Analysis of variance by sector by mean by year, all years.

Sector	n	Sum	Average	Variance
Brewing	27	12779.5	473.3	39825.2
Retailers	27	15093	559	36192.2
Chemicals	27	24223.5	897.2	139956.8
Petrochemicals	24	11098	462.4	48519.8
Aggregates	27	11364.5	420.9	104361.7

Source of variation	Sum of squares	df	MS	F	P-value	F crit
Between groups	4020124	4	1005031	13.5	3.31E-09	2.443016
Within groups	9444690	127	74367.64			
Total	13464815	131				

The F statistic of 13.5 indicates a strong 'between' sectors variability relative to 'within' sectors.

The hypothesis that there will be little or no intersectoral difference in employee disclosure is not supported by the findings. There *may* be a case to suggest that some companies that may, *a priori*, have more reason to show higher employee disclosure volumes due to elevated health and safety risk, but this is only borne out by chemicals companies. It is likely that similar health and safety risks are experienced by employees in petrochemicals companies but employee disclosure by petrochemicals companies, with an all-years sector mean of 462 words per year is comparable to or lower than retailers and brewers who have less of such risk.

Intersectoral (all-years) employee disclosure gives the appearance of randomness in that there is no explanation consistent with LT that could explain the intersectoral differences.

H1 is not confirmed.

7.1.2 H1(a): Examination by sensitivity to health & safety issues

When companies were divided into binary categories according to environmental sensitivity (see also under hypothesis 3, an analogue for the sectors' supposed sensitivity to health & safety issues - one component of employee disclosure), the data was capable of analysis using a stacked t-test. Chapter 5 (hypotheses) identified 'more H&S-sensitive' as chemicals and petrochemicals (which both handle hazardous materials and process using high-pressure and high-temperature reactors) and aggregates. The lower risk ('less-H&S-sensitive') sectors are thus brewers and retailers.

The means of the two stacked data lists show similar means but the standard deviations are sufficiently separated to reject the null (that there is no difference between samples) at the 7% level – insufficient to demonstrate difference at the 5% confidence limit but within the 10% level. This is an indicative rather than a conclusive result.

	Higher risk	*Lower risk*
Mean	594.3	521.4
Variance	240357	79610
Observations	158	106
Standard deviation	490	282
t Stat	1.53	
P(T<=t) one-tail	**0.064**	
t Critical one-tail	1.65	

Hence, although health and safety issues comprise only one part of employee disclosure, there is some evidence that employee disclosure is higher over the 26 year longitudinal period amongst companies that may be more sensitive to health and safety issues than those that are less so.

H1 (adjunct) is indicated at the 10% level of confidence (i.e. outwith the normal confidence interval).

7.2 Hypothesis 2

H2	Community	Disclosure will be higher in sectors closer to the end user and lower in sectors further from end user.

7.2.1 Proximity to end user by continuum

In order of proximity to end user, a continuum of the same would be expressed as: retailers (nearest to end user or consumer); brewers; petrochemicals; chemicals; aggregates (furthest from end user or consumer).

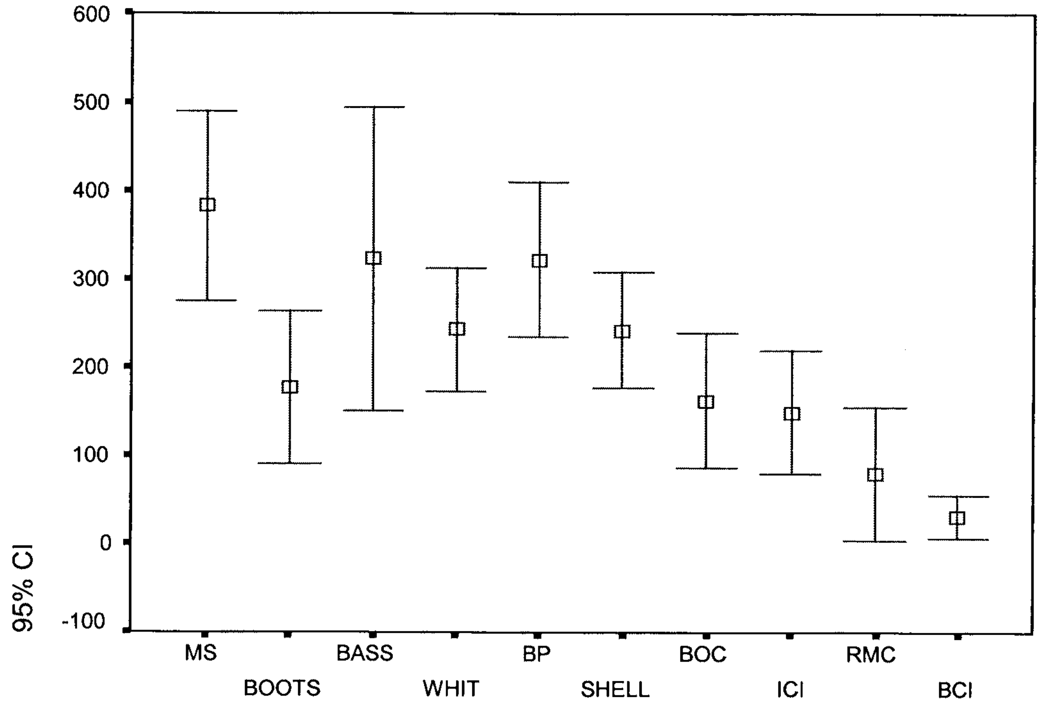

Figure 7.3: Community disclosure (words) by company, mean of all years. Left-to-right continuum is from highest profile to lowest profile. Error bars indicate 95% confidence intervals. Y axis is longitudinal mean community word count by company.

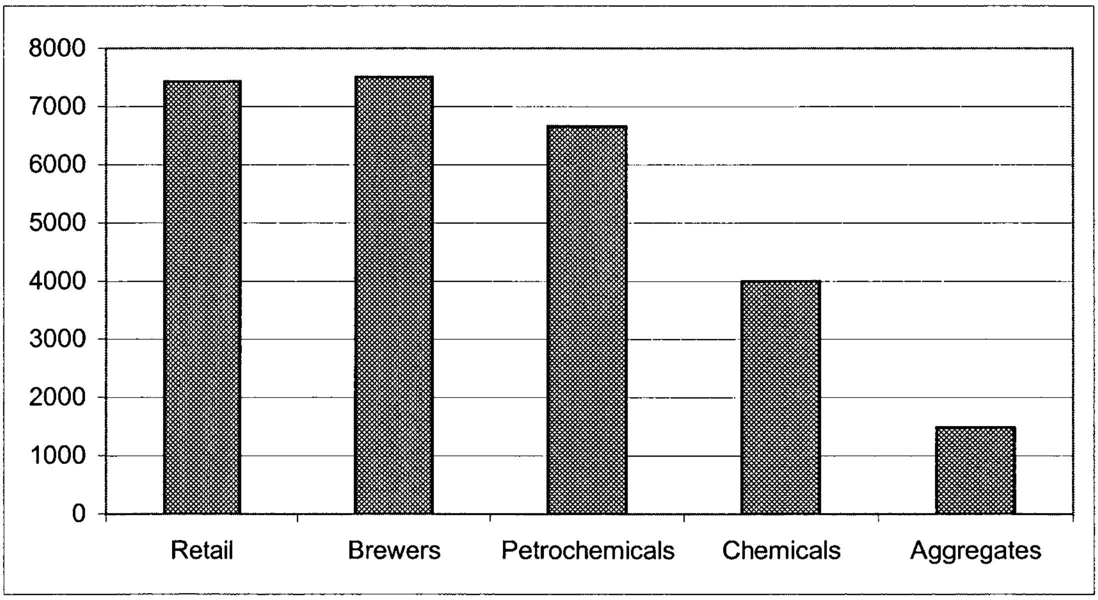

Figure 7.4. Sum of sector means (words, all years) for community disclosure. Sectors are, from left to right, in order of proximity to end user.

The ranked means by sector are in the order: brewers, retailers (although these are virtually identical), petrochemicals, chemicals and finally aggregates. There is, accordingly, a sector effect which corresponds to the proximity to end user proxy measure. The 'by sector' graph is crude owing to the intrasectoral differences in the cases of (especially) retailers and aggregates.

H2 is indicated.

7.2.2 Proximity to end user by division into binary categories of 'high profile' and 'low profile' (Hackston & Milne, 1996)

When, as described in Chapter 6, the sectors are divided into 'nearer to' and 'further from' categories, the t-test findings are as follows. 'Nearer to' sectors comprise retailers, brewers and petrochemicals (because the company names are fairly 'well-known'). 'Further from' sectors comprise chemicals and aggregates. They are measures of high and low profile with regard to public 'fame'.

	Nearer to	*Further from*
Mean	282.9	104.8
Variance	74845	29513
Observations	157	107
t Stat	6.49	
P(T<=t) one-tail	2.1E-10	
t Critical one-tail	1.65	

The notional null 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, by this study, defined as 'nearer to' the end user and are thus more publicly visible, do make higher community disclosures than those that are 'further from' the consumer when the total longitudinal period is considered.

H2 is strongly supported.

7.3 Hypothesis 3

H3	Natural environment	Disclosure will be higher in companies in sectors with higher environmental sensitivity and lower in sectors with lower environmental sensitivity.

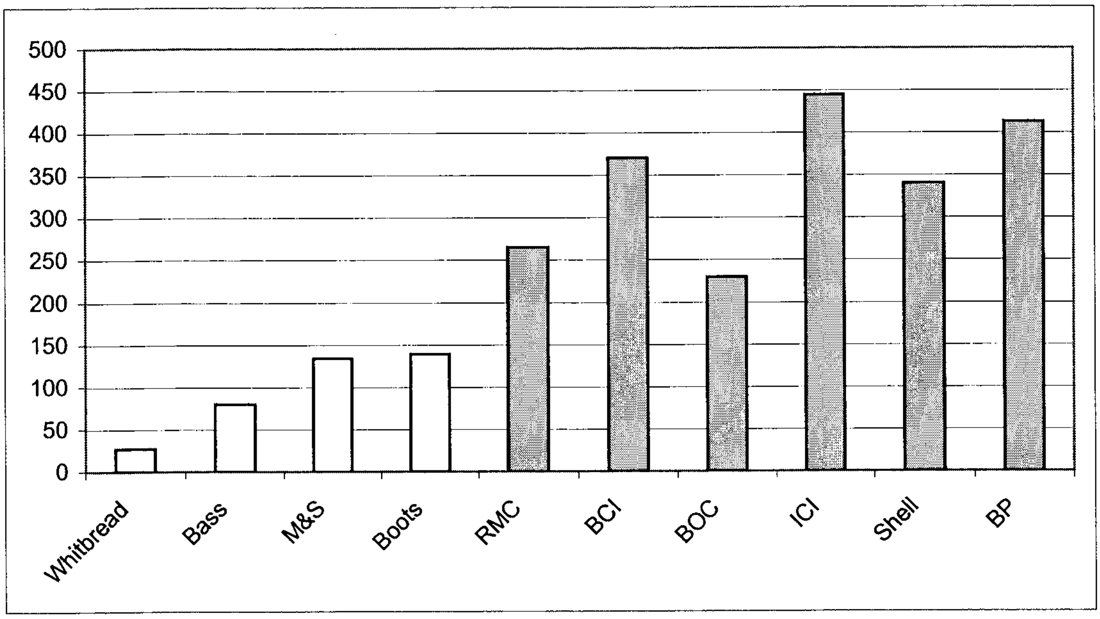

Figure 7.5. Mean environmental disclosure, all years, by company. Shading differences indicate less environmentally sensitive sectors (white) and more environmentally sensitive sectors (shaded).

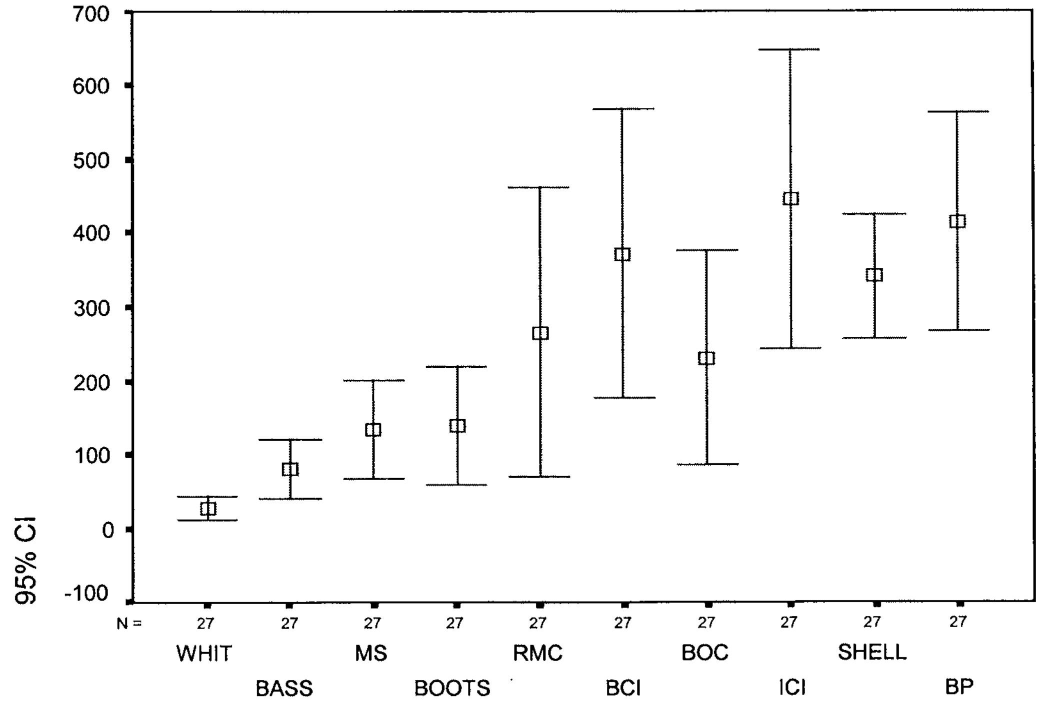

Figure 7.6. Error bar graph showing confidence intervals of mean data (all years). Y axis is longitudinal mean environmental word count by company.

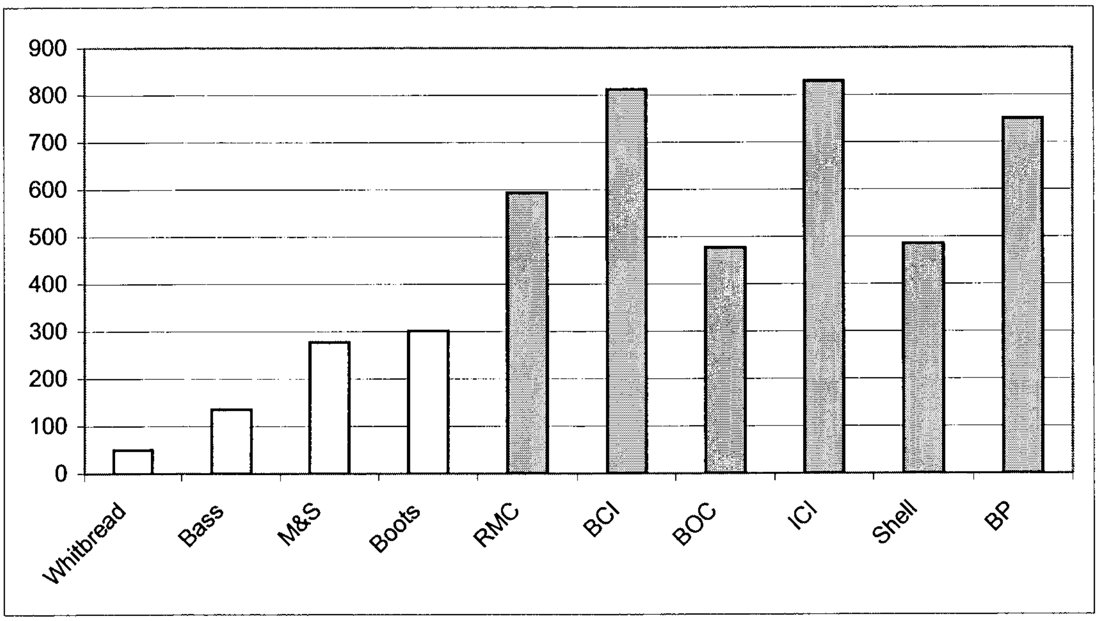

Figure 7.7. Mean environmental disclosure by company for the years 1989-2000 (when environmental disclosure was at its highest in all cases). Shading differences indicate less environmentally sensitive sectors (white) and more environmentally sensitive sectors (shaded).

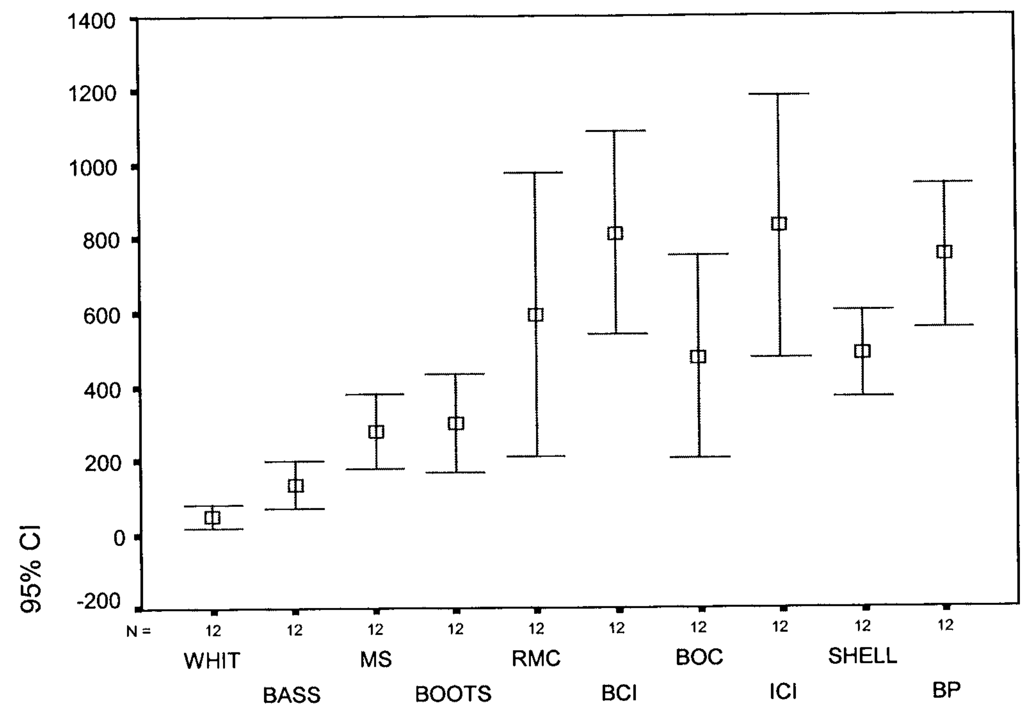

Figure 7.8. Error bar graph showing confidence intervals of mean data (1989-2000 years only). y axis is words. Bottom of error bar usually indicates starting point (1989) and top indicates close to finish point (2000). Y axis is longitudinal mean environmental word count by company.

A visual inspection of figures 7.5 to 7.8 indicates differences in mean approximately coincident with the environmental sensitivity of the sectors. The highest 'less' sensitive sector made, over the entire longitudinal period, a lower mean environmental disclosure than the 'more' sensitive company. Those sectors with lower environmental sensitivity (brewers and retailers) disclosed lower levels of environmental disclosure than the representatives of sectors with more environmental sensitivity - aggregates, chemicals and petrochemicals.

The longitudinal sector means of 55 words for brewers and 139 for retailers are low in comparison to the much higher means (all years) of 344 words (chemicals – see Table 7.1), 396 words (petrochemicals) and 318 (aggregates). The differences in sector are more marked when only the years 1989-2000 are averaged longitudinally (see Table 7.2). This measure (longitudinal mean) is a novel measure of social disclosure, made possible by the longitudinal sample used in this study.

	'Less' sens.		'More' sens.		
	Brewers	Retailers	Chemicals	Petrochemicals	Aggregates
Mean	55.3	139.25	343.9	396.3	318.2
Standard error	11.78	34.8	83.1	57.8	81.9
Median	33.75	59.25	166.75	326.25	25
Standard deviation	60	177.5	423.8	283	425.5
Kurtosis	-1	-0.27	2.35	-0.59	-0.6
Range	165	537	1525	1007	1241
Minimum	0	0	0	16.5	0
Maximum	165	537	1525	1023.5	1241
Sum	1438	3620.5	8942	9512.5	8591
Count	26	26	26	24	27

Table 7.1. Environmental disclosure summary (all years in sample)

When the comparative figures for sector environmental disclosure adopt 1989 as the starting point (because there were only small disclosures before this date – 1988 or 1990 could equally be taken as the start point), the figures more closely highlight the 'more' and 'less' sensitive differences.

	'Less' sens.		'More' sens.		
	Brewers	Retailers	Chemicals	Petrochemicals	Aggregates
Mean	93	289	653	617	702
Standard error	16.6	46	131	63	107
Median	98.5	321.5	543.25	593.5	771.25
Standard deviation	57.4	159.6	453.9	219	370.4
Kurtosis	-1.5	-1.4	-0.008	-0.6	-0.7
Range	165	445.5	1370	731.5	1216
Minimum	0	91.5	155	292	25
Maximum	165	537	1525	1023.5	1241
Sum	1115	3470	7843	7414	8430
Count	12	12	12	12	12

Table 7.2. Environmental disclosure summary (1989-2000)

During the period of higher environmental disclosure (late 1980s and 1990s), the mean disclosure per annual report for more environmentally sensitive sectors was between ca 650 and ca. 700 words. In the less environmentally sensitive sectors, brewers' disclosures were a mean volume of 93 words per annual reports and ca. 290 for retailers.

When the data observations of all disclosures for all years for all companies in each type are stacked, the t-test yields the following figures.

	'More' sensitive.	*'Less' sensitive.*
Mean	344.9	95.4
Variance	182218	22293
Observations	158	106
P(T<=t) one-tail	6.9E-11	
t Critical one-tail	1.652177	

Stacked t-test – all years environmental disclosure by company.

	'More' sensitive	*'Less' sensitive*
Mean	658	191
Variance	203635.9	30097.1
Observations	72	48
P(T<=t) one-tail	1.58E-12	
t Critical one-tail	1.660392	

Stacked t-test – 1989-2000 environmental disclosure by company.

The findings detailed above support legitimacy theory with regard to environmental disclosure. Environmental disclosure appears to be responsive to sector in a manner consistent with the possibility that it is being used to close legitimacy gaps which, it is argued, will be structurally higher in aggregates, chemicals and petrochemicals than in retailing and brewing (i.e. approximately in accordance to environmental sensitivity).

H3 is strongly supported.

7.4 Hypothesis 4

H4	Employee welfare	Two companies within a sector will demonstrate similar longitudinal records of disclosure. 'Agreement' will be higher when disclosure is higher.

Hypotheses 4, 5 and 6 enquire as to the extent of intrasectoral agreement in disclosure patterns. Figure 7.9 to 7.13 show the total employee welfare disclosures (y axis in all cases) per year.

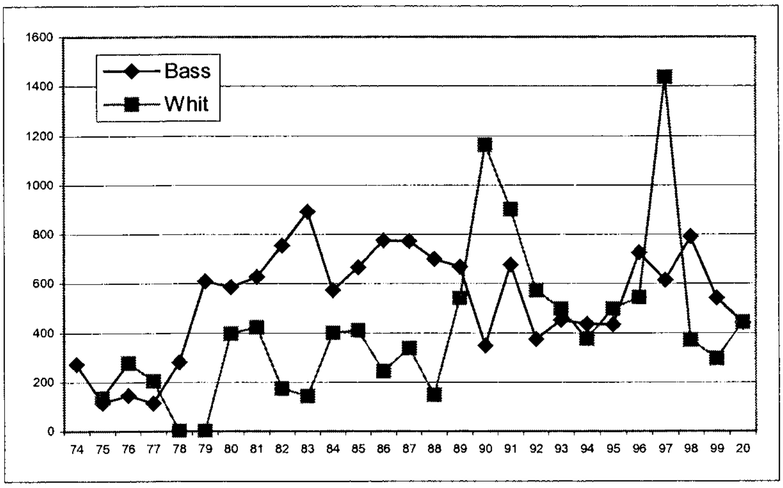

Figure 7.9: Brewers. No evidence of longitudinal agreement.

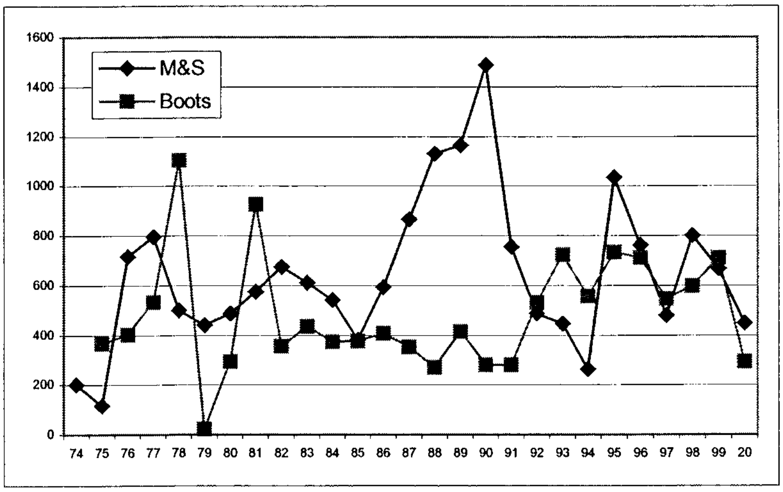

Figure 7.10: Retailers. No evidence of longitudinal agreement.

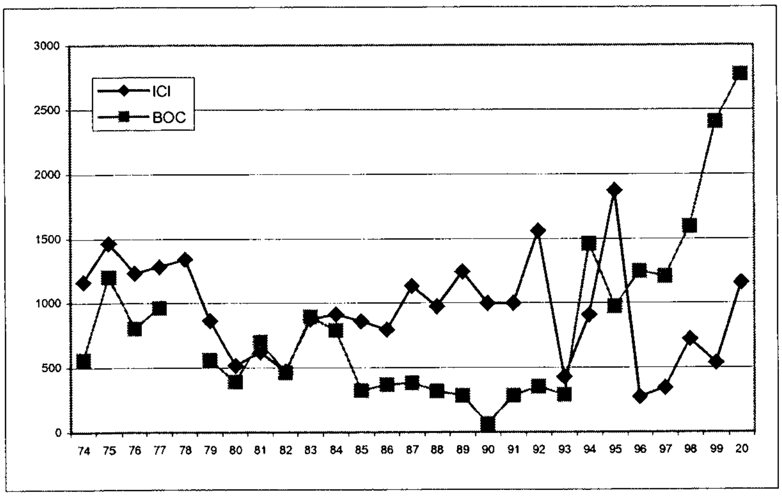

Figure 7.11 Chemicals. No evidence of longitudinal agreement excepting on overall increase in mid to late 1990s.

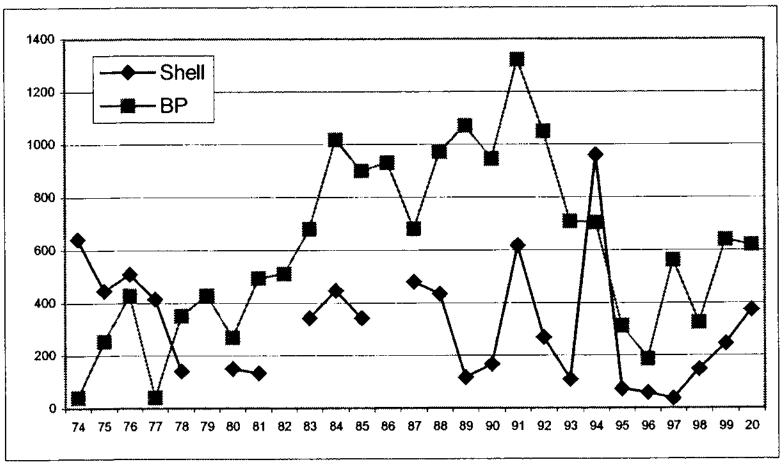

Figure 7.12 Petrochemicals. Little evidence of longitudinal agreement.

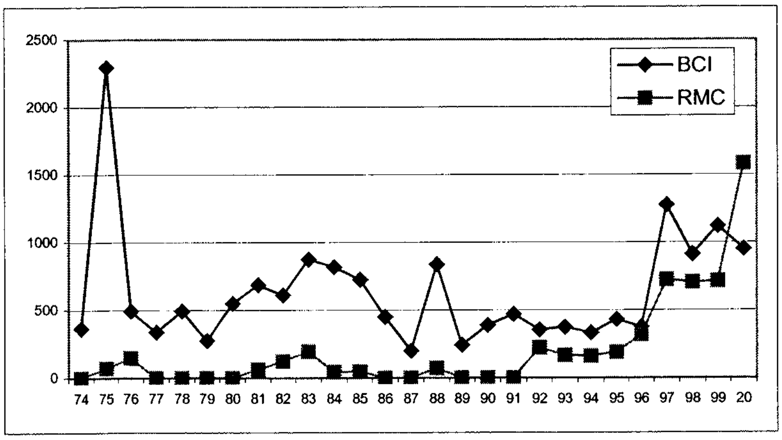

Figure 7.13 Aggregates. Apparent agreement in direction (increase) after 1991. R value of 0.72 for paired observations of 1991-2000.

See section 7.7 for summary.

7.5 Hypothesis 5

H5	Community	Two companies within a sector will demonstrate similar longitudinal records of disclosure. 'Agreement' will be higher when disclosure is higher.

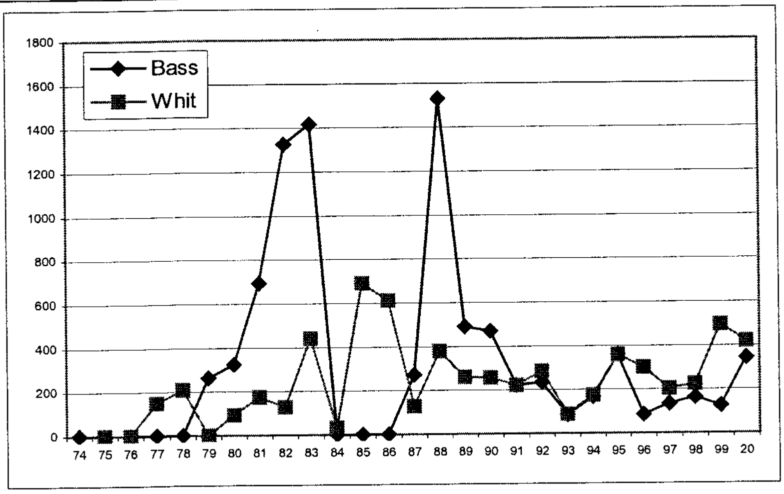

Figure 7.14 Brewers. Apparent longitudinal agreement after 1991 (R value over this period = 0.42). Very close agreement over the period 1991-1993.

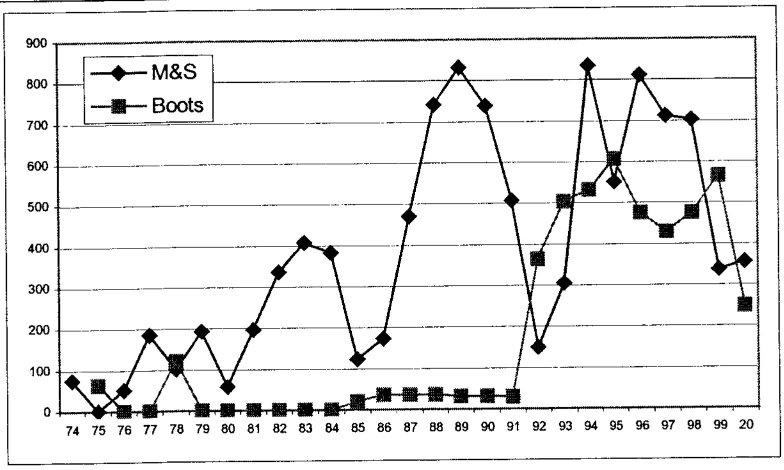

Figure 7.15 Retailers. No evidence of longitudinal agreement.

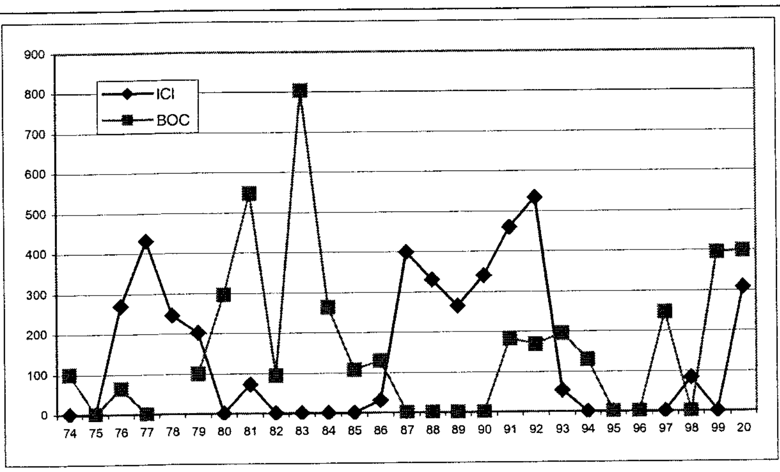

Figure 7.16 Chemicals. No evidence of longitudinal agreement.

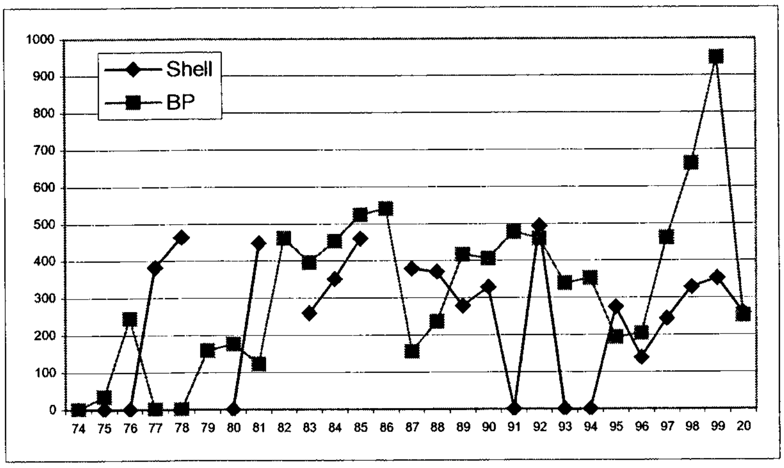

Figure 7.17

Petrochemicals.

Little evidence of longitudinal agreement.

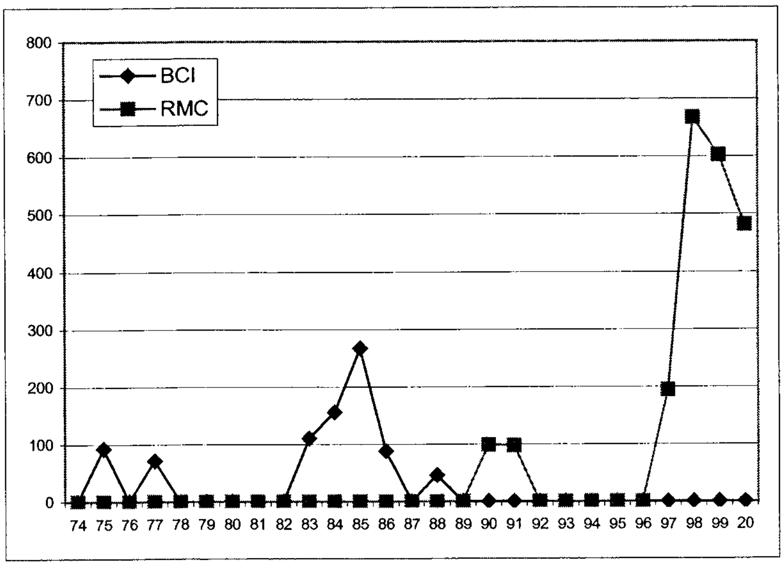

Figure 7.18

Aggregates.

No evidence of longitudinal agreement.

See section 7.7 for summary.

7.6 Hypothesis 6

H6	Natural environment	Two companies within a sector will demonstrate similar longitudinal records of disclosure. 'Agreement' will be higher when disclosure is higher.

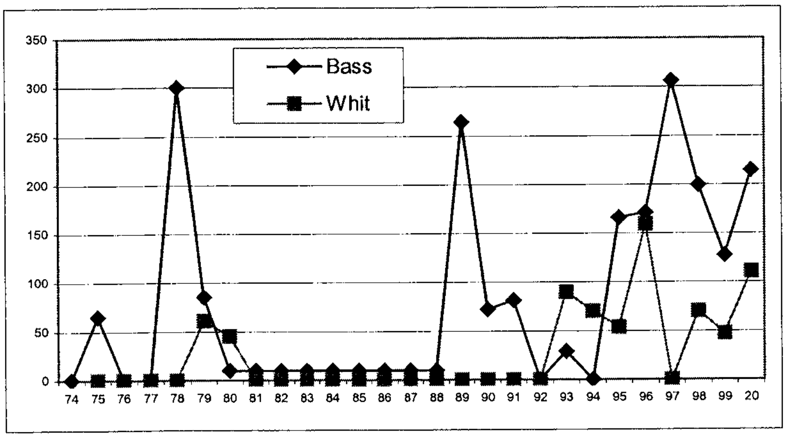

Figure 7.19 Brewers. Little year-to-year agreement but both made increases in the 1990s. Overall volume low compared to other sectors, however (see figures 7.5-7.8).

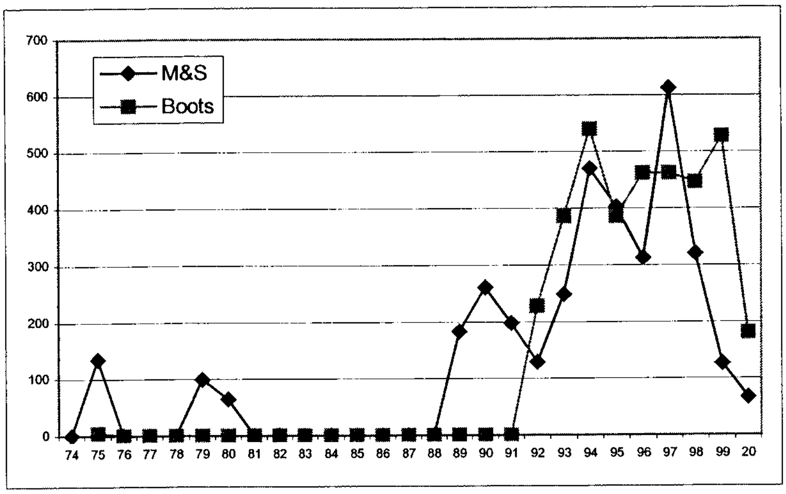

Figure 7.20 Retailers. General agreement between the two companies. Low or no disclosure until late 1980s. Both companies increase their disclosure in the early 1990s and then reduce volumes, approximately together in the late 1990s.

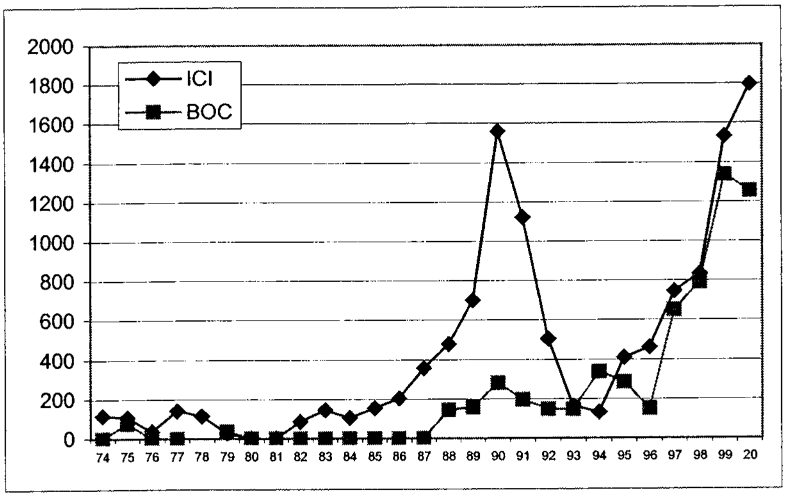

Figure 7.21 Chemicals. Agreement is noted in three time periods. Disclosure is low until both show increases resulting in a peak in 1990 followed by decline (although the peak is much more marked in the case of ICI). Then both show similar increase from the early to late 1990s.

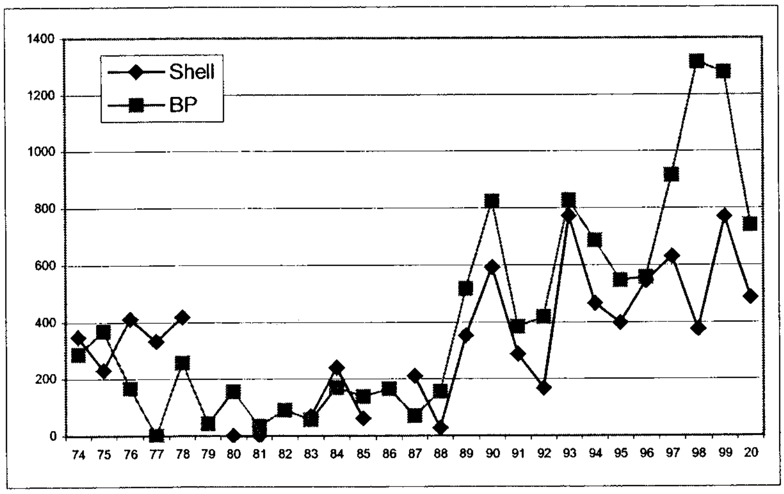

Figure 7.22
Petrochemicals
Close agreement in some time periods especially during the years 1988-97. Two peaks and two troughs are reflected very closely.

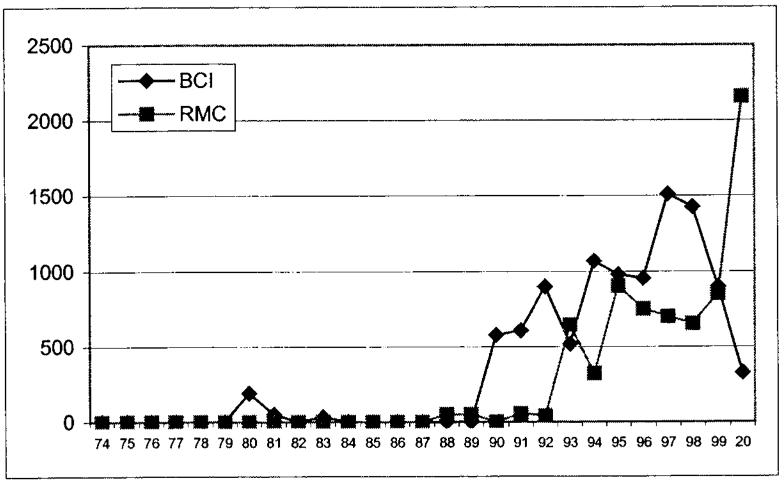

Figure 7.23 Aggregates
General agreement over the duration of the period in that disclosure was virtually zero until 1989 (the start of BCI's increase). Both companies saw the need to make higher disclosures in the 1990s and almost none until the late 1980s.

See section 7.7 for summary.

7.7 'Within' tests summary

When calculated as regressions against each other, the statistics confirm the visual observations. Coefficients of correlation (R values) are very low (using 'all years' data) except for the higher disclosers of environmental information. The R values of 0.8 (chemicals) and 0.75 (petrochemicals) witness to this. One of the 'less environmentally sensitive' sectors (retailing), despite disclosing lower volumes of environmental information in total over the longitudinal period compared to 'more environmentally sensitive' sectors, does nevertheless show a high degree of intrasectoral year-to-year agreement (R=0.77 – see also figure 7.5).

With the exception of these agreements, there is nothing of note to report with regard to intrasectoral agreements. Tables 7.3 and 7.4 provide a summary of regression data. In both cases, the significance in the values are high owing to the number of paired observations in each case (P values are not included in order to simplify the data presentation).

R values (all years)	Employee	Community	Environment
Bass vs. Whitbread	0.044046	0.133885	0.264793
BCI vs. RMC	0.348137	0.210438	0.496013
ICI vs. BOC	0.067807	0.254674	0.803679
Shell vs. BP	0.137489	0.18673	0.751674
M&S vs. Boots	0.093375	0.395569	0.770094

Table 7.3: summary regression data by sector by category all years. All R values are statistically significant to three decimal places (each pairing consists of between 22 and 27 observations).

R values (1987-2000 only)	R	P value
Bass vs. Whitbread	0.166	0.575
BCI vs. RMC	0.209	0.474
ICI vs. BOC	0.702	0.005
Shell vs. BP	0.727	0.003
M&S vs. Boots	0.633	0.015

Table 7.4: summary regression data by sectors, environmental disclosure only, years 1987-2000 only.

H4 is not confirmed.

H5 is not confirmed.

H6 is indicated in some sectors (retailers, chemicals and petrochemicals).

7.8 Hypothesis 7

H7 Environmental disclosure will change over time in sympathy with changing societal opinion on environmental concern (environmental lobby group membership is a suitable proxy for societal opinion on environmental concern).

Overall, environmental disclosure was low in all sectors and all companies until the late 1980s (figure 7.24). Although the increase is not a step change, there appears nevertheless to be a period of two years (1989 and 1990), which witnessed an increase in environmental disclosure.

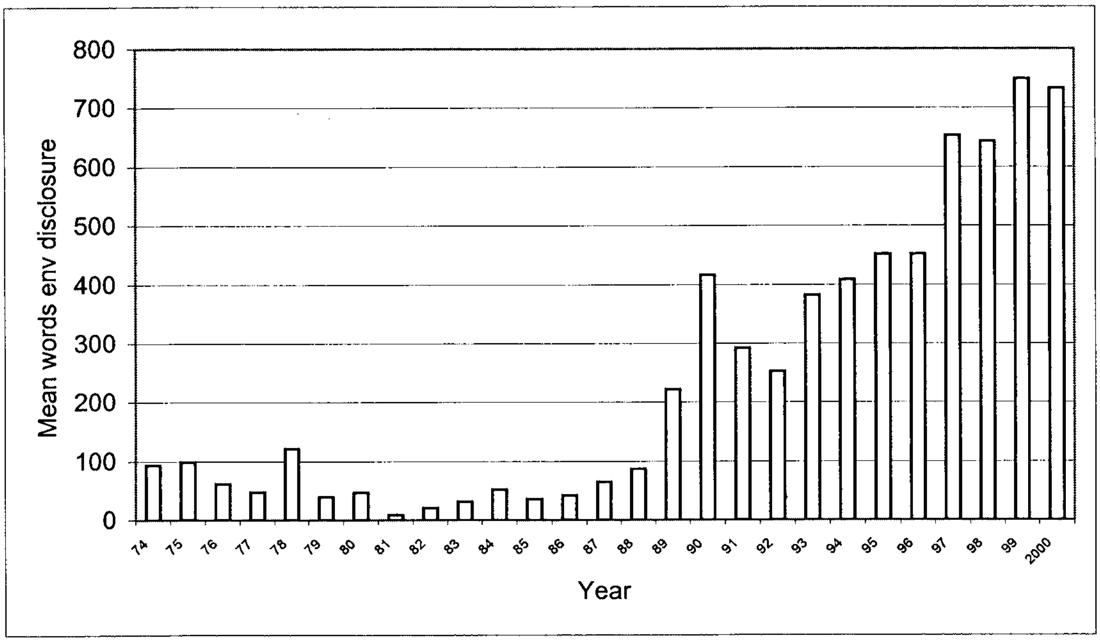

Figure 7.24: mean word count by year, all companies in sample, environmental disclosure.

In order to demonstrate H7, the above data is paired with the membership statistics of the respondent organisations (Friends of the Earth and the Campaign for the Protection of Rural England). Only the years obtained from the organisations are used in the correlation analyses. Hypothesis 8 disaggregates the cross sectional sample into the 'more' and 'less' environmentally sensitive.

7.8.1 Environmental disclosure vs. FOE membership

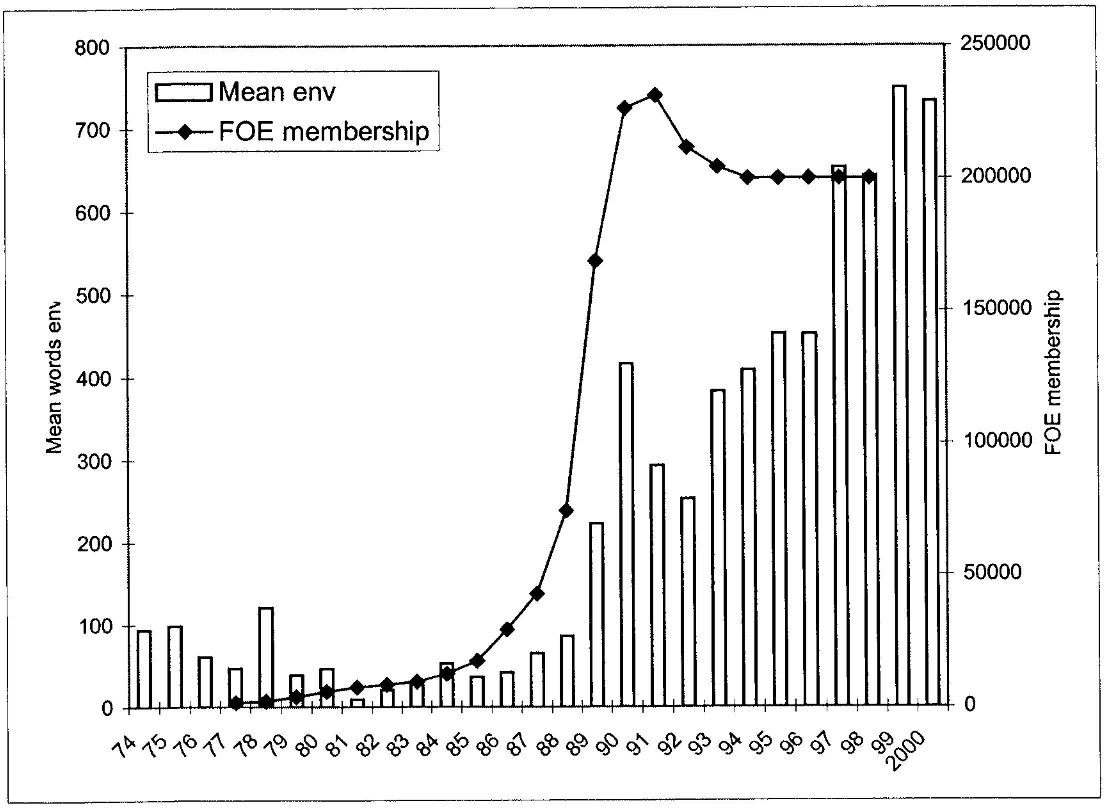

Figure 7.25. Mean environmental disclosure volumes (all companies in sample) with membership of FOE overlaid. Multiple R = 0.87; R square = 0.76; adjusted R square = 0.75. Statistically significant to three decimal places.

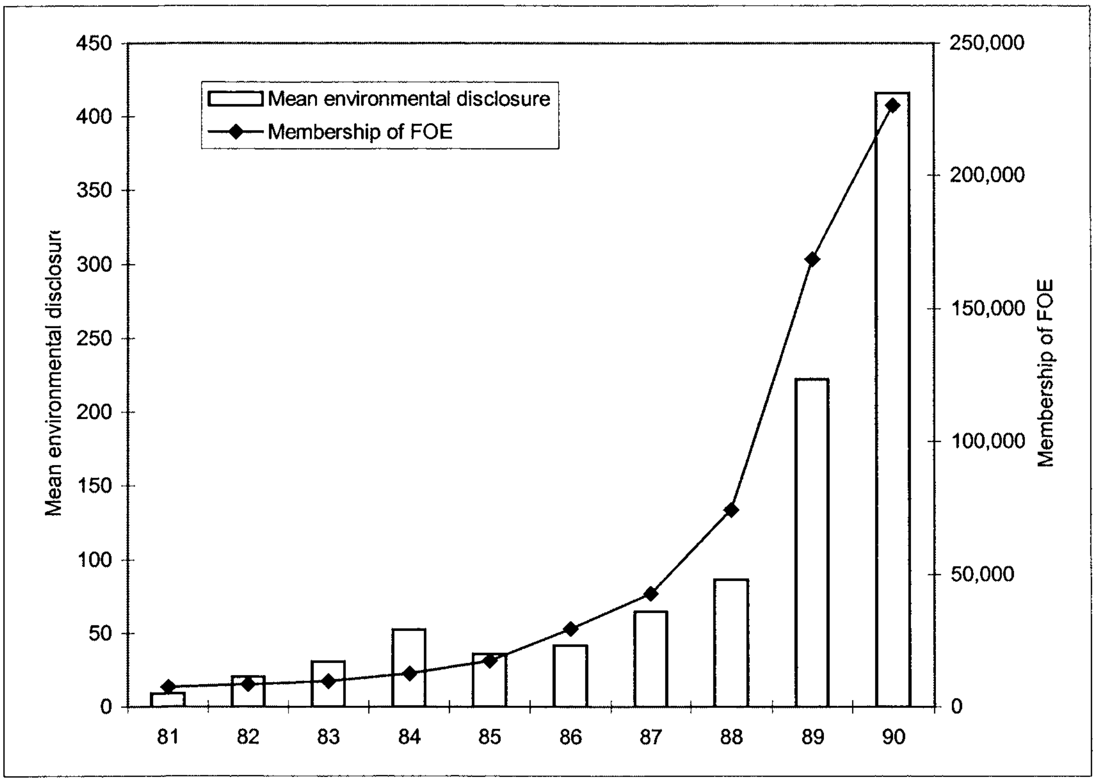

Figure 7.26. Mean environmental disclosure volumes (all companies in sample) with membership of FOE overlaid – years 1981-90 to show the association over the key period of growth in environmental concern. Multiple R = 0.97; R square = 0.95; adjusted R square = 0.94. Statistically significant to three decimal places.

7.8.2 Environmental disclosure vs. CPRE membership

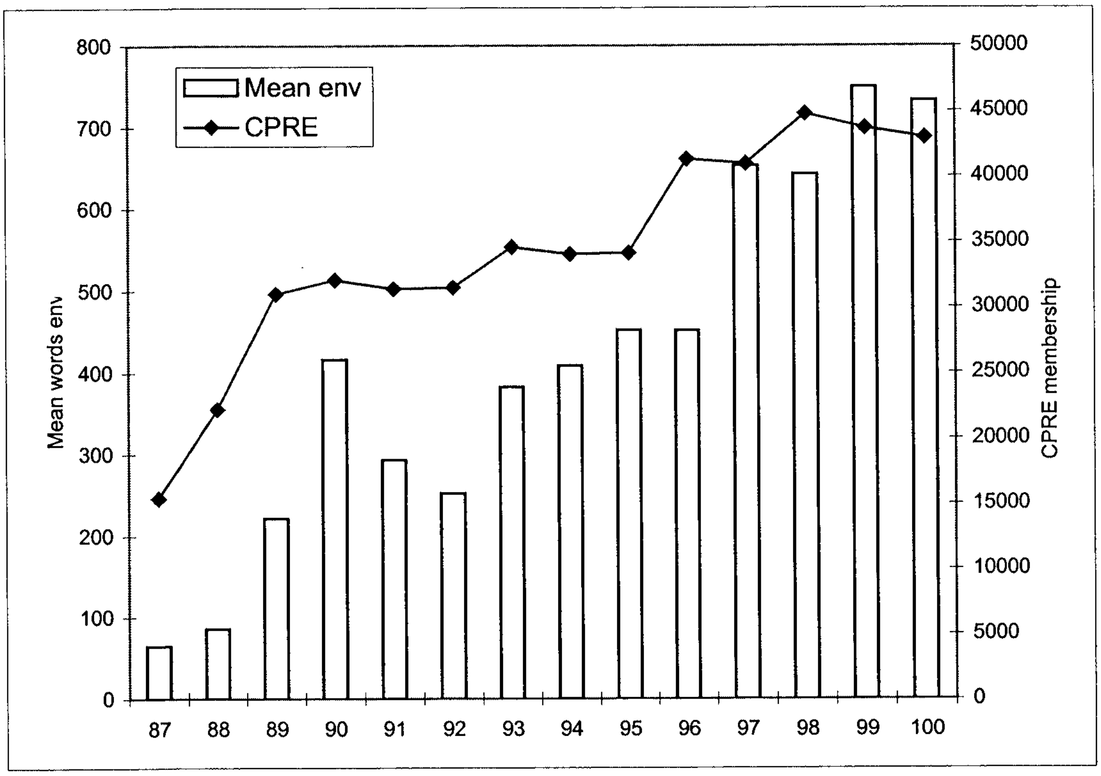

Figure 7.27. Mean environmental disclosure volumes (all companies in sample) with membership of CPRE overlaid (the years in the graph match those supplied by CPRE). Multiple R = 0.925; R square = 0.856; adjusted R square = 0.84. Statistically significant to three decimal places.

7.8.3 Hypothesis 7 summary

The environmental disclosure data set used for hypothesis 7 is the mean by year for all companies in the sample. In this respect, hypothesis 7 tests for an aggregate corporate response, across the sample, to the change in environmental opinion. In the undisaggregated sample, the evidence supports hypothesis 7. In each of the two expressions of societal opinion (FOE and CPRE membership), the high correlations indicate support for hypothesis 7. Hypothesis 7 is supported.

7.9 Hypothesis 8

H8	The correlation coefficient between lobby group memberships and environmental disclosure will be higher for 'more sensitive' than for 'less sensitive' companies.

7.9.1 Correlations against FOE and CPRE memberships

The evidence in support of hypothesis 8 is provided in part by figures earlier in this chapter relating to hypothesis 3. H3 showed statistically significant differences between 'more' and 'less' environmentally sensitive sectors (by t-test).

Specifically, however, H8 proposes that 'more' environmentally sensitive sectors will demonstrate a higher correlation with the two proxies for societal opinion than 'less' sensitive sectors. This is shown in figures 7.28 and 7.29.

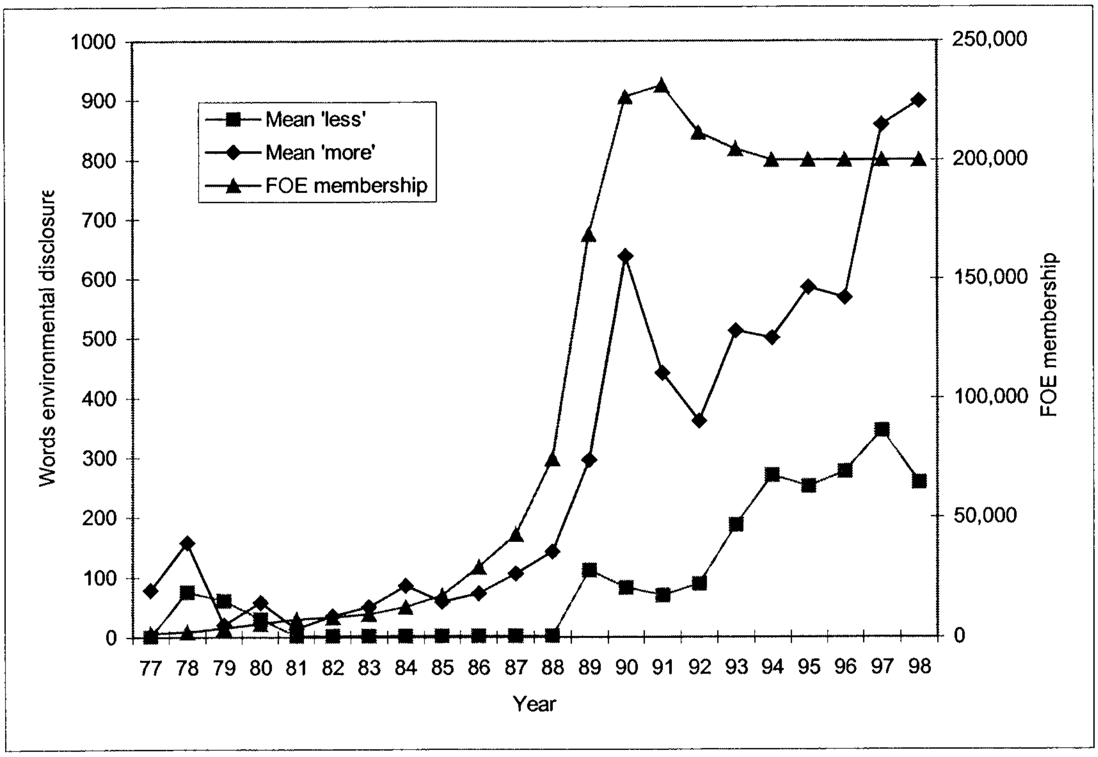

Figure 7.28: Mean environmental disclosure by year for companies that are 'less' environmentally sensitive and 'more' so against FOE membership. Correlation figures show: For 'less' sensitive companies, multiple R = 0.75; R square = 0.57; adjusted R square = 0.55. For 'more' sensitive companies, multiple R = 0.88; R square = 0.78;

adjusted R square = 0.77. Both correlations are statically significant to three decimal places.

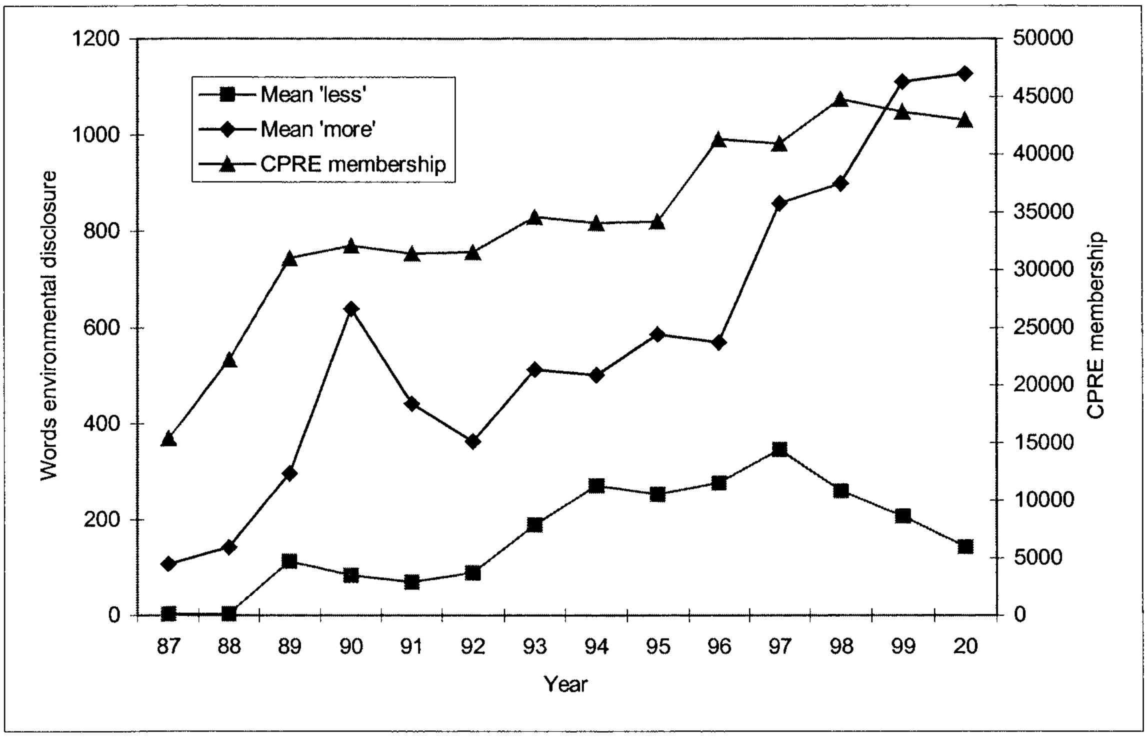

Figure 7.29: Mean environmental disclosure by year for companies that are 'less' environmentally sensitive and 'more' so against CPRE membership. Correlation figures show: For 'less' sensitive companies, multiple R = 0.77; R square = 0.59; adjusted R square = 0.56. For 'more' sensitive companies, multiple R = 0.89; R square = 0.79; adjusted R square = 0.77. Both correlations are statically significant to three decimal places.

R values	Against FOE	Against CPRE
'More' sensitive	0.88	0.89
'Less' sensitive	0.75	0.77

Table 7.5: summary data for H8 (R values).

In the cases of both proxies, the coefficient of correlation is higher against 'more' sensitive sectors than 'less' sensitive sectors. One particular correlation of a proxy data set against a company's volume of environmental disclosure (that of ICI) will perhaps provide additional support for H8.

7.9.2 The unique case of ICI

The case of ICI is highlighted from all companies in the sample because it, uniquely, shows a very close correlation against the FOE membership figures. The graphs are included to indicate the high correlation.

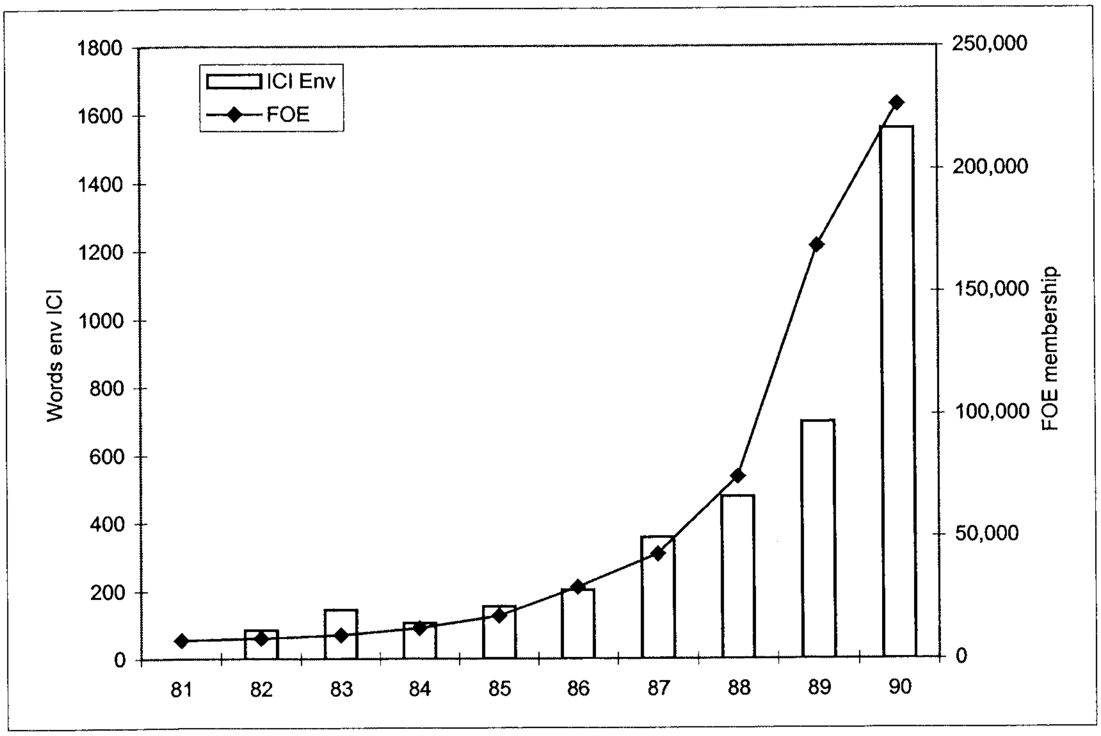

Figure 7.30. ICI environmental disclosure volumes with membership of FOE overlaid – years 1981-90 to show the association over the key period of growth in environmental concern. Multiple R = 0.96; R square = 0.92; adjusted R square = 0.91. Statistically significant to three decimal places.

The product portfolio and operations of ICI are amongst the most environmentally sensitive of all companies in the sample, not least because it was, for a large part of the longitudinal period, the world's major producer of the CFC compounds used in aerosols, fridges, etc. which were strongly linked to ozone layer depletion.

The close correlation between ICI's environmental disclosure and FOE membership may, it is suggested, indicate that this company. uniquely in the sample, is highly responsive to changes in environmental concern in society and uses its voluntary environmental disclosure to demonstrate its commitment to environmental issues closely in line with opinion change. The suggestion that the correlation is due to random variation is difficult to sustain given the 0.96 R value.

7.9.3 H8 summary

The evidence for H8 is strong. The correlations between lobby group memberships and 'more' and 'less' sensitive sectors is shown to be as hypothesised in both cases. The case of the very high correlation between FOE membership and ICI's disclosure provides additional support. The number of observations in each correlation makes the findings statistically significant at the 5% level in all cases. H8 is supported.

7.10 Summary

Hypothesis	Category of social information	Statement of hypothesis	Supported?
H1	Employee welfare	Because all sectors are equally affected by employee welfare issues, there will be no intersectoral difference in disclosure volume.	no
H1(a)	Employee welfare	Disclosure will be higher in companies in sectors with higher environmental sensitivity (because of their higher health and safety risk) and lower in sectors with lower environmental sensitivity.	possibly indicated (at the 10% level)
H2	Community	Disclosure will be higher in sectors closer to the end user and lower in sectors further from end user	yes
H3	Natural environment	Disclosure will be higher in companies in sectors with higher environmental sensitivity and lower in sectors with lower environmental sensitivity.	yes
H4	Employee welfare	Two companies within a sector will demonstrate similar longitudinal records of disclosure. 'Agreement' will be higher when disclosure is higher.	no
H5	Community	Two companies within a sector will demonstrate similar longitudinal records of disclosure. 'Agreement' will be higher when disclosure is higher.	no
H6	Natural environment	Two companies within a sector will demonstrate similar longitudinal records of disclosure. 'Agreement' will be higher when disclosure is higher.	possibly indicated
H7	Natural environment	Environmental disclosure will change over time in sympathy with changing societal opinion on environmental concern (environmental lobby group membership is a suitable proxy for societal opinion on environmental concern).	yes
H8	Natural environment	The correlation coefficient between lobby group memberships and environmental disclosure will be higher for 'more sensitive' than for 'less sensitive' companies.	yes

This study concludes that employee disclosure does not respond to sector in a way that would suggest legitimacy theory to be the cause of intersectoral variability. Evidence is found, however, that both community and environmental disclosure categories do respond to sector in patterns that are consistent with a legitimacy explanation of disclosure.

The longitudinal records of companies within sectors show little agreement except in the case of some intrasectoral agreements in environmental disclosure and brief episodes of agreement in the direction of community disclosures.

The close agreement between mean disclosure and environmental group memberships suggests that when considered as a whole, the sample is very responsive to changes in societal opinion in the area of environmental concern (assuming lobby group memberships can be taken as a proxy for societal environmental opinion). Some companies within the sample show a closer correlation against lobby group memberships than others – ICI being ostensibly the most responsive. 'More' environmentally sensitive sectors respond more closely to the proxy for changing societal opinion on the environment than 'less' sensitive sectors. This is also evidence for a legitimacy-based explanation.

8 Discussion of results

8.1 Between analyses (Hypotheses 1-3)

Intersectoral variability of employee disclosure is evident but there is no pattern in the variability that would suggest a legitimacy-linked explanation. H1 suggests that close agreement between companies would indicate a legitimacy explanation insofar that all companies will be more-or-less equally exposed to changing influences on employees and their conditions. The possible exception of intersectoral discrimination by exposure to health and safety issues is suggested at the 10% level of confidence but far from 'proven'. More detailed content analysis would be necessary to demonstrate this more clearly by disaggregating employee disclosure into more constituent parts. Some studies have resolved to a higher level of detail in employee disclosure (Adams, *et al*, 1995, for example) and were able to extract more meaning from such disclosure than the undisaggregated disclosure captured in this study. A more detailed research design at the outset of this study would have made such a disaggregation possible.

Although community disclosure does not show evidence of agreement within sectors (see Section 8.2), intersectoral differences strongly suggest sector responsiveness to public visibility. The observation that companies that are more publicly visible disclose higher volumes of information regarding the specifics of how they relate to communities, educational and charitable matters (issues of typically concern to local communities) is consistent with a legitimacy understanding of community disclosure. There is a higher risk of legitimacy gaps with regard to community relations opening up towards those companies that are better known to communities. The highly significant confidence indicated by the stacked t-test between 'nearer to' and 'further from' end user companies is strongly indicative of sample difference of means. With regard to doubts over the quality and indicative-only nature of the data observations, it is probably allowable to suggest that the data would need to be *very* muddy to entirely offset the confidence value of the order of E-12.

The hypothesis that environmental disclosure will be responsive by sector to a measure of environmental sensitivity is strongly indicated by the results. The 26 year longitudinality of the data lends weight to this finding. Over the course of the study, and notwithstanding internal (year-to-year) variability, those sectors that would, by virtue of their activities, be thought of as being more vulnerable to criticism on environmental issues are found to disclose more environmental information in their corporate reports. The stacked t-test significances of 6.9E-11 for all years and 6.25E-12 for the years 1987-2000 provide a convincing demonstration of hypothesis 3. As with hypothesis 2, misgivings with regard to the quality of the data would have to be very strongly indicated to offset this finding.

8.2 Within analyses (Hypotheses 4-6)

In the absence of intelligence on external legitimacy-threatening events (a limitation of this study), it is difficult to show whether the effects observed by Patten (1992) and Deegan *et al* (2000) are evident in this study. There are episodes of apparent agreement within sectors when community disclosure is considered but these are spasmodic and a detailed survey of sector-specific events would be necessary to test for association.

There is, however, evidence of intrasectoral agreement on environmental disclosure patterns in retailing, chemicals and petrochemicals. Regression analysis of the intrasectoral samples over the key time periods provides high coefficients of correlation that it would be difficult to explain through random happenstance. Furthermore, in all cases, the 'agreed' increases in environmental disclosure take place at approximately the same time – the late 1980s and early 1990s (see also the outcome of hypothesis 7).

Given that the increase in environmental disclosure over this period is observed in all sectors (to a greater or lesser extent), it would be very difficult to argue for randomness (especially when the observations of hypothesis 7 are considered). Hence, although incremental and perhaps ephemeral changes in social concern may result in a spectrum of disclosure responses (partly due to the varying perceptions of companies to such changes), significant and structural changes appear to be more dramatically reflected in disclosure, particularly evidenced by those changes that precipitated the overall increase in environmental disclosure.

This said, it is likely that hypotheses 4-6 were optimistic in their aspirations. The studies that gave rise to their formulation (Patten, 1992; Deegan *et al*, 2000) observed intrasectoral agreement following highly significant legitimacy-threatening events. This study found one such apparent event (a structural change in environmental opinion in the late 1980s) but no evidence of any such event affecting disclosure of community or employee information. In this regard, hypotheses 4 and 5 over-resolved for detail and possibly overstretched the empirical method with regard to content analysis.

8.3 Hypotheses 7 and 8 – testing disclosure against external proxies

Hypothesis 7

The mean environmental disclosure figures (shown in figure 7.24) show that environmental disclosure was low, albeit fluctuating, until the late 1980s. 1990 witnessed a step change (increase) in total mean disclosure volume, a trend increased in subsequent years until the increase began to level off in the later years of the decade (in their study of 25 Australian firms over the years 1980, 1985, 1988 and 1991, Deegan & Gordon, 1996, observed a similar pattern). This trend in mean conceals a range of individual company responses from Blue Circle (BCI) and ICI which frequently disclosed at or near 1000 words of environmental information in their corporate reports to Whitbread that rarely disclosed over 100.

Friends of the Earth's growth in membership figures is sigmoidal in form (figure 7.25). During the early to mid 1980s, membership was growing at a rate of between 1000 and 4000 a year. In the late 1980s, the rate of increase in membership rose sharply, such that its 1984 membership of 12,652 had risen to 226,341 by the end of the decade (1990). Membership after this point declined slightly and then levelled, thus arriving at the 'top' of the sigmoid. An overlay of the FOE figures on the mean environmental disclosure figures (figure 7.25) shows an apparent 'agreement', but when resolved more closely to the major years of the increase (early 1980s to 1990), the extent of agreement can be seen more clearly (figure 7.26). If membership of FOE can be taken as a proxy for environmental concern in society, then we are able to say that the businesses in the sample appear to have increased their environmental disclosures more-or-less in line with the increase in societal concern in this area.

Figure 7.27 shows the CPRE membership figures overlaid on the mean environmental disclosure figures (the same environmental disclosure data as shown in figure 7.24). CPRE was able to provide membership figures between 1987 and 2000 (the years shown on figure 7.27). Again, an apparent similarity in form can be observed – the sharp increase in the late 1980s, followed by a levelling off in the 1990s.

Regression analysis provides a clarification of the above. The mean environmental disclosure by year data vs. FOE membership (all years in which FOE membership was provided) provides an coefficient of correlation (R value) of 0.87 (R sq = 0.76), indicating a high degree of correlation (figure 7.25). The more resolved mean environmental disclosure by year vs. FOE membership for years 1981 to 1990 is shown in figure 7.26. The R value of 0.97 (Rsq = 0.95) indicates an even higher correlation than the regression for all years in sample (not surprisingly).

In seeking to address hypothesis 7, that environmental disclosure will change in sympathy with societal opinion on environmental matters, the evidence presented would appear to support the belief that as environmental concern increased in society (as evidenced by the increases in memberships of environmental organisations), environmental disclosure in corporate reports increased in similar fashion.

Hypothesis 8

Hypothesis 8 is a more robust test of legitimacy theory than hypothesis 7. In addition to the expectation that mean environmental disclosure for the entire cross sectional sample will respond to lobby group membership (hypothesis 7), the separation of the sample into 'more' and 'less' environmentally sensitive allows for a test of specific response by type.

It is evident from the detailed results in Appendix 1 that not all companies in the sample demonstrated the same 'start date' nor volumetric magnitude of environmental disclosure. If legitimacy theory posits that companies will respond to legitimacy gaps in a given area of reporting (in this case environmental opinion and environmental disclosure), it is hypothesised that environmental opinion will not affect all sectors equally. This is also the underlying premise of hypothesis 3.

Using the same 'more' and 'less' categories as those used in hypothesis 3, the correlation coefficient between mean environmental disclosure by sector and lobby group membership was higher for 'more' sensitive than for 'less' sensitive sectors (Table 7.5). It can thus be suggested that sectors with a higher exposure to criticism with regard to environmental performance do respond with higher sympathy with changing environmental opinion in society than companies in sectors less likely to be so criticised.

Figure 7.30 shows just the environmental disclosure record for ICI plc. This company was selected from the sample to demonstrate the agreement between its disclosure record and the increase in the proxy for environmental concern. It may be possible to suggest that ICI has, uniquely, understood this change in societal concern and responded to it by increasing its environmental disclosure at approximately the same rate as the increase in environmental concern in society. Its high overall disclosure, compared to the sample mean, may indicate a self-realisation on its part of the environmental sensitivity of its activities. The R value is 0.95 for the ICI vs. FOE membership data (years 1981-1990 – see figures 7.31 and 7.32) whilst the mean environmental disclosure vs. CPRE membership provides an R value of 0.92 (Rsq = 0.86).

9. Conclusions and critique

9.1 Conclusions from the discussion of hypotheses

The results in Chapter 7 and discussion in Chapter 8 permit the drawing of a number of conclusions. Using the method underpinning the main thrust of this thesis (i.e. hypotheses 1-6), indications of within and between resolution are convincingly provided only in the intersectoral differences in community disclosure, and the within and between measures for environmental disclosure.

Although year-to-year agreements are not noted in intrasectoral community disclosures, this study found that when the 26 year history of a company's community disclosure was taken into account, sector differences are shown to be associated with public visibility using proximity to end user as a proxy. Tertiary industries, which are better-known to the consumer, show longitudinal records with higher community disclosures than mainly secondary industries (chemicals, petrochemicals). The mainly primary industry in this sample (aggregates) has historically made almost no community disclosure. Sector effects are thus observed. This is evidence that community disclosure is used by companies as a legitimation measure.

The contention that environmental disclosure is used by companies to manage and restore legitimacy has been researched in some depth before (see for example Deegan & Rankin, 1996; Deegan & Gordon, 1996 and others). This study is able to reinforce this contention within the UK context - most of the previous studies have concerned Australian companies (in addition to the Deegan papers, see Wilmhurst & Frost, 2000; O'Donovan, 1999) or North American based companies (see Patten, 1992, Buhr, 1998).

Three outcomes are noteworthy with regard to environmental disclosure. Firstly, intersectoral differences were shown to be associated with the environmental sensitivity of the sectors. The more environmentally-sensitive sectors of chemicals, petrochemicals and aggregates were found to have historically disclosed a similar volume per corporate report, and this volume was substantially greater than the mean historical disclosures for the less environmentally-sensitive sectors of brewing and retailing. Second, some year-to-year intrasectoral agreement was noted. Patten's (1992) and Deegan *et al.*'s (2000) finding that companies in a sector will respond in a similar way to each other when faced with a change in environmental opinion is found in this study but on a larger scale – effects are noted, to a greater or lesser extent, in all five sectors (again, the confirmation of this in the UK context is novel). Furthermore, intrasectoral agreement does not appear to depend upon the occurrence of 'disasters' (Deegan *et al,* 2000). Third, environmental disclosure is shown to be highly correlated with the memberships of environmental lobbying organisations (a proxy for societal concern employed by Deegan & Gordon, 1996). On a synchronous (i.e. not lagged) year-to-year comparison, correlation coefficients for mean environmental disclosure vs. environmental pressure group memberships are above R=0.95. Patten's (1992) conclusion that "it appears that at least for environmental disclosures, threats to a firm's legitimacy do entice the firms to include more social responsibility information in its annual reports." (Patten, 1992: 475) is borne out in this study.

It appears, therefore, that legitimacy theory is easier to demonstrate for CSR categories that are discriminatory between sectors. It can be shown, for example, that companies differ in their environmental sensitivity and accordingly, empirical studies can be designed to examine sector differences (this being a theme in Adams, *et al,* 1998; Deegan & Rankin, 1996 and others). Similarly, it can be argued that exposure to community issues is a discriminator. Proximity to end user is a measure of such exposure.

It is more difficult to 'test for' legitimacy theory, however, when the category of CSR affects all companies in the sample more-or-less equally as there is no source of discrimination. Employee disclosure is one such category. If all companies in a sample are large (as is the case in this sample), it is likely that all companies in the sample will experience similar concerns with regard to their performance with regard to employees (and thus its employee disclosure). Changing demographics, employment law, working practices, labour market conditions, etc. will tend to affect all large employers thus reducing the usefulness of employee disclosure to demonstrate company-to-company and sector-to-sector differences. The belief that some types of employee issue may affect one sector rather more than another is borne out to a limited and unconvincing extent by this study.

The findings of this research may have implications for future CSR studies. It is likely that empirical studies that are based upon a discriminatory category will return more meaningful results than those that are based on less-discriminatory categories. Intra- and intersectoral variability will be greater, and thus more meaningful (i.e. more capable of internal comparison or external association) when only categories that discriminate between sectors are chosen. Hence, employee disclosure is a less useful measure of intersectoral social reporting intentions than environmental and community reporting.

It is possible to postulate, given these findings, that companies do use voluntary social disclosures where affected or concerned stakeholders can be identified and a form of narrative can be constructed that would, at least in part, address the information needs of such stakeholders. Community disclosures concern the ways in which the company interacts with local communities, educational concerns and with 'society' in general. Such concerns are relevant to those stakeholders who would wish to have information on the general level of social responsibility of the business. Stakeholders in this category may typically be primary (Clarkson, 1995), voluntary or involuntary (Clarkson, 1994). The stakeholder profiles of sectors nearer to the end user will include a higher proportion of groups concerned about community issues and hence it is logical to expect higher disclosures to be made in this area.

Similarly, environmental disclosure can be seen to be addressing a set of very specific concerns material to identifiable stakeholders (including lobby groups). The higher disclosure found in those sectors most likely to be criticised on environmental issues is likely to be partly due to the fact that both the concerns and the concerned stakeholders can be clearly delineated.

Hence, less circumscribable and more amorphous concerns or those 'aimed' at less identifiable stakeholder groupings are less likely to trigger disclosure intended to legitimate. It may be phrased thus, "How can we know what and how much to disclose when we do not know who wants information on it and we can't clearly define the issues of concern?" Such confusion or lack of clarity may result in lower disclosure or unfocussed disclosure, varying with apparent randomness from one year to the next and from company to company. This misgiving appears not to be an issue when it comes to community and environmental disclosure but probably is in the case of employment disclosure. The belief that 'we ought to say something' about employees seems to have triggered a great deal more variability within and particularly between companies and sectors with regard to employee disclosure when considered against the other two categories (hence the employee disclosure F statistic of 13.5).

This study has been about the extent to which reporting companies respond (or do not) to society through voluntary disclosures. At its simplest, the answer appears to be that they do if they can clearly identify and circumscribe the area of concern and they can formulate a form of words that they believe will go some way to address the concerned stakeholders' concerns in those areas. Companies are less likely to show consistent patterns of 'response' if they feel themselves to be less affected by a particular area of concern or the area of concern is difficult to circumscribe and/or stakeholders concerned about that area of concern are more difficult to identify.

9.2 A comment on method development

In addition to the major conclusions drawn from this study (above), the author feels able to provide comment on the contributions this study may be able to make to method development in this area. Choosing the major contributions is a matter of judgment but two areas seem to be most worthy of additional comment: the contribution to hypothesis generation in LT studies and the value of longitudinality in sample selection.

Contribution to hypothesis generation

One of the main contributions of this study has been its comment on and advancements to methods for exploring legitimacy theory. The literature reflects significant advancement in method since the crude approaches adopted by Hogner (1982) and Guthrie & Parker (1989). The exploration of the quality of content analysis data was an important development (Milne & Adler, 1999, Deegan & Rankin, 1996) although it was the formulation of specific hypotheses to 'test for' LT that was particularly influential in this study.

The question as to whether LT can be 'proven' is an important epistemological point. Underpinning the question is the extent to which LT can be used to generate hypotheses. It is generally agreed, for example, the political economy of accounting theory (Cooper & Scherer, 1984; Gray, *et al.* 1996) does not lend itself readily to empirical study as it is resolved at the level of society. LT, on the other hand, is resolved at the level of the individual company (Suchman, 1995; Dowling & Pfeffer, 1975; Shocker & Sethi, 1974). In the same way that an individual government is party to a social contract with its constituents (Chapter 2), so is a given business organisation in an implied social contract with its affected stakeholders (also Chapter 2). Any individual business can benefit or suffer from its reputation and the extent to which a legitimacy gap exists in the relationship will be a major determinant in the cordiality of the business-society interface.

The validity of the findings in this study rest upon the belief that LT is capable of generating hypotheses and in turn, that LT is resolved at the level of the company. Hence, if LT is to be 'tested', 'proven' or 'rebutted', contingent hypotheses must be capable of generation from its basic characteristics (discussed in Chapters 4 and 5 of this thesis). It is in this area that this study makes a contribution. The particular propositions were all derived from previous studies but were further developed for the purposes of this study. The following developments of method were the most important in this study.

- The proposition that companies will respond to position with regard to end user using community disclosure (hypothesis 2) was developed from Cowen, *et al.* (1987), Patten (1991), Adams, *et al.* (1998) and Clarke & Gibson-Sweet (1999).

The amount of disclosure 'needed' to legitimate will be greater for some companies than others depending on their prominence and exposure to public 'fame'.

- The proposition that companies will respond to environmental sensitivity using environmental disclosure (hypotheses 3 and 8) was developed from Deegan & Gordon (1996) and Wilmhurst & Frost (2000). Sectors will experience structurally dissimilar sensitivities to environmental criticism and this can be used as a hypothesis generator.
- The proposition that companies within an industry will respond similarly in social disclosure by category (hypotheses 3 to 6) was developed from observations by Patten (1992) and Deegan, *et al.* (2000) who found concerted responses by industry to changing opinion even it that legitimacy threat only applied to one industry member. Although evidence for intrasectoral agreement was only found in the case of environmental disclosures in the 1990s, the validity of these hypotheses remains valid and may be further developed in future research.
- The proposition that environmental lobby group memberships may be assumed to be a proxy for societal environmental concern (hypotheses 7 and 8) was developed from Deegan & Gordon (1996) and, to a lesser extent, Tilt (1994).

Demonstrating the value of longitudinality

In addition to the above theoretical constructs, this study has also shown the value of longitudinality in sample selection. The cross sectional sample of ten companies in five sectors was justified (Chapter 6) but the 26 year longitudinal period was a prominent feature of this study and increased the validity of the conclusions. For Hypotheses 1 to 3, mean disclosure volumes by category were used to show intersectoral differences in volumetric disclosure. This quality facilitated the 'ironing out' of any short term peaks or troughs in a company's disclosure and enabled the generation of a figure that was indicative of the company's long term commitment (or not) to a particular disclosure category. In Hypotheses 3 to 6, the longitudinality allowed for the long term intrasectoral comparisons. The possession of data going back 26 years minimised the possible misidentification of short term superficial intrasectoral agreements. It is possible to draw the conclusion that companies within sectors show little agreement on disclosure volume (excepting agreement of environmental disclosure in the 1990s) precisely because of the long historical period of the study. In hypotheses 7 and 8, the longitudinal quality enabled environmental disclosure volumes by total (hypothesis 7) and by type (hypothesis 8) to be compared with lobby group memberships thus making the coefficients of correlation statistically significant in all cases to three decimal places (i.e. 0.000). A lower number of observations for comparison (i.e. fewer years) would have reduced the confidence of the findings.

9.3 Review of method and possible improvements

It is conceded that the method employed in this research is open to challenge on a number of levels (the major limitations were discussed in Chapter 6). These points remain as criticisms of the method, but at the conclusion of the project, it was thought appropriate to comment on any ways in which, if repeated, the method could be improved upon or refined.

The main problem with the method was the fact that it was entirely volumetric and did not systematically record content in a qualitative manner. The analysis could have been richer if it were possible to not only report agreements in volume (magnitude or direction of movement) but also whether the two companies (in intrasectoral studies for hypotheses 3 to 6) were reporting on the same or similar subjects. This limitation is not limited to this study, however. Metrics to record content or news value of disclosures have exercised previous researchers and this thesis is unable to provide any enrichment on this issue.

The selection of only three categories of social disclosure may be another limitation. It may have been possible, for example, to resolve meaning from the employee welfare data if it were further disaggregated into sub-categories within the human resource area. Some studies have performed this step although on results reported in the literature so far, it is uncertain as to whether it has enabled additional meaning to be extracted. One such attempt, (Gray, *et al,* 1995b) resolved data into the following

HR-related categories: employment of minorities; advancement of minorities; employment of women; advancement of women; employment of other special interest groups; employee health and safety; employee training; other human resource disclosures. Whilst many of these categories are infrequently disclosed by companies and some contain very low volume disclosures within them, it could be argued that the richer resolution makes for more meaningful cross-sectional analysis. Against this is the argument that Gray's database over-resolves. A given disclosure may arguably fit into more than one category and some may have so few entries so as to make meaningful comparison problematic. This said, although employee disclosures may have benefited from closer examination, environmental disclosure has rarely been disaggregated – apparently to no deterioration of the data usefulness. The most-cited papers in environmental disclosure take a 'broad-brush' and permissive view of this particular disclosure category and are yet able to draw conclusions from it.

This study, in common with some others, relied for data collection upon content analysis alone. Studies that adopt more interactive methods are rare, partly because they are more resource-intensive in their data gathering. O'Donovan (1999) was published towards the end of this study but made some good points, particularly with regard to the problems of extracting meaning from content analysis data. Other methods, based partly on interviews such as Buhr (1998) and Woodward *et al.* (2001), may also have enriched the method if it was being formulated after these papers were published.

With regard to the cross sectional sample, ten companies in five sectors is not the broadest cross sectional study in the social disclosure literature and it remains true that the more companies in the sample the more valid will be any conclusions drawn. Whilst it might have been desirable to have included more companies and sectors, the number of companies was justified and the longitudinal element offsets criticisms on cross sectionality. If the longitudinal element contained fewer years, the vulnerability of criticism over cross sectionality would have been greater. As it was, disclosure data was captured from ten companies over 26 years in three categories and (although this detail was not ultimately used in the study) by location in corporate report (of which there were three). This generated a database of 2,340 direct observations (i.e. 260

corporate reports, capturing three categories of disclosure by location in either chairman's statement, directors' report or 'other').

9.4 A final comment and conclusions

Young & Preston (1996), in their commentary on theories adopted in accounting research, made reference to the 'tyranny of single theory perspectives'. They argued that one of the failures of the academic community has been its failure to recognise "the organizational context [of accounting] and, as a consequence, the failure of accounting academics to develop [coherent} accounting theories." (ibid. p. 107). At the risk of misrepresentation, they argued that in seeking to investigate the complex multifacetedness of accounting and the complexities of its interactions with other areas of business and social scientific discipline, researchers may have been excessively reductionist, seeking to explore complex features using theories incapable of sufficient interrogation of the problem addressed.

Whilst this is probably not an original observation, and the reasons for methodological reductionism are relatively obvious (there is no 'theory of everything'), it nevertheless represents a fair criticism of what some would consider to be 'blunt' accounting theories, of which legitimacy theory may be one. Young & Preston continued to challenge theory-builders (and presumably theory testers) to make more explicit the limitations of their theories.

"The authors must therefore elaborate their definition of an accounting theory. What is such a thing to look like? Is it envisaged that it will have predictive capabilities; will it be complete and all-encompassing? Are the authors referring to a single theory or multiple theories of accounting? Are they referring to theories of accounting in use, theories of what accounting practices should be employed and how accounting should be practised, theories of accounting or income measurement or all of these and more?" (ibid. p. 110)

When measured against such criteria, it is likely that legitimacy theory still has some way to go. Whilst there is some agreement in the literature as to what it would 'look like', it's predictive powers are limited and it is demonstrably not 'complete and all-encompassing.'

The interconnectedness of the various explanatory theories in social and environmental accounting may bear some witness to this 'tyranny'. The belief that social disclosure may respond to sectoral exposure to external threats – a common theme in LT studies – is not inconsistent, for example, with the basic formulation of Watts & Zimmerman's (1986) political costs hypothesis (their size hypothesis component of PCH being one discriminator, for example). That different companies and sectors will respond to their exposure postures with relevant disclosure is therefore not a contention peculiar to legitimacy theory.

Nor does LT have the power to explain and predict social reporting behaviour in all but the most specific and clearly circumscribed situations. This and previous studies have shown, with a fairly high degree of confidence, that environmental disclosure has been used to legitimate – certainly in response to events (Patten, 1992; Deegan *et al,* 2000) but also as a response to the structural situation a business finds itself in by virtue of its industrial sector (Deegan & Gordon, 1996; this study). This observation probably makes LT predictive *in such cases only*. One could probably now argue that a major environmental incident would almost certainly trigger a legitimacy-restoring spate of social, and in particular, environmental disclosures (whether these would be in annual reports is another matter – websites are becoming the medium of choice for 'quick reaction' communications – see for example Williams & Pei, 1999). This increase would be more marked in industries affected by the incident. Hence, if it were an incident in the petrochemicals industry, petrochemicals and allied industries would probably increase their environmental disclosures in response. In the cases of such events, LT may therefore have some predictive power.

This study has noted that legitimacy theory may also have some predictive power with regard to community disclosure although not on the same scale as for environmental disclosure and not on a response-for-response basis (as is observable in changes in environmental disclosure). The longitudinality of this study has made the intersectoral differences in community disclosure observable (i.e. the 26 years have made this difference evident whereas a shorter period may not have highlighted such differences). Legitimacy theory is not able to predict community disclosure behaviour on a year-to-year basis.

According to the method adopted in this thesis, legitimacy theory has very little predictive power with regard to employee disclosure and 'all categories' disclosure, nor is it certain what LT would 'look like' (using Young & Preston's terms) if these categories were used to legitimate.

What, then, can be said about legitimacy theory? Although intuitive and well-defined in the literature, it has only limited applicability as a predictive theory. The methods that have been used to test for it, especially those based on content analysis, are likely to find evidence for it in limited cases only. Methods in which content analysis is enriched by qualitative or textual analysis offer a slightly more effective research instrument but still suffer from the structural problem that it seems to only present itself in certain categories of information (especially environmental and community disclosures). That said, it is a predictor of behaviour in environmental disclosure in event studies and can also explain mimetic or correlated environmental disclosure behaviour within and between sectors. It is not a 'theory of everything' but almost certainly still has a future in the social accounting literature and in other areas seeking to better understand the business-society relationship.

9.5 A comment on the initial research objectives

This thesis began (Chapter 1) with the explicit statement of five research objectives.

6. To formulate a set of hypotheses capable of investigating legitimacy theory as an explicator of variability in CSR without the need to rely on a metric of societal opinion for the validity of the test. The hypotheses, testing for agreement within sectors and differences between sectors, seek to provide insight into LT by analysis of volume data, measured by word count.

This objective has been met. Although hypothesis 7 was borrowed more-or-less unmodified from that employed by Deegan & Gordon (1996), hypotheses 1-6 were derived specifically for the purposes of this thesis. The intersectoral hypotheses (1, 1(a), 2 and 3) were derived from previous studies that had observed intersectoral differences in social disclosure and this study extended the research by proposing patterns of intersectoral difference specific to the category of social disclosure being examined. Hypothesis 8 employed elements of hypotheses 7 and 3, suggesting that LT would be indicated if correlation was found between a proxy for environmental opinion and environmental disclosure, and by sector sensitivity to environmental criticism. The use of longitudinal intrasectoral agreement to test for LT is derived from effects noted by previous studies that observed concerted industry disclosure movements following legitimacy threatening events. Hypotheses 4-6 were thus intended in part to investigate whether such agreement was a general feature of intrasectoral disclosure behaviour.

7. To provide enrichment to the above hypotheses by applying an amendment to hypotheses developed by Deegan & Gordon (1996). This part of the thesis is not intended to be central, but to provide additional evidence for LT for environmental disclosure only.

This objective has been met. Hypotheses 7 and 8 clarified this and the method (Chapter 6) detailed how environmental lobby group membership would be employed as the analogue of societal environmental concern over time.

8. To analyse the content analysis-derived data in a manner consistent with the quality of the data.

This objective has been met. Over-reliance on statistical method was avoided although simple parametric methods such as t-tests, correlations and linear regressions were employed in order to provide further comment on data represented on graphs (usually time-related representations). Where the evidence in support of a hypothesis was very strong by these two approaches, the hypothesis was said to have been demonstrated, supported or indicated. There was no assertion that any hypothesis was 'proven'.

9. To provide comment on the hypotheses, draw conclusions as appropriate, concede limitations and suggest ideas for improvement in methods used to 'test for' legitimacy theory.

This objective has been met. Chapters 8 and 9 drew conclusions as appropriate. method limitations were discussed in Chapter 6 and ideas for improvement were discussed earlier in this chapter.

10. To use the outcomes of the research to suggest, as appropriate, refinements of amendments to empirical approaches for exploring and testing legitimacy theory in social and environmental accounting studies.

This objective has been met. In the foregoing narrative in this chapter, the importance of explicit hypothesis generation and longitudinality were shown. These observations are capable of enriching SEA empirical studies and are better understood as a result of this research.

References

Abbott W.F. and Monsen, R.J. (1979), 'On the measurement of corporate social responsibility: self-reported disclosures as a method of measuring corporate social involvement.' Academy of Management Journal, Vol. 22 No. 3, pp. 501-15.

Accounting Standards Committee (1975), 'The Corporate Report.' Institute of Chartered Accountants of England and Wales, London.

Adams, C. A, Hill, W-Y, & Roberts, C. B. (1998) 'Corporate social reporting practices in Western Europe: legitimating corporate behaviour?' British Accounting Review. 30. pp1-21.

Adams, C. A. and Harte, G (1995). 'Corporate reporting on employment: the changing portrayal of women in banking and retail.' University of Glasgow, department of Accounting and Finance, working paper series.

Adams, C.A.and Harte, G. (1998) 'The changing portrayal of the employment of women in British banks' and retail companies' corporate annual reports' Accounting, Organizations and Society, November 1998, vol. 23, no. 8, pp. 781-812.

Adams, C. A., Coutts, A. and Harte, G. (1995). 'Corporate equal opportunities (non-) disclosure', British Accounting Review. 27, 87-108.

Ahlstedt, L., & Jahnukainen, I. (1971). 'Yritysorganisaatio yhteistoiminnan ohjausjaerjestelmaenae.' Helsinki: Weilin + Goeoes.

Alkhafaji, A. F. (1989). 'A stakeholder approach to corporate governance. Managing in a dynamic environment.' Westport, CT: Quorum Books.

Anderson, J. C. and Frankle, A. W. (1980). 'Voluntary social reporting: an iso-beta portfolio analysis.' The Accounting Review. 55(3). pp.467-479

Anderson, R.H. (1980), 'Attitudes of chartered accountants to social responsibility disclosure in Australia', Chartered Accountant in Australia, Vol. 10 No. 1, pp. 12-16.

Andrew, B.H., Gul, F.A., Guthrie, J.E. and Teoh, H.Y. (1989), 'A note on corporate social disclosure practices in developing countries: the case of Malaysia and Singapore', British Accounting Review, Vol. 21, No. 4, pp. 371-376.

Ansoff, I. (1965). 'Corporate strategy.' New York: McGraw Hill.

Arlow, P. and Gannon, M. (1982), 'Social responsiveness, corporate structure and economic performance', Academy of Management Review, Vol. 7 No. 2, pp. 235-41.

Beams, F.A. and Fertig, P.E. (1971), 'Pollution control through social costs conversion', Journal of Accountancy, Vol. 141, pp. 37-42.

Bebbington, J., Gray, R., Hibbitt, C. and Kirk, E. (2001). 'Full cost accounting: an agenda for action.' ACCA Research Report No. 73. Certified Accountants Educational Trust, London, 2001.
Belkaoui, A. (1976). 'The Impact of the Disclosure of the Environmental Effects of Organizational Behavior on the Market', Financial Management, Winter, pp. 26–31.
Belkaoui, A. (1980), 'The impact of socio-economic accounting statements on the investment decision: an empirical study', Accounting Organizations and Society, Vol. 5 No. 3, pp. 263-83.
Belkaoui, A. and Karpik, P.G. (1989), 'Determinants of the corporate decision to disclose social information', Accounting, Auditing & Accountability Journal, Vol. 2 No. 1, pp. 36-51.
Booth, P., Moores, K.J. and McNamara, R. (1987), 'Researching the information content of social responsibility disclosures', British Accounting Review, Vol. 19 No. 1, pp. 31-51.
Bowie, N. 1988. 'The moral obligations of multinational corporations.' In S. Luper-Foy (Ed.), 'Problems of international justice' pp 97-113. Boulder, CO: Westview Press.
Bowman, E.H. and Haire, M. (1975), 'A strategic posture towards corporate social responsibility', California Management Review, Winter, pp. 49-58.
Bowman, E.H. and Haire, M. (1976). 'Social impact disclosure and corporate annual reports'. Accounting, Organisations and Society. pp. 11-21.
Brenner, S. N. (1993). 'The stakeholder theory of the firm and organizational decision making: Some propositions and a model'. In J. Pasquero & D. Collins (Eds.), Proceedings of the Fourth Annual Meeting of the International Association for Business and Society: 205-210. San Diego.
Brenner, S. N. (1995). 'Stakeholder theory of the firm: Its consistency with current management techniques'. In J. Nasi (Ed.), 'Understanding stakeholder thinking' pp 75-96. Helsinki: LSR-Julkaisut Oy.
Brooks, L.J. Jr (1986), 'Canadian Corporate Social Performance.' The Society of Management Accountants of Canada, Hamilton.
Brown, N. and Deegan C (1998) 'The public disclosure of environmental performance information - a dual test of media agenda setting theory and legitimacy theory', Accounting and Business Research, Vol. 29 No.1, pp.21-41.

Buhr, N. (1998). 'Environmental performance, legislation and annual report disclosure: the case of acid rain and Falconbridge.' Accounting, Auditing and Accountability Journal. Vol. 11. No. 2, 1996, pp. 163-190.
Burchell, S., Clubb, C. and Hopwood, A. (1985), 'Accounting in its social context: towards a history of value added in the United Kingdom ', Accounting, Organizations and Society, Vol. 110 No. 4, pp. 381-413.
Burrell, G. and Morgan, G. (1979). 'Sociological Paradigms and Organizational Analysis.' Heinemann, London.
Buzby, S.L. and Falk, H. (1979). 'Demand for social responsibility information by university investors', The Accounting Review, Vol. LIV No. 1, January, pp. 23-37.
Camfferman, K (1997). 'Voluntary annual report disclosure by listed Dutch companies, 1945 – 1983.' Garland Publishing
Campbell, D. J. (2000). 'Legitimacy theory or managerial reality construction. Corporate social disclosure in Marks and Spencer corporate reports, 1969-1997'. Accounting Forum. Vol. 24. No. 1. March 2000. pp. 80-100.
Campbell, D. J., Shrives, P. and Bohmbach-Saager, H. (2001). 'Voluntary social disclosure through mission statements in corporate reports. Signalling what and to whom?' Business and Society Review. Spring 2001, vol. 106, no. 1, pp. 65-87 (23)
Carroll, A.B. (1989). Business and society: Ethics and stakeholder management. Cincinnati: South-Western.
Carroll, A. B. (1993). 'Business and society: Ethics and stakeholder management.' (2nd ed.). Cincinnati: South-Western.
Churchman, C.W. (1971), 'On the facility, felicity, and morality of measuring social change', Accounting Review, Vol. 46. No. 1, pp. 30-5.
Clarke, J., and Gibson –Sweet, M.(1999). 'The use of corporate social disclosures in the management of reputation & legitimacy.' Business ethics: a European review Vol. 8 No.1. pp 5-13.
Clarkson, M. (1994). 'A risk based model of stakeholder theory.' Proceedings of the Second Toronto Conference on Stakeholder Theory. Toronto: Centre for Corporate Social Performance & Ethics, University of Toronto.
Clarkson, M. B. E. (1995). 'A stakeholder framework for analysing and evaluating corporate social performance.' Academy of Management Review, 20, 1, pp 92-117
Cooper, D. (1980). 'Discussion of towards a political economy of accounting.' Accounting, Organizations and Society. Vol. 5. No. 1. pp. 179-86.

Cooper, D.J. (1988), 'A social analysis of of corporate pollution disclosures: a comment', Advances in Public Interest Accounting, Vol. 2, pp. 179-86.
Cooper, D.J. and Sherer, M.J. (1984), 'The value of corporate accounting reports: arguments for a political economy of accounting', Accounting, Organizations and Society, Vol. 9 No. 3/4, pp. 207-32.
Cornell, B. & Shapiro, A. (1987). 'Corporate stakeholders and corporate finance.' Financial Management. pp 5-14.
Cowen, S.S., Ferreri, L.B. and Parker, L.D. (1987), 'The impact of corporate characteristics on social responsibility disclosure: a typology and frequency-based analysis', Accounting, Organizations and Society, Vol. 12 No. 2, pp. 111-22.
Deegan C. and Gordon, B. (1996). 'A study of the environmental disclosure policies of Australian corporations', Accounting and Business Research. Vol.26, No.3 pp. 187-199.
Deegan C. and Rankin M. (1996) 'Do Australian companies report environmental news objectively?' Accounting, Auditing and Accountability Journal, Vol.9, No.2, pp. 50-67.
Deegan, C. & Rankin, M. (1997). 'The materiality of environmental information to users of annual reports.' Accounting, Auditing and Accountability Journal. Vol. 10. No. 4. pp. 562-583.
Deegan, C., Rankin, M. and Voght, P. (2000). 'Firms' disclosure reactions to major social incidents: Australian evidence.'. Accounting Forum. Vol. 24. No. 1. March 2000. pp. 101-130.
Dey, C. (2000). 'An ethnographic approach to investigating corporate social responsibility.' Paper presented at the Congress of the European Accounting Assiociation, Munich. March 2000.
Dierkes, M. and Preston, L.E. (1977), 'Corporate social accounting reporting for the physical environment: a critical review and implementation proposal', Accounting, Organizations and Society, Vol. 2 No. 1, pp. 3-22.
Donaldson, T. (1982). 'Corporations and morality'. Prentice Hall. Englewood Cliffs, NJ.
Donaldson, T. and Dunfee, T. W. (1994). 'Towards and integrative conception of business ethics; integrative social contracts theory.' Academy of Management Review. Vol. 19. No. 2. pp.252-284.

Donaldson, T. and Preston, L.E. (1995) 'The stakeholder theory of the corporation: concepts, evidence and implications', Academy of Management Review. Vol. 20, No. 1, pp. 65-91.

Dowling, J., and Pfeffer, J. (1975). 'Organizational legitimacy: social values and organizational behavior,' Pacific Sociological Review, 18: pp. 122-136.

Elsbach, K. D. (1994). 'Managing organizational legitimacy in the California cattle industry: The construction and effectiveness of verbal accounts.' Administrative Science Quarterly. 39: 57-88.

Elsbach, K. D., & Sutton, R. I. (1992). 'Acquiring organizational legitimacy through illegitimate actions: A marriage of institutional and impression management theories.' Academy of Management Journal, 35: 699-738.

Ernst and Ernst (1976 et seq.). 'Social Responsibility Disclosure.' Ernst and Ernst, Cleveland, OH.

Evan, W. M. & Freeman, R. E. (1993). 'A stakeholder theory of the modern corporation: Kantian capitalism.' in Cryssides, G. D. & Kaler, J. H. (1993). 'An introduction to business ethics.' Englewood Cliffs: Prentice Hall, pp 254-266.

Evan, W. M., & Freeman, R. E, (1988). 'A stakeholder theory of the modern corporation: Kantian capitalism.' In T. L. Beauchamp & N. Bowie (Eds.), 'Ethical theory and business.' pp 75-84. Englewood Cliffs, NJ: Prentice-Hall.

Freedman, M. & Stagliano, A. J. (1992). 'European unification, accounting hamonisation and social disclosures.' The International Journal of Accounting. Vol. 27. No. 2. pp. 112-122.

Freedman, M. and Jaggi, B. (1982), 'Pollution disclosures, pollution performance and economic performance', Omega, Vol. 10 No. 1, pp. 167-76.

Freedman, M. and Jaggi. M. (1988), 'An analysis of the association between pollution disclosure and economic performance', Accounting, Auditing & Accountability Journal, Vol. 1 No. 2, pp. 43-58.

Freeman, R. E. (1994). 'The politics of stakeholder theory: some future directions.' Business Ethics Quarterly, 4, 4, pp 409-421.

Freeman, R. E. (1984). 'Strategic management: A stakeholder approach'. Boston: Pitman.

Freeman, R.E., & Evan, W.M. (1990). 'Corporate governance: A stakeholder interpretation.' Journal of Behavioral Economics, CAPut!': 337-359.

Freeman, R.E., & Gilbert, D. R. (1987). 'Managing stakeholder relationships.' In S.P. Sethi & C. M. Falbe (Eds.), 'Business and society: Dimensions of conflict and cooperation.' pp397-423. Lexington, MA: Lexington Books.

Freeman, R.E., & Reed, D.L. (1983). 'Stockholders and stakeholders: A new perspective on corporate governance.' California Management Review, 25(3): 93-94.

French, J. R. P., & Raven, B. (1960). 'The base of social power.' In D. Cartwright & A. F. Zander (Eds.), 'Group dynamics' (2nd ed.): 607-623. Evanston, IL: Row, Peterson.

Friedman, M. (1970). 'The social responsibility of business is to increase its profits.' New York Times magazine. 13 Sept. pp 7-13.

Gray, R, Owen, D and Adams C (1996). 'Accounting and Accountability: changes and challenges in corporate social and environmental reporting'. Prentice Hall, London.

Gray, R. and Bebbington, J (2001). 'Accounting for the environment.' (2e). Sage Publications, London.

Gray, R., Javad, M., Power, D. and Sinclair, D. (2001). 'Social and environmental disclosure and corporate characteristics: a research note and extension.' Journal of Business Finance and Accounting. 28(3) & (4), April/May, 2001

Gray, R., Kouhy, R. and Lavers, S. (1995a). 'Corporate social and environmental reporting. A review of the literature and a longitudinal study of UK disclosures', Accounting, Auditing and Accountability Journal, Vol. 8, No. 2, pp 47-77.

Gray, R., Kouhy, R. and Lavers, S. (1995b). 'Methodological themes: constructing a research database of social and environmental reporting by UK companies', Accounting, Auditing and Accountability Journal, Vol. 8, No. 2, pp. 78-101.

Gray, R.H., Owen, D.L. and Maunders, K.T. (1987). 'Corporate Social Reporting: Accounting & Accountability.' Prentice-Hall, Hemel Hempstead.

Griffin, E. M. (1994). 'A first look at communication theory.' (2nd ed). New York: McGraw Hill.

Grojer, J.E. and Stark, A. (1977), 'Social accounting: a Swedish attempt', Accounting, Organizations and Society, Vol. 2 No. 4, pp. 349-86.

Guthrie, J. (1983). 'Corporate social accounting and reporting: an Australian empirical study.' AAANZ Conference Proceedings. Brisbane, Australia.

Guthrie, J.E. and Mathews, M.R. (1985), 'Corporate social accounting in Australasia', Research in Corporate Social Performance and Policy, Vol. 7, pp. 251-77.

Guthrie, J.E. and Parker, L.D. (1989). 'Corporate social reporting: a rebuttal of legitimacy theory', Accounting and Business Research, Vol. 9 No. 76, pp. 343-52.
Guthrie, J.E. and Parker, L.D. (1990), 'Corporate social disclosure practice: a comparative international analysis', Advances in Public Interest Accounting, Vol. 3, pp. 159-76.
Hackston, D. & Milne, M. J. (1996) 'Some determinants of disclosures in NZ companies', Accounting, Auditing and Accountability Journal, Vol. 9, No. 1, pp. 77 - 108.
Hamlyn, D. W. (1987). 'The Penguin History of Western Philosophy.' Penguin Books: London
Harte, G. and Owen, D.L. (1991), 'Environmental disclosure in the annual reports of British companies: a research note.' Accounting, Auditing & Accountability Journal, Vol. 4 No. 3, pp. 51-61.
Heard, J.E. and Bolce, W.J. (1981), 'The political significance of corporate social reporting in the United States of America.' Accounting, Organizations and Society, Vol. 6 No. 3, pp. 247-54.
Hill, C. W. L., & Jones, T. M. (1992). 'Stakeholder-agency theory.' Journal of Management Studies, 29(2): 131-154.
Hobbes, T. (1660). 'The Leviathan.' See for example http://www.orst.edu/instruct/phl302/texts/hobbes/leviathan-contents.html
Hogner, R.H. (1982) 'Corporate Social Reporting; Eight decades of Development at US Steel.' Research in Corporate Performance and Policy, Vol.4 pp. 243-50
Hopper, T. and Powell, A. (1985). 'Making sense of research into the organisational and social aspects of management accounting: a review of its underlying assumptions.' Journal on Management Studies. Vol. 22. No 5. pp. 429-65.
Ingram, R.W. (1978), 'An investigation of the information content of (certain) social responsibility disclosure', Journal of Accounting Research, Vol. 16 No. 2, pp. 270-85.
Jaggi, B. & Freedman, M. (1982). 'An Analysis of the Information Content of Pollution Disclosures', Financial Review, 17 (3), pp. 142–152.
Jorgensen, H. B. (1993). 'The "green account" of the Danish Steel Works Ltd'. Social and Envoronmental Accounting (the CSEAR journal). Vol. 13. No 1. Spring
Kreps, T. J. (1940). 'Measrurement of the social performance of business.' Monograph No. 7, Investigation of concentration of economic powerfor the temporary

National Economic Committee. Washington, DC. United States Government Printing Office.

Krippendorf, K. (1980). 'Content Analysis: An Introduction to its Methodology.' Sage, New York, NY.

Langtry, B. (1994). 'Stakeholders and the moral responsibilities of business.' Business Ethics Quarterly, 4: 431-443.

Lee, C. (1997). 'This sceptred isle.' London. BBC Books.

Lewis, N., Parker, L and Sutcliffe, P. (1984). 'Financial reporting to employees: the pattern of development, 1919 to 1979.' Accounting, Organizations and Society. pp. 275-290.

Lindblom, C.K. (1994), 'The implications of organizational legitimacy for corporate social performance and disclosure', paper presented at the Critical Perspectives on Accounting Conference, New York, NY.

Linowes, D.F. (1972), 'Socio-economic accounting', Journal of Accountancy, Vol. 142, pp. 37-42.

Locke, J. (1690). 'Second treatise on government.' See for example http://www.swan.ac.uk/poli/texts/locke/lockcont.htm

Lyall, D. (1982). 'Disclosure practises in employee reports.' Accounts Magazine Vol. 86 No. 913 pp. 246-248

MacArthur, J. B. (1988). 'An analysis of the content of corporate submissions on proposed accounting standards in the United Kingdom.' Accounting and Business Research. No. 71. pp213-226.

Mahapatra, S. (1984), 'Investor reaction to a corporate social accounting', Journal of Business Finance and Accounting, Vol. 11 No. 1, pp. 29-40.

Mahoney, J. (1994). 'Stakeholder responsibilities: turning the ethical tables.' Business Ethics - A European Review. 3, 4, pp 212-218.

Mathews, M.R. (1993). 'Socially Responsible Accounting.' Chapman & Hall, London.

Mathews, M.R. (1997) 'Twenty five years of social and environmental accounting research - is there a silver jubilee to celebrate?' Accounting, Auditing and Accountability Journal, Vol. 10, No. 4, pp. 481-531.

Mathews, M.R. and Perera, M.H.B. (1995). 'Accounting theory and development.' 3rd edition. Nelson, Melbourne.

Maurer, J.G. (1971). 'Readings in organisational theory: Open systems. Approaches'. Random House. New York.

Maxwell, S.R. and Mason, A.K. (1976). 'Social Responsibility and Canada's Largest Corporations.' ICRA Occasional Paper No. 9, International Centre for Research in Accounting, University of Lancaster.

McCombs, M. and Shaw, D. (1981). 'The agenda setting function of mass media.' Public Opinion Quarterley. 36. pp. 176-187.

Miles, R.H. (1987). 'Managing the corporate social environment'. Prentice Hall, Englewood Cliffs, NJ.

Milne, M J and Chan, C C C. (1999). 'Narrative corporate social disclosures: how much of a difference do they make to investment decision-making?' British Accounting Review. Vol. 31. pp. 439-457.

Milne, M. and Adler, R. (1999). 'Exploring the reliability of social and environmental disclosure content analysis.' Accounting, Auditing & Accountability Journal, Vol. 12 No. 2, pp. 237-256.

Mitchell, R. K., Agle, B. R and Wood, D. J. (1997). 'Toward a theory of stakeholder identification and salience: defining the principle of who and what really counts.' Academy of Management Review, Oct 1997 v22 n4 p853 (34).

Mobley, S.C. (1970), 'The challenges of socio-economic accounting', The Accounting Review, Vol. 45 No. 4, pp. 762-8.

Morris, R D (1987). 'Signalling, agency theory and accounting policy choice.' Accounting and Business Research, 18 (4), pp. 47 – 56

Nasi, J. (1995). 'What is stakeholder thinking? A snapshot of a social theory of the firm.' In J. Nasi (Ed.), 'Understanding stakeholder thinking' pp. 19-32. Helsinki: LSR-Julkaisut Oy.

Ness, K.E. and Mirza, A.M. (1991), 'Corporate social disclosure: a note on a test of agency theory', British Accounting Review, Vol. 23 No. 3, September, pp. 211-18.

Neu, D., Warsame, H. & Pedwell, K. (1998) 'Managing public impressions: environmental disclosure in annual reports', Accounting, Organiazations and Society, Vol. 23, No. 3, pp. 265 - 282.

O'Donovan, G. (1999). 'Managing legitimacy through increased corporate environmental reporting: an exploratory study.' Interdisciplinary Environmental review. Vol. 1. No. 1. pp. 63-99

Parker, L.D. (1986), 'Polemical themes in social accounting: a scenario for standard setting', Advances in Public Interest Accounting, Vol. 1, pp. 67-93.
Parsons, T. (1960). 'Structure and process in modern societies'. New York, Free Press.
Patten D.M. (1992) 'Intra-industry environmental disclosures in response to the Alaskan oil spill: a note on legitimacy theory.' Accounting, Organizations and Society, 17(5) pp. 471-5.
Patten, D.M. (1991), 'Exposure, legitimacy, and social disclosure.' Journal of Accounting and Public Policy, Vol. 10, pp. 297-308.
Patten, D.M. (1995). 'Variability in social disclosure: a legitimacy-based analysis.' Advances in public interest accounting. Vol. 6. pp. 273-285
Peltzman, S. (1974). 'Regulation of pharmaceutical innovation: the 1962 amendments.' Washington, DC: American Enterprise Institute for Public Policy Research.
Popkin, R. H., Stroll, A. and Kelly, A. V. (ed). (1983). 'Philosophy Made Simple.' Heinemann: London.
Preston, L. E., Rey, F., and Dierkes, M. (1978). 'Corporate social performance: Germany, France, Canada and the US.' California Management Review. No. 4. pp 40-49.
Preston, L.E. and Post, J.E. (1975). 'Private Management and Public Policy.' Prentice-Hall, Englewood Cliffs, NJ.
Puxty, A.G. (1986), 'Social accounting as immanent legitimation: a critique of a technist ideology', Advances in Public Interest Accounting, Vol. 1, pp. 95-112.
Rawls, J. (1971). 'A Theory of Justice.' Cambridge, MA: Harvard University Press.
Rhenman, E. (1964). 'Foeretagsdemokrati och foeretagsorganisation.' Stockholm: Thule.
Roberts, C.B. (1990). 'International Trends in Social and Employee Reporting.' Occasional Research Paper No. 6, Chartered Association of Certified Accountants, London.
Roberts, C.B. (1992), 'Environmental disclosures in corporate annual reports in Western Europe', in Owen, D.L. (Ed.). 'Green Reporting: The Challenge of the Nineties.' Chapman & Hall, London, pp. 139-65.
Roberts, R.W. (1992). 'Determinants of corporate social responsibility disclosure.' Accounting, Organisations & Society Vol.17 No.6 pp. 595-612

Rockness, J. and Williams, P. F. (1988). 'A descriptive study of social accounting responsibility mutual funds.' Accounting, Organizations and Society. Vol 13. No 4. pp 397-411

Rockness, J.W. (1985). 'An assessment of the relationship between US corporate environmental performance & disclosure.' Journal of Business Finance & Accounting Vol. 12 No. 3 pp. 339-355

Ross, S. A. (1977). 'The determination of financial structure: the incentive signalling approach.' Bell Journal of Economics, Spring 1977, pp. 23-40.

Rousseau, J-J. (1762). 'The social contract.' See for example http://www.constitution.org/jjr/socon.htm

Savage, G. T., Nix, T. H., Whitehead, C. J., & Blair, J.D. (1991). 'Strategies for assessing and managing organizational stakeholders.' Academy of Management Executive, 5: 61-75.

Schumacher, E. F. (1973). 'Small is beautiful.' London: Abacus.

Shane, P. and Spicer, B. (1983), 'Market response to environmental information produced outside the firm', The Accounting Review, July, pp. 521-38.

Shocker, A.D. and Sethi, S.P. (1974). 'An approach to incorporating social preferences in developing corporate action strategies.' in S.P.Sethi (editor) 'The Unstable Ground: Corporate Social Policy in a Dynamic Society.' Melville, California.

Simpson, L.(2000). 'The annual report: an exercise in ignorance?' Accounting Forum, 2000, 24, 3, 231-247.

Singh, D.R. and Ahuja, J.M. (1983), 'Corporate social reporting in India ', International Journal of Accounting, Vol. 18 No. 2, pp. 151-70.

Spence, M (1973). 'Job market signalling.' Quarterly Journal of Economics, 87 (8), pp. 355 – 374

Spicer, B.H. (1978), 'Accounting for corporate social performance: some problems and issues.' Journal of Contemporary Business, Winter, pp. 151-67.

Stanford memo (1963) is unreferenced. The quotation in Chapter 2 was taken from Mitchell et al 1997) and was unreferenced in that paper.

Starik, M. (1994). 'Essay by Mark Starik.' pp. 89-95 of The Toronto conference: 'Reflections on stakeholder theory.' Business & Society, 33: 82-131.

Sternberg, E. (1998). 'Corporate governance: accountability in the marketplace.' Hobart Paper 137 IEA. London.

Stone, R A (1996). 'Mission Statements Revisited.' SAM Advanced Management Journal, Winter, pp. 31 – 37

Sturdivant, F. (1979). 'Executive and activists: test of stakeholder management.' California Management Review. Fall, 1979, pp 53-59

Suchman, M.C. (1995). 'Managing legitimacy: strategic and institutional approaches.' Academy of Management Review, July. Vol.20 No.3 pp571-610.

Tattenbaum, R and Schmidt, W. H. (1973). 'How to choose a leadership pattern'. Harvard Business Review. May-June. pp 162-75, 178-180.

Thomas, A. P. (1989). 'The effects of organsational culture on choices of accounting methods.' Accounting and Business Research, Vol 19. No. 76. pp 363-378.

Thompson, J. K., Wartick, S. L., & Smith, H.L. (1991). 'Integrating corporate social performance and stakeholder management: Implications for a research agenda in small business.' Research in Corporate Social Performance and Policy, 12: 207-230.

Tilt, C. A. (1994) 'The influence of external pressure groups on corporate social disclosure: some empirical evidence' Accounting, Auditing and Accountability Journal, Vol. 7, No. 4, pp 47 - 72.

Tinker, A. and Niemark, M. (1987), 'The role of annual reports in gender and class contradictions at General Motors: 1917-1976', Accounting, Organizations and Society, Vol. 12. No. 1, pp. 65-88.

Tinker, A. M. (1980). 'Towards a political economy of accounting: an empirical illustration of the Cambridge controversies.' Accounting, Organizations and Society. Vol. 5. No. 1. pp. 147-160.

Tinker, A.M. (1985). 'Paper Prophets: A Social Critique of Accounting.' Holt Saunders, Eastbourne.

Tinker, A.M., Lehman, C. and Niemark, M. (1991), 'Corporate social reporting: falling down the hole in the middle of the road', Accounting, Auditing & Accountability Journal, Vol. 4 No. 1, pp. 28-54.

Trotman, K. T. (1979). 'Social responsibility disclosures by Australian companies.' Chartered Accountant in Australia. March. pp. 24-28.

Trotman, K.T. and Bradley, G.W. (1981), 'Associations between social responsibility disclosure and characteristics of companies', Accounting, Organizations and Society, Vol. 6 No. 4, pp. 355-62.

Ullmann, A.E. (1976), 'The corporate environmental accounting system: a management tool for fighting environmental degradation', Accounting, Organizations and Society, Vol. 1 No. 1, pp. 71-9.

Ullmann, A.E. (1985), 'Data in search of a theory: a critical examination of the relationships among social performance, social disclosure and economic performance of US firms', Academy of Management Review, Vol. 10 No. 3, pp. 540-57.

Unerman, J. (2000). 'Methodological issues - Reflections on quantification in corporate social reporting content analysis.' Accounting, Auditing & Accountability Journal ; Vol 13, 5. pp. 667-681

Verrecchia, R E (1983). 'Discretionary disclosure.' Journal of Accounting and Finance, 5, pp. 179 – 194

Votaw, D. (1973). 'Genius becomes rare'. In: Votaw, D. and Sethi, S.P. (ed.). 'The corporate dilemma: traditional values versus contemporary problems.' Prentice Hall, Englewood Cliffs, NJ, pp. 1-45.

Waddock, S. A. & Graves, S. B. (1997). 'The corporate social performance-financial performance link.' Strategic Management Journal. Vol. 18. No. 4. pp 303-319.

Watts, R L and Zimmerman, J. L. (1986). 'Positive Accounting Theory.' Englewood Cliffs, NJ: Prentice Hall

Wicks, A. C., Gilbert, D. R., Jr., & Freeman, R. E. (1994). 'A feminist reinterpretation of the stakeholder concept.' Business Ethics Quarterly, 4(4): 475-497.

Williams, S. M. and Pei, C-A. H. W. (1999). 'Corporate social disclosures by listed companies on their web sites: an international comparison.' The International Journal of Accounting. Vol. 34. No. 3. pp. 389-419.

Wilmhurst, D W and Frost, G R. (2000). 'Corporate environmental reporting. a test of legitimacy theory'. Accounting, Auditing and Accountability Journal. Vol. 13. No. 1. pp. 10-26.

Wiseman, J.W. (1982), 'An evaluation of environmental disclosures made in corporate annual reports', Accounting, Organizations and Society, Vol. 7 No. 1, pp. 53-63.

Woodward, D., Edwards, P. and Birkin, F. (2001). 'Some evidence of executives' views of corporate social responsibility.' British Accounting Review. 33, 357–397

Yamagami, T. and Kokubu, K. (1991), 'A note on corporate social disclosure in Japan', Accounting, Auditing & Accountability Journal, Vol. 4 No. 4, pp. 32-9.

Young, J. & Preston, A. (1996). 'The tyranny of single theory perspectives? Commentaries. Are accounting researchers under the tyranny of single theory perspectives?' Accounting, Auditing and Accountability Journal. Vol. 9 No. 4, 1996, pp. 107-111.

Zeghal, D. and Ahmed, S.A. (1990), 'Comparison of social responsibility information disclosure media used by Canadian firms.' Accounting, Auditing & Accountability Journal, Vol. 3 No. 1, pp. 38-53.

Zucker, H. G. (1978). 'The variable nature of news media influence.' Communication Yearbook No. 2. Rubin, B.D. (ed). New Jersey. p. 225-245.

Appendix 1
Detailed breakdown of results

	Bass	Whitbread	BCI	RMC	ICI	BOC	Shell	BP	M&S	Boots	Mean
74	273		361	0	1162	559	640	40	200		404.375
75	114	135	2294	73	1461	1198	446	253	116	365	645.5
76	145	278	491	144	1228	801	507	427	714	401	513.6
77	115	205	336	0	1280	964	414	41	795	532	468.2
78	280	0	492	0	1337		140	350	499	1103	466.7778
79	608	0	274	0	862	561		429	441	23	355.3333
80	586	396	547	0	517	390	151	269	487	292	363.5
81	626	421	684	59	620	699	132	494	574	927	523.6
82	753	173	610	124	469	462		510	673	356	458.8889
83	890	143	875	195	873	892	342	679	609	434	593.2
84	573	399	817	43	914	790	444	1017	540	374	591.1
85	665	409	723	48	856	321	342	899	380	375	501.8
86	775	244	448	0	794	365		932	591	406	506.1111
87	771	336	200	0	1130	380	478	680	864	353	519.2
88	699	147	836	69	970	315	433	972	1130	271	584.2
89	668	542	241	0	1238	285	115	1072	1162	415	573.8
90	346	1163	387	0	999	66	167	946	1486	280	584
91	677	902	468	0	995	285	617	1320	754	280	629.8
92	374	573	356	220	1556	351	268	1049	487	531	576.5
93	450	496	375	163	428	286	108	708	446	723	418.3
94	435	375	330	162	906	1458	961	703	263	555	614.8
95	432	496	431	190	1867	972	72	312	1033	734	653.9
96	726	544	375	318	274	1245	57	186	762	711	519.8
97	613	1438	1275	720	342	1206	36	562	479	546	721.7
98	790	371	911	705	720	1591	148	323	801	597	695.7
99	540	294	1119	711	534	2407	245	638	665	711	786.4
2000	440	442	947	1582	1157	2772	373	620	447	293	907.3
Mean	532	420	637	204	944	831	318	608	644	484	

Appendix 1.1. Summary word count results – employee disclosure.

	Bass	Whitbd	BCI	RMC	ICI	BOC	Shell	BP	M&S	Boots	Mean
74	0		0	0	0	100	0	0	75		21.875
75	0	0	92	0	0	0	0	35	0	64	19.1
76	0	0	0	0	269	64	0	245	51	0	62.9
77	0	149	71	0	431	0	382	0	185	0	121.8
78	0	211	0	0	245		463	0	101	122	126.8889
79	263	0	0	0	202	99		159	193	0	101.7778
80	322	92	0	0	0	296	0	177	57	0	94.4
81	694	176	0	0	72	547	447	123	196	0	225.5
82	1326	128	0	0	0	95		461	335	0	260.5556
83	1415	439	110	0	0	804	259	396	408	0	383.1
84	0	31	155	0	0	262	351	453	382	0	163.4
85	0	690	266	0	0	108	459	523	123	20	218.9
86	0	613	88	0	30	130		541	172	36	178.8889
87	271	127	0	0	399	0	378	156	470	36	183.7
88	1530	379	45	0	330	0	370	237	742	36	366.9
89	489	258	0	0	264	0	278	417	832	31	256.9
90	469	256	0	99	340	0	328	406	738	31	266.7
91	221	221	0	98	460	183	0	476	506	30	219.5
92	234	285	0	0	533	168	492	459	149	364	268.4
93	85	86	0	0	53	196	0	338	305	504	156.7
94	166	175	0	0	0	130	0	353	834	531	218.9
95	359	357	0	0	0	0	275	193	550	606	234
96	84	299	0	0	0	0	138	204	812	475	201.2
97	135	203	0	194	0	247	243	462	712	429	262.5
98	163	223	0	668	84	0	328	662	703	475	330.6
99	124	495	0	603	0	395	353	949	338	566	382.3
2000	345	418	0	481	307	399	259	253	356	249	306.7
Mean	322	243	31	79	149	162	242	321	382	177	

Appendix 1.2. Summary word count results – community disclosure

	Bass	Whit	BCI	RMC	ICI	BOC	Shell	BP	M&S	Boots	Means
74	0		0	0	113	0	348	287	0		93.5
75	65	0	0	0	107	74	230	368	134	4	98.2
76	0	0	0	0	35	0	411	166	0	0	61.2
77	0	0	0	0	140	0	332	0	0	0	47.2
78	300	0	0	0	113		417	258	0	0	120.9
79	85	61	0	0	25	35		42	99	0	38.5
80	10	45	191	0	0	0	0	155	64	0	46.5
81	10	0	49	0	0	0	0	33	0	0	9.2
82	10	0	0	0	85	0		90	0	0	20.5
83	10	0	32	0	145	0	67	56	0	0	31
84	10	0	0	0	105	0	239	170	0	0	52.4
85	10	0	0	0	154	0	60	137	0	0	36.1
86	10	0	0	0	202	0		164	0	0	41.8
87	10	0	0	0	357	0	209	71	0	0	64.7
88	10	0	0	50	477	143	28	155	0	0	86.3
89	264	0	0	50	698	158	351	517	183	0	222.1
90	72	0	575	0	1560	281	590	822	260	0	416
91	81	0	607	55	1120	197	287	383	197	0	292.7
92	0	0	895	41	503	147	167	417	128	228	252.6
93	29	90	518	645	163	147	771	828	248	385	382.4
94	0	70	1066	321	132	336	464	685	470	540	408.4
95	166	54	976	900	409	284	396	546	402	386	451.9
96	171	159	950	748	462	149	544	556	312	462	451.3
97	306	0	1511	698	746	650	628	915	612	462	652.8
98	199	70	1425	651	834	792	375	1314	320	446	642.6
99	127	47	897	849	1532	1337	768	1279	126	527	748.9
2000	214	111	325	2157	1796	1254	485	740	66	180	732.8
Mean (all years)	80	27	371	265	445	230	340	413	134	139	
Mean (89-00)	136	50	812	593	829	478	485	750	277	301	

Appendix 1.3. Summary word count results – environmental disclosure.

The separate calculation of the mean environmental disclosure volume between 1987 and 2000 was thought appropriate owing to the fact that it was in the late 1980s that the phenomenon began in earnest (see Figure 7.24). This figure may be a more accurate indicator of environmental reporting comparative volumes.

Bass

Year	Env disc in chairman's statement	Env disc in directors' report	Env disc in other locations	**Total env words**	Emps disc in chairman's statement	Emps disc in directors' report	Emps disc in other locations	**Total emps words**	Comms disc in chairman's statement	Comms disc in directors' report	Comms disc in other locations	**Total comms words**	**Total words social disc.**
74	0	0	0	**0**	273	0	0	**273**	0	0	0	**0**	**273**
75	65	0	0	**65**	114	0	0	**114**	0	0	0	**0**	**179**
76	0	0	0	**0**	145	0	0	**145**	0	0	0	**0**	**145**
77	0	0	0	**0**	115	0	0	**115**	0	0	0	**0**	**115**
78	0	0	300	**300**	20	0	260	**280**	0	0	0	**0**	**580**
79	0	0	85	**85**	161	0	447	**608**	0	0	263	**263**	**956**
80	0	0	10	**10**	63	0	523	**586**	0	0	322	**322**	**918**
81	0	0	10	**10**	69	242	315	**626**	0	0	694	**694**	**1330**
82	0	0	10	**10**	64	240	449	**753**	0	0	1326	**1326**	**2089**
83	0	0	10	**10**	81	774	35	**890**	0	0	1415	**1415**	**2315**
84	0	0	10	**10**	74	464	35	**573**	0	0	0	**0**	**583**
85	0	0	10	**10**	134	496	35	**665**	0	0	0	**0**	**675**
86	0	0	10	**10**	108	632	35	**775**	0	0	0	**0**	**785**
87	0	0	10	**10**	0	532	239	**771**	0	0	271	**271**	**1052**
88	0	0	10	**10**	0	495	204	**699**	0	0	1530	**1530**	**2239**
89	0	0	264	**264**	0	457	211	**668**	0	0	489	**489**	**1421**
90	0	0	72	**72**	0	346	0	**346**	0	0	469	**469**	**887**
91	0	0	81	**81**	73	0	604	**677**	0	0	221	**221**	**979**
92	0	0	0	**0**	0	374	0	**374**	0	0	234	**234**	**608**
93	0	29	0	**29**	0	450	0	**450**	0	85	0	**85**	**564**
94	0	0	0	**0**	0	435	0	**435**	0	166	0	**166**	**601**
95	0	166	0	**166**	0	432	0	**432**	0	359	0	**359**	**957**
96	0	171	0	**171**	83	269	374	**726**	0	0	84	**84**	**981**
97	0	120	186	**306**	46	201	366	**613**	0	0	135	**135**	**1054**
98	0	0	199	**199**	102	390	298	**790**	0	0	163	**163**	**1152**
99	70	57	0	**127**	259	266	15	**540**	124	0	0	**124**	**791**
2000	0	57	157	**214**	94	260	86	**440**	0	50	295	**345**	**999**

Appendix 1.4. Detailed data for Bass. All entries are word count.

Note: Env = environmental disclosure; Emps = employee welfare disclosure; Comms = community disclosure.

BP

Year	Env disc in chairman's statement	Env disc in directors' report	Env disc in other locations	**Total env words**	Emps disc in chairman's statement	Emps disc in directors' report	Emps disc in other locations	**Total emps words**	Comms disc in chairman's statement	Comms disc in directors' report	Comms disc in other locations	**Total comms words**	**Total words social disc.**
74	0	287	0	**287**	0	40	0	**40**	0	0	0	**0**	**327**
75	0	368	0	**368**	143	110	0	**253**	35	0	0	**35**	**656**
76	0	0	166	**166**	143	0	284	**427**	0	0	245	**245**	**838**
77	0	0	0	**0**	41	0	0	**41**	0	0	0	**0**	**41**
78	106	0	152	**258**	0	0	350	**350**	0	0	0	**0**	**608**
79	0	0	42	**42**	71	47	311	**429**	0	0	159	**159**	**630**
80	0	0	155	**155**	0	0	269	**269**	0	0	177	**177**	**601**
81	0	0	33	**33**	129	97	268	**494**	0	0	123	**123**	**650**
82	0	90	0	**90**	0	468	42	**510**	0	461	0	**461**	**1061**
83	0	56	0	**56**	0	679	0	**679**	0	396	0	**396**	**1131**
84	0	170	0	**170**	0	1017	0	**1017**	0	453	0	**453**	**1640**
85	0	137	0	**137**	0	899	0	**899**	0	523	0	**523**	**1559**
86	0	164	0	**164**	0	932	0	**932**	0	541	0	**541**	**1637**
87	0	71	0	**71**	0	680	0	**680**	0	156	0	**156**	**907**
88	114	41	0	**155**	56	916	0	**972**	0	237	0	**237**	**1364**
89	89	428	0	**517**	76	996	0	**1072**	0	417	0	**417**	**2006**
90	65	0	757	**822**	65	0	881	**946**	0	0	406	**406**	**2174**
91	0	0	383	**383**	123	0	1197	**1320**	0	0	476	**476**	**2179**
92	0	0	417	**417**	137	0	912	**1049**	0	0	459	**459**	**1925**
93	0	0	828	**828**	31	0	677	**708**	33	0	305	**338**	**1874**
94	0	0	685	**685**	110	0	593	**703**	0	0	353	**353**	**1741**
95	0	0	546	**546**	83	0	229	**312**	0	0	193	**193**	**1051**
96	0	0	556	**556**	0	0	186	**186**	0	0	204	**204**	**946**
97	48	0	867	**915**	132	0	430	**562**	0	0	462	**462**	**1939**
98	0	0	1314	**1314**	0	0	323	**323**	35	0	627	**662**	**2299**
99	50	0	1229	**1279**	34	0	604	**638**	0	0	949	**949**	**2866**
2000	0	0	740	**740**	0	0	620	**620**	0	0	253	**253**	**1613**

Appendix 1.5. Detailed data for BP. All entries are word count.

Blue Circle

Year	Env disc in chairman's statement	Env disc in directors' report	Env disc in other locations	**Total env words**	Emps disc in chairman's statement	Emps disc in directors' report	Emps disc in other locations	**Total emps words**	Comms disc in chairman's statement	Comms disc in directors' report	Comms disc in other locations	**Total comms words**	**Total words social disc.**
74	0	0	0	**0**	0	321	40	**361**	0	0	0	**0**	**361**
75	0	0	0	**0**	0	311	1983	**2294**	0	0	92	**92**	**2386**
76	0	0	0	**0**	40	451	0	**491**	0	0	0	**0**	**491**
77	0	0	0	**0**	0	336	0	**336**	0	71	0	**71**	**407**
78	0	0	0	**0**	0	492	0	**492**	0	0	0	**0**	**492**
79	0	0	0	**0**	0	274	0	**274**	0	0	0	**0**	**274**
80	0	0	191	**191**	65	51	431	**547**	0	0	0	**0**	**738**
81	0	0	49	**49**	94	51	539	**684**	0	0	0	**0**	**733**
82	0	0	0	**0**	65	51	494	**610**	0	0	0	**0**	**610**
83	0	0	32	**32**	0	51	824	**875**	0	0	110	**110**	**1017**
84	0	0	0	**0**	48	51	718	**817**	0	0	155	**155**	**972**
85	0	0	0	**0**	92	0	631	**723**	0	0	266	**266**	**989**
86	0	0	0	**0**	0	0	448	**448**	0	0	88	**88**	**536**
87	0	0	0	**0**	0	200	0	**200**	0	0	0	**0**	**200**
88	0	0	0	**0**	0	816	20	**836**	0	45	0	**45**	**881**
89	0	0	0	**0**	0	241	0	**241**	0	0	0	**0**	**241**
90	0	0	575	**575**	0	275	112	**387**	0	0	0	**0**	**962**
91	84	0	523	**607**	136	296	36	**468**	0	0	0	**0**	**1075**
92	0	0	895	**895**	0	335	21	**356**	0	0	0	**0**	**1251**
93	0	0	518	**518**	0	375	0	**375**	0	0	0	**0**	**893**
94	0	0	1066	**1066**	0	330	0	**330**	0	0	0	**0**	**1396**
95	0	0	976	**976**	0	360	71	**431**	0	0	0	**0**	**1407**
96	0	0	950	**950**	0	280	95	**375**	0	0	0	**0**	**1325**
97	85	0	1426	**1511**	0	445	830	**1275**	0	0	0	**0**	**2786**
98	57	0	1368	**1425**	47	391	473	**911**	0	0	0	**0**	**2336**
99	0	0	897	**897**	0	467	652	**1119**	0	0	0	**0**	**2016**
2000	0	0	325	**325**	0	485	462	**947**	0			**0**	**1272**

Appendix 1.6. Detailed data for Blue Circle. All entries are word count.

BOC

Year	Env disc in chairman's statement	Env disc in directors' report	Env disc in other locations	**Total env words**	Emps disc in chairman's statement	Emps disc in directors' report	Emps disc in other locations	**Total emps words**	Comms disc in chairman's statement	Comms disc in directors' report	Comms disc in other locations	**Total comms words**	**Total words social disc.**
74	0	0	0	**0**	0	559	0	**559**	100	0	0	**100**	**659**
75	0	74	0	**74**	310	599	289	**1198**	0	0	0	**0**	**1272**
76	0	0	0	**0**	0	568	233	**801**	64	0	0	**64**	**865**
77	0	0	0	**0**	214	542	208	**964**	0	0	0	**0**	**964**
78													
79	0	0	35	**35**	28	533	0	**561**	0	0	99	**99**	**695**
80	0	0	0	**0**	132	228	30	**390**	0	0	296	**296**	**686**
81	0	0	0	**0**	249	311	139	**699**	390	0	157	**547**	**1246**
82	0	0	0	**0**	121	341	0	**462**	0	0	95	**95**	**557**
83	0	0	0	**0**	0	790	102	**892**	804	0	0	**804**	**1696**
84	0	0	0	**0**	193	597	0	**790**	0	60	202	**262**	**1052**
85	0	0	0	**0**	0	321	0	**321**	0	0	108	**108**	**429**
86	0	0	0	**0**	0	365	0	**365**	0	36	94	**130**	**495**
87	0	0	0	**0**	0	380	0	**380**	0	0	0	**0**	**380**
88	0	0	143	**143**	0	315	0	**315**	0	0	0	**0**	**458**
89	0	0	158	**158**	0	285	0	**285**	0	0	0	**0**	**443**
90	0	173	108	**281**	0	66	0	**66**	0	0	0	**0**	**347**
91	0	130	67	**197**	0	285	0	**285**	0	0	183	**183**	**665**
92	0	147	0	**147**	0	351	0	**351**	0	0	168	**168**	**666**
93	0	147	0	**147**	0	286	0	**286**	0	0	196	**196**	**629**
94	0	91	245	**336**	89	1168	201	**1458**	0	55	75	**130**	**1924**
95	0	91	193	**284**	0	810	162	**972**	0	0	0	**0**	**1256**
96	0	91	58	**149**	0	897	348	**1245**	0	0	0	**0**	**1394**
97	0	49	601	**650**	0	1126	80	**1206**	0	213	34	**247**	**2103**
98	0	0	792	**792**	0	0	1591	**1591**	0	0	0	**0**	**2383**
99	0	50	1287	**1337**	0	248	2159	**2407**	0	0	395	**395**	**4139**
2000	0	0	1254	**1254**	0	0	2772	**2772**	0	0	399	**399**	**4425**

Appendix 1.7. Detailed data for BOC. All entries are word count.

Boots

Year	Env disc in chairman's statement	Env disc in directors' report	Env disc in other locations	**Total env words**	Emps disc in chairman's statement	Emps disc in directors' report	Emps disc in other locations	**Total emps words**	Comms disc in chairman's statement	Comms disc in directors' report	Comms disc in other locations	**Total comms words**	**Total words social disc.**
74													
75	4	0	0	**4**	365	0	0	**365**	64	0	0	**64**	**433**
76	0	0	0	**0**	401	0	0	**401**	0	0	0	**0**	**401**
77	0	0	0	**0**	499	33	0	**532**	0	0	0	**0**	**532**
78	0	0	0	**0**	1079	24	0	**1103**	122	0	0	**122**	**1225**
79	0	0	0	**0**	0	23	0	**23**	0	0	0	**0**	**23**
80	0	0	0	**0**	0	23	269	**292**	0	0	0	**0**	**292**
81	0	0	0	**0**	0	195	732	**927**	0	0	0	**0**	**927**
82	0	0	0	**0**	161	195	0	**356**	0	0	0	**0**	**356**
83	0	0	0	**0**	162	249	23	**434**	0	0	0	**0**	**434**
84	0	0	0	**0**	92	259	23	**374**	0	0	0	**0**	**374**
85	0	0	0	**0**	27	325	23	**375**	20	0	0	**20**	**395**
86	0	0	0	**0**	0	383	23	**406**	0	36	0	**36**	**442**
87	0	0	0	**0**	0	330	23	**353**	0	36	0	**36**	**389**
88	0	0	0	**0**	0	248	23	**271**	0	36	0	**36**	**307**
89	0	0	0	**0**	0	229	186	**415**	0	31	0	**31**	**446**
90	0	0	0	**0**	0	257	23	**280**	0	31	0	**31**	**311**
91	0	0	0	**0**	0	257	23	**280**	0	30	0	**30**	**310**
92	12	0	216	**228**	0	138	393	**531**	64	0	300	**364**	**1123**
93	60	0	325	**385**	104	131	488	**723**	0	0	504	**504**	**1612**
94	53	0	487	**540**	0	131	424	**555**	82	0	449	**531**	**1626**
95	0	0	386	**386**	55	138	541	**734**	4	0	602	**606**	**1726**
96	0	0	462	**462**	67	130	514	**711**	0	0	475	**475**	**1648**
97	0	0	462	**462**	0	127	419	**546**	0	0	429	**429**	**1437**
98	0	0	446	**446**	0	132	465	**597**	0	0	475	**475**	**1518**
99	0	0	527	**527**	52	135	524	**711**	0	0	566	**566**	**1804**
2000	0	0	180	**180**	0	139	154	**293**	0	0	249	**249**	**722**

Appendix 1.8. Detailed data for Boots. All entries are word count.

ICI

Year	Env disc in chairman's statement	Env disc in directors' report	Env disc in other locations	**Total env words**	Emps disc in chairman's statement	Emps disc in directors' report	Emps disc in other locations	**Total emps words**	Comms disc in chairman's statement	Comms disc in directors' report	Comms disc in other locations	**Total comms words**	**Total words social disc.**
74	0	113	0	**113**	46	1116	0	**1162**	0	0	0	**0**	**1275**
75	0	107	0	**107**	116	1345	0	**1461**	0	0	0	**0**	**1568**
76	0	35	0	**35**	70	1158	0	**1228**	73	196	0	**269**	**1532**
77	0	140	0	**140**	117	1163	0	**1280**	137	294	0	**431**	**1851**
78	0	113	0	**113**	95	1186	56	**1337**	0	245	0	**245**	**1695**
79	0	25	0	**25**	0	848	14	**862**	0	202	0	**202**	**1089**
80	0	0	0	**0**	40	477	0	**517**	0	0	0	**0**	**517**
81	0	0	0	**0**	0	620	0	**620**	0	72	0	**72**	**692**
82	0	85	0	**85**	0	469	0	**469**	0	0	0	**0**	**554**
83	0	145	0	**145**	0	873	0	**873**	0	0	0	**0**	**1018**
84	0	105	0	**105**	0	914	0	**914**	0	0	0	**0**	**1019**
85	9	145	0	**154**	0	812	44	**856**	0	0	0	**0**	**1010**
86	0	202	0	**202**	0	748	46	**794**	0	0	30	**30**	**1026**
87	0	181	176	**357**	0	1092	38	**1130**	0	0	399	**399**	**1886**
88	12	330	135	**477**	0	970	0	**970**	0	330	0	**330**	**1777**
89	28	314	356	**698**	0	1062	176	**1238**	0	264	0	**264**	**2200**
90	0	218	1342	**1560**	0	999	0	**999**	0	340	0	**340**	**2899**
91	65	654	401	**1120**	0	995	0	**995**	0	460	0	**460**	**2575**
92	0	0	503	**503**	0	696	860	**1556**	0	0	533	**533**	**2592**
93	0	0	163	**163**	0	0	428	**428**	0	0	53	**53**	**644**
94	0	0	132	**132**	0	214	692	**906**	0	0	0	**0**	**1038**
95	0	0	409	**409**	0	180	1687	**1867**	0	0	0	**0**	**2276**
96	0	0	462	**462**	0	178	96	**274**	0	0	0	**0**	**736**
97	0	0	746	**746**	54	176	112	**342**	0	0	0	**0**	**1088**
98	0	0	834	**834**	140	175	405	**720**	0	0	84	**84**	**1638**
99	0	0	1532	**1532**	0	175	359	**534**	0	0	0	**0**	**2066**
2000	0	0	1796	**1796**	66	247	844	**1157**	0	0	307	**307**	**3260**

Appendix 1.9. Detailed data for ICI. All entries are word count.

Marks & Spencer

Year	Env disc in chairman's statement	Env disc in directors' report	Env disc in other locations	**Total env words**	Emps disc in chairman's statement	Emps disc in directors' report	Emps disc in other locations	**Total emps words**	Comms disc in chairman's statement	Comms disc in directors' report	Comms disc in other locations	**Total comms words**	**Total words social disc.**
74	0	0	0	**0**	200	0	0	**200**	75	0	0	**75**	**275**
75	134	0	0	**134**	116	0	0	**116**	0	0	0	**0**	**250**
76	0	0	0	**0**	417	0	297	**714**	51	0	0	**51**	**765**
77	0	0	0	**0**	399	0	396	**795**	185	0	0	**185**	**980**
78	0	0	0	**0**	47	0	452	**499**	101	0	0	**101**	**600**
79	99	0	0	**99**	114	0	327	**441**	134	0	59	**193**	**733**
80	64	0	0	**64**	97	0	390	**487**	57	0	0	**57**	**608**
81	0	0	0	**0**	143	0	431	**574**	196	0	0	**196**	**770**
82	0	0	0	**0**	225	60	388	**673**	335	0	0	**335**	**1008**
83	0	0	0	**0**	372	60	177	**609**	408	0	0	**408**	**1017**
84	0	0	0	**0**	157	204	179	**540**	382	0	0	**382**	**922**
85	0	0	0	**0**	0	202	178	**380**	123	0	0	**123**	**503**
86	0	0	0	**0**	0	201	390	**591**	172	0	0	**172**	**763**
87	0	0	0	**0**	371	222	271	**864**	212	0	258	**470**	**1334**
88	0	0	0	**0**	192	300	638	**1130**	241	0	501	**742**	**1872**
89	139	0	44	**183**	254	256	652	**1162**	278	0	554	**832**	**2177**
90	190	0	70	**260**	391	262	833	**1486**	89	0	649	**738**	**2484**
91	0	0	197	**197**	127	234	393	**754**	122	0	384	**506**	**1457**
92	0	0	128	**128**	0	305	182	**487**	0	0	149	**149**	**764**
93	18	0	230	**248**	0	268	178	**446**	56	0	249	**305**	**999**
94	0	0	470	**470**	0	263	0	**263**	77	0	757	**834**	**1567**
95	0	0	402	**402**	0	267	766	**1033**	0	0	550	**550**	**1985**
96	0	0	312	**312**	0	274	488	**762**	0	0	812	**812**	**1886**
97	0	0	612	**612**	0	356	123	**479**	41	0	671	**712**	**1803**
98	0	0	320	**320**	108	347	346	**801**	0	0	703	**703**	**1824**
99	0	0	126	**126**	0	411	254	**665**	0	0	338	**338**	**1129**
2000	0	0	66	**66**	0	334	113	**447**	0	0	356	**356**	**869**

Appendix 1.10. Detailed data for Marks & Spencer. All entries are word count.

RMC

Year	Env disc in chairman's statement	Env disc in directors' report	Env disc in other locations	**Total env words**	Emps disc in chairman's statement	Emps disc in directors' report	Emps disc in other locations	**Total emps words**	Comms disc in chairman's statement	Comms disc in directors' report	Comms disc in other locations	**Total comms words**	**Total words social disc.**
74	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	**0**
75	0	0	0	**0**	73	0	0	**73**	0	0	0	**0**	**73**
76	0	0	0	**0**	57	0	87	**144**	0	0	0	**0**	**144**
77	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	**0**
78	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	**0**
79	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	**0**
80	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	**0**
81	0	0	0	**0**	59	0	0	**59**	0	0	0	**0**	**59**
82	0	0	0	**0**	124	0	0	**124**	0	0	0	**0**	**124**
83	0	0	0	**0**	195	0	0	**195**	0	0	0	**0**	**195**
84	0	0	0	**0**	43	0	0	**43**	0	0	0	**0**	**43**
85	0	0	0	**0**	48	0	0	**48**	0	0	0	**0**	**48**
86	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	**0**
87	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	**0**
88	50	0	0	**50**	69	0	0	**69**	0	0	0	**0**	**119**
89	50	0	0	**50**	0	0	0	**0**	0	0	0	**0**	**50**
90	0	0	0	**0**	0	0	0	**0**	99	0	0	**99**	**99**
91	55	0	0	**55**	0	0	0	**0**	98	0	0	**98**	**153**
92	41	0	0	**41**	62	158	0	**220**	0	0	0	**0**	**261**
93	85	0	560	**645**	0	163	0	**163**	0	0	0	**0**	**808**
94	0	0	321	**321**	0	162	0	**162**	0	0	0	**0**	**483**
95	36	0	864	**900**	0	164	26	**190**	0	0	0	**0**	**1090**
96	0	0	748	**748**	0	318	0	**318**	0	0	0	**0**	**1066**
97	42	0	656	**698**	40	680	0	**720**	0	0	194	**194**	**1612**
98	59	0	592	**651**	43	307	355	**705**	0	0	668	**668**	**2024**
99	63	0	786	**849**	0	232	479	**711**	0	0	603	**603**	**2163**
2000	55	23	2079	**2157**	0	376	1206	**1582**	0	0	481	**481**	**4220**

Appendix 1.11. Detailed data for RMC. All entries are word count.

Shell

Year	Env disc in chairman's statement	Env disc in directors' report	Env disc in other locations	**Total env words**	Emps disc in chairman's statement	Emps disc in directors' report	Emps disc in other locations	**Total emps words**	Comms disc in chairman's statement	Comms disc in directors' report	Comms disc in other locations	**Total comms words**	**Total words social disc.**
74	0	0	348	**348**	88	0	552	**640**	0	0	0	**0**	**988**
75	0	0	230	**230**	0	116	330	**446**	0	0	0	**0**	**676**
76	84	0	327	**411**	25	0	482	**507**	0	0	0	**0**	**918**
77	0	0	332	**332**	88	0	326	**414**	0	0	382	**382**	**1128**
78	0	0	417	**417**	0	0	140	**140**	0	0	463	**463**	**1020**
79													
80	0	0	0	**0**	0	0	151	**151**	0	0	0	**0**	**151**
81	0	0	0	**0**	0	0	132	**132**	0	0	447	**447**	**579**
82													
83	0	0	67	**67**	0	0	342	**342**	0	0	259	**259**	**668**
84	41	0	198	**239**	41	0	403	**444**	0	0	351	**351**	**1034**
85	0	0	60	**60**	0	0	342	**342**	0	0	459	**459**	**861**
86													
87	68	0	141	**209**	0	0	478	**478**	0	0	378	**378**	**1065**
88	28	0	0	**28**	348	0	85	**433**	370	0	0	**370**	**831**
89	213	0	138	**351**	47	0	68	**115**	0	0	278	**278**	**744**
90	99	0	491	**590**	95	0	72	**167**	0	0	328	**328**	**1085**
91	287	0	0	**287**	0	0	617	**617**	0	0	0	**0**	**904**
92	143	0	24	**167**	0	0	268	**268**	119	0	373	**492**	**927**
93	129	0	642	**771**	108	0	0	**108**	0	0	0	**0**	**879**
94	82	0	382	**464**	89	0	872	**961**	0	0	0	**0**	**1425**
95	0	0	396	**396**	72	0	0	**72**	275	0	0	**275**	**743**
96	0	0	544	**544**	57	0	0	**57**	86	0	52	**138**	**739**
97	10	0	618	**628**	36	0	0	**36**	172	0	71	**243**	**907**
98	34	0	341	**375**	54	94	0	**148**	0	0	328	**328**	**851**
99	153	0	615	**768**	173	0	72	**245**	0	0	353	**353**	**1366**
2000	47	0	438	**485**	62	242	69	**373**	0	0	259	**259**	**1117**

Appendix 1.12. Detailed data for Shell. All entries are word count.

Whitbread

Year	Env disc in chairman's statement	Env disc in directors' report	Env disc in other locations	**Total env words**	Emps disc in chairman's statement	Emps disc in directors' report	Emps disc in other locations	**Total emps words**	Comms disc in chairman's statement	Comms disc in directors' report	Comms disc in other locations	**Total comms words**	**Total words social disc.**
74													
75	0	0	0	**0**	135	0	0	**135**	0	0	0	**0**	**135**
76	0	0	0	**0**	278	0	0	**278**	0	0	0	**0**	**278**
77	0	0	0	**0**	205	0	0	**205**	149	0	0	**149**	**354**
78	0	0	0	**0**	0	0	0	**0**	211	0	0	**211**	**211**
79	61	0	0	**61**	0	0	0	**0**	0	0	0	**0**	**61**
80	0	0	45	**45**	396	0	0	**396**	92	0	0	**92**	**533**
81	0	0	0	**0**	421	0	0	**421**	176	0	0	**176**	**597**
82	0	0	0	**0**	122	51	0	**173**	128	0	0	**128**	**301**
83	0	0	0	**0**	91	52	0	**143**	397	0	42	**439**	**582**
84	0	0	0	**0**	349	50	0	**399**	31	0	0	**31**	**430**
85	0	0	0	**0**	271	52	86	**409**	69	0	621	**690**	**1099**
86	0	0	0	**0**	192	52	0	**244**	110	0	503	**613**	**857**
87	0	0	0	**0**	284	52	0	**336**	127	0	0	**127**	**463**
88	0	0	0	**0**	56	91	0	**147**	254	0	125	**379**	**526**
89	0	0	0	**0**	97	158	287	**542**	258	0	0	**258**	**800**
90	0	0	0	**0**	28	454	681	**1163**	256	0	0	**256**	**1419**
91	0	0	0	**0**	20	397	485	**902**	90	0	131	**221**	**1123**
92	0	0	0	**0**	0	210	363	**573**	0	0	285	**285**	**858**
93	90	0	0	**90**	0	214	282	**496**	86	0	0	**86**	**672**
94	70	0	0	**70**	0	207	168	**375**	175	0	0	**175**	**620**
95	54	0	0	**54**	81	286	129	**496**	357	0	0	**357**	**907**
96	159	0	0	**159**	83	367	94	**544**	265	34	0	**299**	**1002**
97	0	0	0	**0**	0	488	950	**1438**	0	0	203	**203**	**1641**
98	0	70	0	**70**	0	371	0	**371**	150	73	0	**223**	**664**
99	0	47	0	**47**	0	294	0	**294**	270	225	0	**495**	**836**
2000	0	111	0	**111**	0	442	0	**442**	226	192	0	**418**	**971**

Appendix 1.13. Detailed data for Whitbread. All entries are word count.

Appendix 2
Correlation between word count and page proportion count data observations

This is a work in progress prepared for the EAA congress in Athens in year 2001.It was subsequently reviewed by Markus Milne at Otago University in New Zealand. Dr Milne identified a number of areas of possible improvement but these were not possible during the period from the receipt of the review and the submission of this thesis. Accordingly, this appendix contains the findings from the paper delivered at the 2001 EAA. The purpose of including this material here is to show the longitudinal correlations between word count and page proportion counted data. The paper's literature review is omitted in this version.

Data capture methods in social disclosure studies.

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Abstract
This paper reports upon and summarises the discussion in the social accounting literature on the major methods of data measurement used in empirical studies. The advantages and disadvantages of the two most prominent methods are discussed and previous studies are cited to illustrate this. A sample of six UK FTSE companies are studied over a period of 23 or 24 years wherein social disclosure is recorded by both word count and page proportion count (using the same data). The results are analysed statistically and correlations are found in the order of R values between +0.7 and +0.95. Other tests on the data offer countervailing evidence of equivalence in the methods.

Acknowledgements
Helpful feedback was received on an earlier version of this paper at the 24th European Accounting Congress in Athens in April, 2001. In addition, Markus Milne provided a helpful review.

Introduction

A history of the empirical studies in social disclosure studies was provided by Mathews (1997). In his survey of previous studies, Mathews was able to list over a hundred previous studies up to that date that had, at least in part, analysed and reported on social and/or environmental disclosure. The sample selection in previous studies has naturally varied both in cross section and in depth (longitudinality), by country, by time period, by data-category analysed and by event or hypothesis 'tested' . What is perhaps more interesting (at least from a methodological perspective) is the various methods that have been used to measure and record social disclosures, i.e. methods of coding and counting narrative in content analysis. It is this matter than is the focus of this paper.

This paper aims to provide an overview of the various methods of content analysis used in social disclosure studies and proceeds as follows. First, Previous studies are to illustrate the range of samples and data recording methods that have been used in previous studies. Second, the issues surrounding 'coding' and 'counting' are discussed. Third, the two most popular methods of data counting are discussed and comment is made on the value of each counting method given the inherent coding limitations that each one may have. Some of the advantages and disadvantages of each method are discussed. Fourth, a substantial empirical study is then introduced in which social disclosure has been measured by the two most widely-employed data counting methods. Results by both measures are discussed and comparisons are shown both graphically and by the use of regression analysis. Finally, conclusions are drawn.

Literature review and theory is omitted for brevity

Method

Hypotheses
Three hypotheses are proposed.

Insofar that previous studies have opted for one of the previously-discussed data capture methods without comparing the 'story' told by that method with another, this paper took as its starting point the objective of providing a comparison between the two. Although an intuitive discussion of this issue would suggest that correlation between the two would differ from an R value of +1 because of the effects of non-narrative disclosures adding to page proportion count without adding to word count, just *how much difference* this makes is the matter of interest in the development of hypothesis 1. This is designed to establish the extent to which data capture method will affect the outcome of a longitudinal analysis of social disclosure volume.

Hypothesis 1: the proportion of word count to page proportion total can be considered to be proportionate in a longitudinal analysis.

A further comparison of the two methods can be drawn by comparing the relationship between results yielded within the 24 years in each company's longitudinal sample (see later for sample selection). This inquiry is a test of the effect of the company's varying patterns of disclosure on the relationship between the two methods. The question, again. is *how much difference* varying patterns of page formatting, employment of non-narrative disclosures and the like have on correlation.

Hypothesis 2: there is no difference between the ratio between word count to page proportions (i.e. word densities) in each year of the study for each company.

Thirdly, a test is proposed to establish whether the it matters which method is chosen with regard to the story told in each case. Essentially, hypothesis 3 aims to inform the question, Would the longitudinal record be the same if either method was used? This can be informed by employing regression analysis of data sets by the two data capture methods.

Hypothesis 3: the 'story' told by the two methods is the same - it doesn't matter which method is chosen.

Sample selection
In order to shed some light on measurement by the two methods under discussion, a sample was selected that would have representative cross sectional width (i.e. containing representatives of several industrial sectors to 'iron out' any industry-specific effects) and sufficient longitudinal depth to offset any historical periods which might contain particular concordances or discordances between disclosures by the two methods (if a shallow sample was analysed, it might, for example, contain a particular fashion for social reporting through photographs - a feature that would skew the results in that instance).

Accordingly, companies were selected from four FTSE 100 sectors. The nature of the inquiry (i.e. the comparison of two data capture methods) did not suggest nor prescribe that any particular companies nor sectors be represented. It was important, however, that the companies selected would be expected to disclose social information and because size effects had been previously noted (e.g. Gray et al 1995), the companies were selected from the FTSE 100 (i.e. they were all 'large').

From the FTSE 100, companies were selected that would represent a variety of industry segments. The reason for this was to dilute any particular sector effects. Apart from these qualifications, selection was more-or-less at random although there was an attempt to select FTSE sectors that were not too similar to each other (i.e. in an attempt to sample the FTSE index as a whole).

The cross sectional sample comprised six companies: Bass and Whitbread (brewing and leisure); Ready Mixed Concrete (RMC) and BP (broadly representing industrials); and Marks & Spencer and Boots (retailers).

In each case, a longitudinal period of 23 or 24 years was observed (1974 or 1975-1997). This substantial longitudinal depth was necessary to address the concern (above) of potential historical 'fashions' in reporting patterns.

Category selection

Freedman and Stagliano, (1992: 113) noted that previous studies in social disclosure had tended to focus upon three categories of social information: environmental concern, employee welfare and community relations. This understanding of what comprises social information has not been challenged and seems, *prima facie*, to be a fair description of what constitutes social information. Other categories could probably be added to this list but any cursory glance at social disclosure in a corporate report (for example) shows these three to be represented whilst other social concerns are at best of marginal import and at worst, are not represented at all.

Accordingly, these three areas of social concern were selected for measurement in the study.

Location/media selection

In selecting corporate communications to use for social disclosure studies, it is generally accepted that it would be ideal if all company publications would be included as media in any given year. Essentially, the argument for this rests upon the supposition that only by examining every publication will a full picture of the company's attitude to social issues be established. Failure to analyse one or more documents may result in an incomplete record of the company's social disclosures.

In practice, this is rarely possible (although see Unerman, 2000). To include every form of communication would involve analysis of the corporate report, any voluntary social or environmental reports, press statements, product advertisements, job advertisements, public relations literature, interim accounts and any other one-off communications. It is not surprising, therefore, that most researchers take the view that some assumptions need to be made - that a company will choose to provide sufficient indication of its social intentions in a sample of this total output. The corporate annual report is usually selected for this purpose.

There are a number of defences that can be offered in support of this selection.

1. Excluding the audited sections, the company has almost total editorial control over the document. It has a wide latitude to disclose voluntary information in the report and the subjects disclosed will reflect those things it considers to be most important;
2. It is produced at regular intervals and its publication is independent of any and all other external or internal occurrences (such as macroeconomic conditions, company performance, etc.). This may not be true of other corporate communications;
3. It is usually the most widely distributed of all the regularly-produced public documents published by the company.

4. Although it is true that many companies produce environmental reports, these usually have to be separately sent for. It can be argued that those matters that are considered most important would be disclosed in the document that is the most widely circulated (i.e. the corporate report).

Gray at al (1995) offered further justification.

... *the annual report is used as the principal focus of reporting* [in many social disclosure studies]. *There is some justification for this. The annual report not only is a statutory document, produced regularly, but it also represents what is probably the most important document in terms of the organisation's construction of its own social imagery.* (Gray et al, 1995, p83)

Accordingly, and in keeping with other empirical studies in the field of social disclosure, it was decided that only the corporate report would be analysed in the study. This decision also made document collection much easier as it would be very difficult to collect all company communications for each company over each year in the sample (especially in the earlier years of the study).

Data capture method

In keeping with the aims of the paper, data was measured using both word count and page proportions. Each document thus generated two figures - one being the total number of social disclosure words and the other being the sum of the page proportions. For the purposes of this paper, page proportion was calculated by measuring each disclosure as a proportion of the total page area - not of the area of the page containing printed material. If the entire page was given over to a single social disclosure issue, it was counted as a whole page even although it might not be entirely filled with narrative. It was assumed, in such situations, that the company deemed the subject under discussion sufficiently important to allocate a whole page to it without any other content.

In some marginal cases of disclosure (where the meaning of the disclosure was not necessarily clear), it was not obvious whether the disclosure is of a social nature or not, and accordingly, whether it should be included or not. Where such marginal disclosures were made, a measure of subjective discretion was used although internal stability errors were reduced by employing only one researcher (the author). Whenever such a disclosure was accepted as constituting social disclosure, it was counted by both data capture methods.

Results

1. The 'raw' results

Year	Bass	Whitbread	RMC	BP	M&S	Boots
74	273		0	327	275	
75	179	135	73	656	250	433
76	145	278	144	838	765	401
77	115	354	0	41	980	532
78	580	211	0	608	600	1225
79	956	61	0	630	733	23
80	918	533	0	601	608	292
81	1330	597	59	650	770	927
82	2089	301	124	1061	1008	356
83	2315	582	195	1131	1017	434
84	583	430	43	1640	922	374
85	675	1099	48	1559	503	395
86	785	857	0	1637	763	442
87	1052	463	0	907	1334	389
88	2239	526	119	1364	1872	307
89	1421	800	50	2006	2177	446
90	887	1419	99	2174	2484	311
91	979	1123	153	2179	1457	310
92	608	858	261	1925	764	1123
93	564	672	808	1874	999	1612
94	601	620	483	1741	1567	1626
95	957	907	1090	1051	1985	1726
96	981	1002	1066	946	1886	1648
97	1054	1641	1612	1939	1803	1437

Table 3. social disclosure in sample companies measured by word count.

Year	Bass	Whitbread	RMC	BP	M&S	Boots
74	0.48		0	0.7	0.65	
75	0.25	0.25	0.11	0.95	0.5	0.676
76	0.2	0.8	0.16	1.84	1.45	0.55
77	0.2	0.65	0.2	0.05	1.65	0.75
78	1.2308	0.4	0	1.75	1.1	1.392
79	2.5584	0.125	0	1.53	1.265	0.05
80	2.1458	0.595	0	0.6425	1.37	0.266
81	2.4905	0.792	0.07	0.784	1.47	2.2
82	3.1958	0.3114	0.2	2.255	2.1	0.467
83	4.3875	0.7214	0.75	3	2.05	0.5428
84	0.8085	0.454	0.05	4	2.08	0.53
85	1.3625	1.418	1.05	2.7	1.044	0.5
86	1.1625	2.411	0	2.5	1.564	0.6
87	1.556	0.543	0	1.95	3.33	0.58
88	4.4125	0.835	0.3	2.91	5.23	0.475
89	4.2875	1.1958	1.1	4.5	6.13	0.75
90	1.793	4.125	0.125	4.64	8.03	0.47
91	3.718	3.163	0.25	5.07	6.931	0.47
92	1.8	3.53	0.76	3.66	3	2.121
93	1.243	1.71	3	3.73	3.65	3.787
94	1.25	1.72	2.4	3.4	4	3.462
95	2.25	1.33	3.555	1.84	6.15	5.226
96	2.742	1.153	4.95	1.585	6	5.343
97	2.05	1.35	3.76	2.141	4.85	3.2

Table 4. social disclosure in sample companies measured by page proportion count.

2. Correlation statistics

Company	R
Bass	0.89
Whitbread	0.70
RMC	0.92
BP	0.91
M&S	0.94
Boots	0.95

Table 5: R values for the pairs of results (x axis, page proportions; y axis, word counts).

3. Data analysis and comparison of the two methods

	Bass wrds	Bass PPs	Whitb'd wrds	Whitb'd PPs	RMC wrds	RMC PPs	BP wrds	BP PPs	M&S wrds	M&S Pps	Boots wrds	Boots Pps
Mean	928.58	1.98	672.56	1.28	279.4	0.99	1228.5	2.42	1146.7	3.15	776.26	1.49
Std error	123.1	0.26	83.87	0.22	91.3	0.3	127.4	0.279	126.4	0.456	117.97	0.33
Median	902.5	1.79	597	0.83	99	0.2	1096	2.198	989.5	2.09	442	0.6
SD	603.09	1.297	402.24	1.078	437.88	1.46	624.2	1.37	619.25	2.23	565.75	1.6
Range	2200	4.21	1580	4	1612	4.95	2138	5.02	2234	7.53	1703	5.29
Min	115	0.2	61	0.125	0	0	41	0.05	250	0.5	23	0.05
Max	2315	4.41	1641	4.125	1612	4.95	2179	5.07	2484	8.03	1726	5.34
Sum	22286	47.574	15469	29.58	6427	22.79	29485	58.13	27522	75.59	17854	34.4
Count	24	24	23	23	23	23	24	24	24	24	23	23

Table 6. Analysis of the raw data - descriptive statistics

	Bass wds	Bass PPs	Whit wrds	Whit PPs	RMC wrds	RMC PPs	BP words	BP PPs	M&S words	M&S PPs	Boots words	Boots PPs
Mean	3.40	4.13	4.98	5.14	3.828	9.008	3.76	3.46	4.17	4.84	1.94	2.21
Std Error	0.451	0.551	0.621	0.899	1.251	2.776	0.39	0.40	0.46	0.7	0.29	0.49
Median	3.30	3.74	4.422	3.339	1.356	1.818	3.352	3.14	3.598	3.21	1.1	0.88
SD	2.21	2.70	2.979	4.314	5.998	13.32	1.91	1.96	2.252	3.44	1.41	2.37
Range	8.06	8.776	11.70	16	22.08	45	6.54	7.17	8.124	11.58	4.25	7.83
Min	0.42	0.416	0.452	0.5	0	0	0.125	0.071	0.909	0.77	0.057	0.074
Max	8.479	9.19	12.15	16.5	22.08	45	6.66	7.24	9.033	12.35	4.3	7.90
Sum	81.63	99.11	114.58	118.33	88.04	207.18	90.17	83.04	100.08	116.3	44.52	50.9
Count	24	24	23	23	23	23	24	24	24	24	23	23
Interce pt	2.468	2.358	0.977	0.903	-3.82	-8.68	1.286	1.49	1.25	0.074	0.299	-0.62
Grad	0.0746	0.142	0.334	0.353	0.637	1.47	0.198	0.157	0.234	0.38	0.136	0.24

Table 7. Summary of normalised data. In all cases excepting RMC, observation 1 equals 1 in order to make intra and inter company regression analysis meaningful. For RMC the first observation was discarded (equaling zero disclosure by both methods) as division by zero would not enable the normalised data to be produced for the other observations.

The statistical analysis highlights several points of note. The regression statistics show similar intercepts and gradients by the two methods in the cases of Bass, Whitbread and BP. The effect of non-narrative disclosure on the regression statistics are shown up in the cases of RMC (where the volume of disclosure is much lower in absolute terms than the others - mean of 279 words per year), Marks & Spencer and Boots. In the case of RMC, the gradient of the regressed normalised data for page proportion count is almost thrice that for word count.

4. Analysis of word density statistics

Year (Base 1974 = 0)	Bass	Whitbread	RMC	BP	M&S	Boots
0	568.75			467.1429	423.0769	
1	716	540	663.6364	690.5263	500	640.5325
2	725	347.5	900	455.4348	527.5862	729.0909
3	575	544.6154		820	593.9394	709.3333
4	471.2256	527.5		347.4286	545.4545	880.2393
5	373.671	488		411.7647	579.4466	460
6	427.8059	895.7983		935.4086	443.7956	1096.372
7	534.0293	753.6727	842.8571	829.0816	523.8095	421.3636
8	653.6704	966.5124	620	470.51	480	762.8566
9	527.6353	806.7322	260	377	496.0976	799.5578
10	721.0884	947.2033	860	410	443.2692	705.6604
11	495.4128	774.8533	45.71429	577.4074	481.8008	790
12	675.2688	355.4378		654.8	487.8517	736.6667
13	676.1651	852.895		465.1282	400.6006	670.6897
14	507.4221	630.1914	396.6667	468.7285	357.935	646.3158
15	331.4286	668.9763	45.45455	445.7778	355.1387	594.6667
16	494.7016	344	792	468.5345	309.34	661.7021
17	263.3237	355.0427	612	429.783	210.215	659.5745
18	337.7778	243.0595	343.4211	525.9563	254.6667	529.4672
19	453.7409	392.9825	269.3333	502.4129	273.6986	425.6668
20	480.8	360.4651	201.25	512.0588	391.75	469.7159
21	425.3333	681.9549	306.6104	571.1957	322.7642	330.2597
22	357.7681	869.0373	215.3535	596.8454	314.3333	308.4492
23	514.1463	1215.556	428.7234	905.6516	371.7526	449.0625
Intercept	619.1867	603.3402	768.3031	552.706	554.8127	827.6639
Gradient	-9.25114	2.482465	-22.5671	0.266784	-11.6927	-16.5182
R (correlation coefficient)	-0.49527	0.065744	-0.53754	0.0113	-0.78327	-0.60022
Mean	512.7986	633.1298	459.0012	555.7741	420.3468	629.4454
Standard Error	26.96065	53.40032	68.84831	34.07635	21.54674	38.91941
Median	501.4175	630.1914	396.6667	486.4614	433.1731	659.5745
Standard Deviation	132.0797	256.099	283.8689	166.9393	105.557	186.6509
Range	461.6763	972.4961	854.5455	587.98	383.7244	787.9226
Minimum	263.3237	243.0595	45.45455	347.4286	210.215	308.4492
Maximum	725	1215.556	900	935.4086	593.9394	1096.372
Sum	12307.17	14561.99	7803.021	13338.58	10088.32	14477.24
Count	24	23	17	24	24	23

Table 8. Word densities calculated as words in corporate report/total page proportions. For years when RMC made no disclosures, the calculation is omitted (because it would be necessary to divide by zero).

Table 8 shows the word densities of each year of the sample and for each company. It is evident, even at a cursory glance, that words per page of disclosure varies substantially. The companies in the sample can be roughly ranked according to their mean word densities although there is some difference in the means (highest 827 words per page, lowest 552).

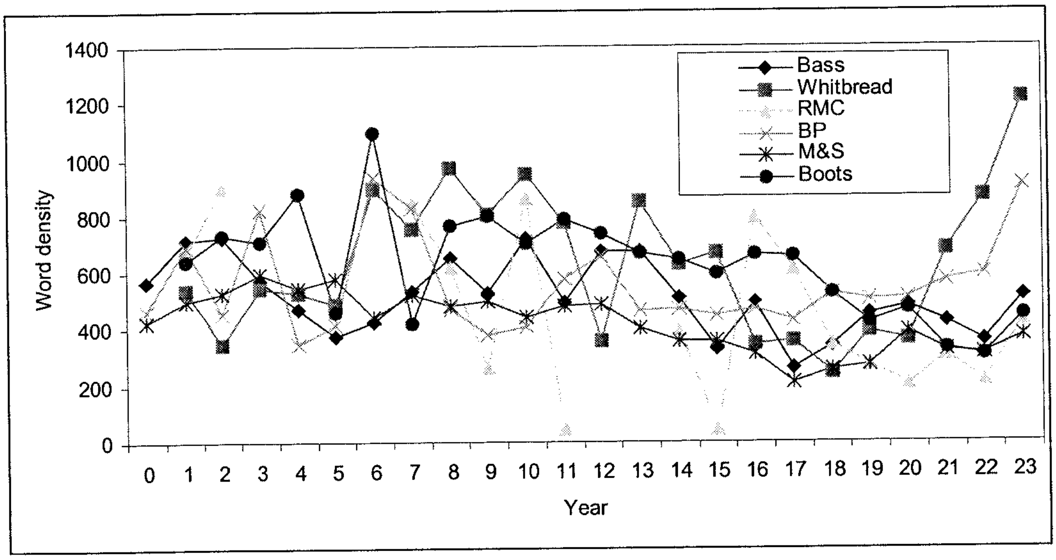

Figure 1. Word densities against time. Note the chaotic appearance of the graph demonstrating the wide range of word densities within each company's reports over the longitudinal period..

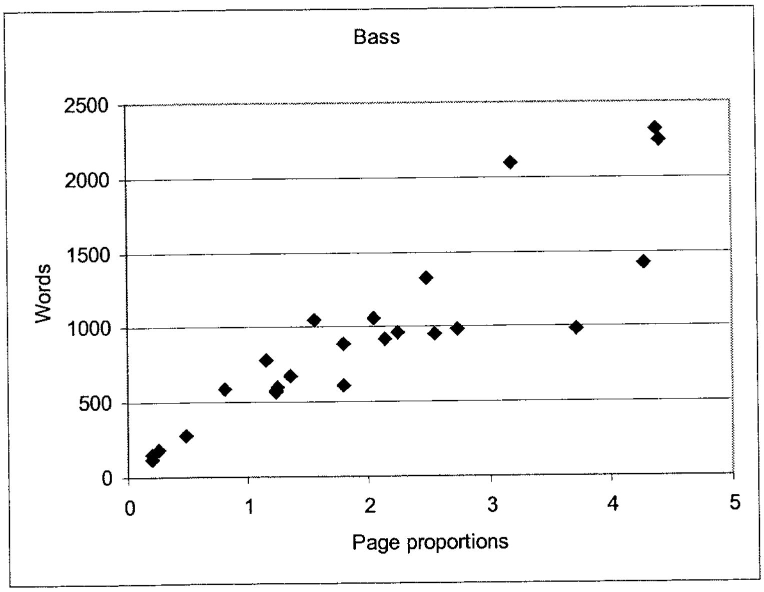

Figure 2. Scattergram showing data for words vs. page proportions for Bass. R = 0.89.

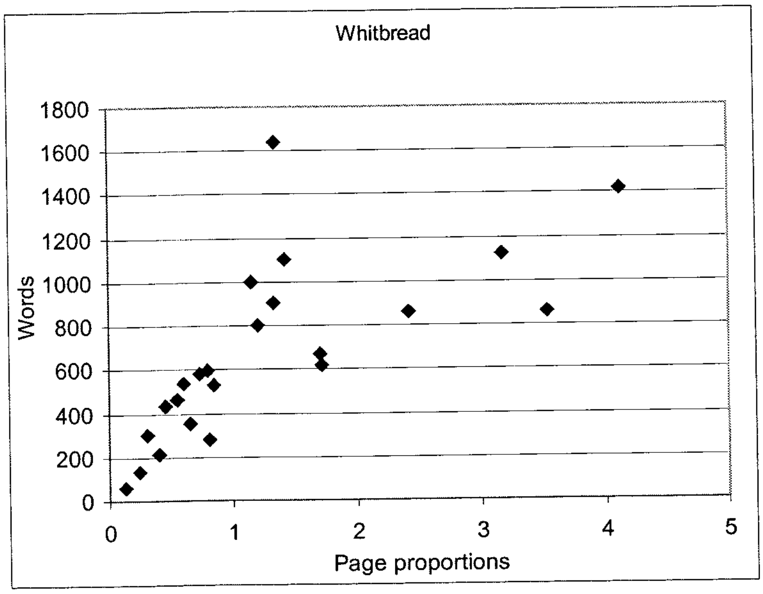

Figure 3. Scattergram showing data for words vs. page proportions for Whitbread. R = 0.70 (lower due to the handful of outlying results).

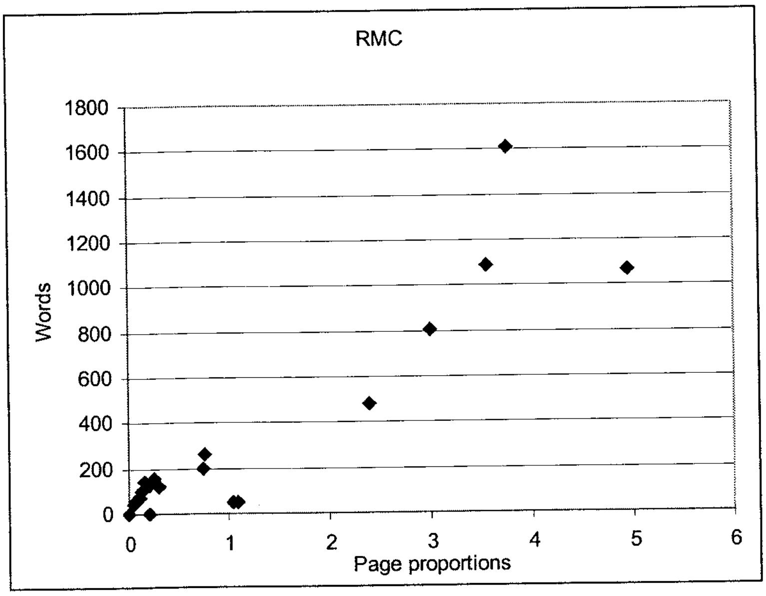

Figure 4. Scattergram showing data for words vs. page proportions for RMC. R = 0.92.

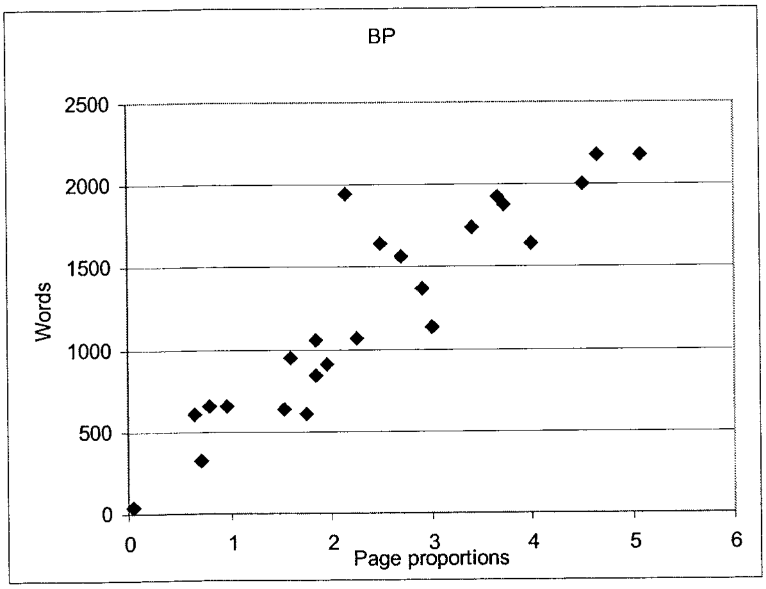

Figure 5. Scattergram showing data for words vs. page proportions for BP. R = 0.91.

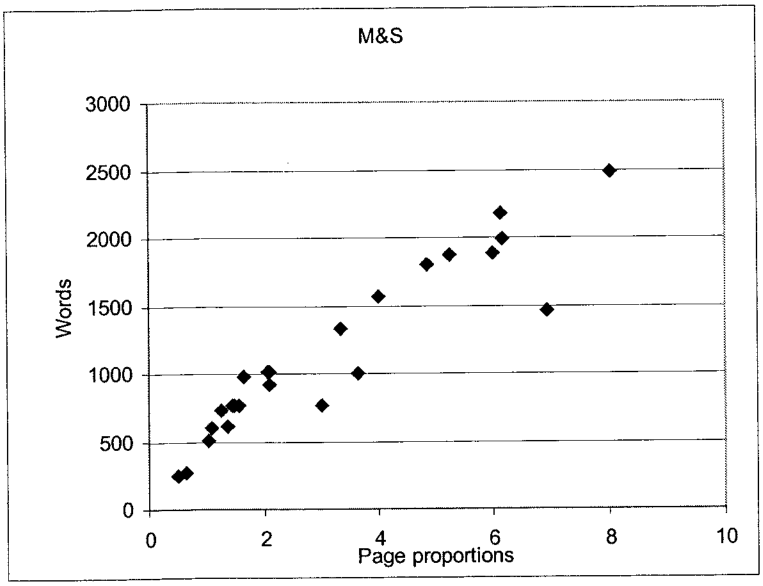

Figure 6. Scattergram showing data for words vs. page proportions for M&S. R = 0.94.

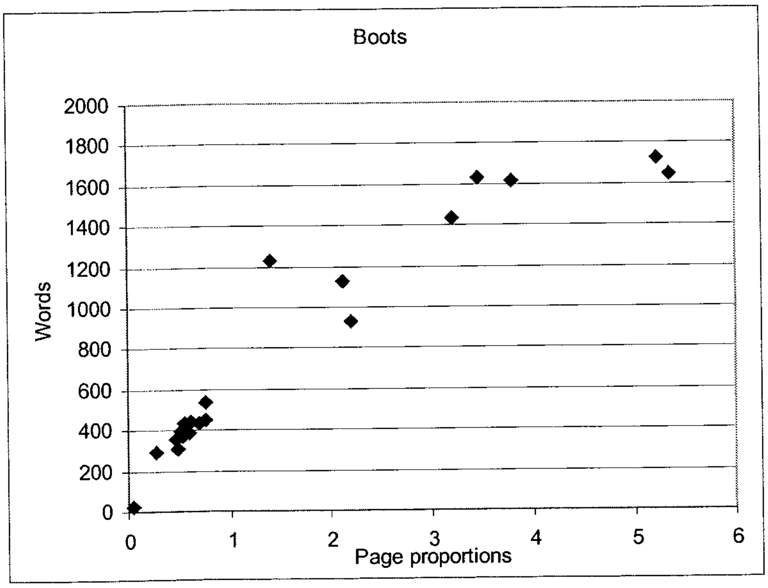

Figure 7. Scattergram showing data for words vs. page proportions for Boots. R = 0.95.

Conclusions

Hypothesis 1. R values of data scatter
Excepting the case of Whitbread, the correlation coefficients (R values) are within the range 0.89-0.95 demonstrate a high degree of correlation in the cases of the higher R values. The result for Whitbread is lower due to the skewing effect of non-narrative disclosures in a small number of years. The effects of non-narrative disclosures is not sufficient to give the impression of randomness.

Hypothesis 2. R values of internal longitudinal consistency.
The correlations for internal longitudinal consistency are much less convincing (table 8). The R values vary widely in the sample (high of -0.78, low of 0.0113) but there is no evidence that any of the companies employed a consistent approach to the ratio of word count to page proportions over the period in question. On the contrary in fact, the two lowest values of 0.066 (Whitbread) and 0.0113 (BP) are much more suggestive of randomness.

Hypothesis 3: regression analysis
In terms of the rate of growth and the intercept, table 7 shows that the 'story' told by analysis of the social disclosures by the two methods is not the same in all cases. In the cases of Whitbread, BP an M&S, the gradients are comparable but in the cases of Bass, RMC and Boots, gradients by the two methods differ by a factor of ca. 2. Similarly, the intercepts at x = 0 (i.e. at year 1) differ. The intercepts for Bass, Whitbread and BP are comparable whereas those for the others differ (in the case of RMC by a factor of almost 3).

Discussion

The results demonstrate that the two data capture methods explained in this paper generally result in the same direction of disclosure being revealed over time insofar as all of them reveal a positive direction.

The two methods do, however, differ in what they reveal about the rate of change over time and it is not possible to say that one method will necessarily result in a steeper gradient than the other. The *a priori* expectation that measurement by page proportions will result in higher disclosure than word count (because it measures some disclosure that word count does not) is partly indicated, excepting the case of BP - see the normalised means in Table 6.

The differences in the methods are due largely to the variations in font size, typesetting, page design and graphic sizing. The finding of this paper suggest that these factors result in different records of longitudinal disclosure.

The challenge for empirical researchers in social disclosure studies is to select a method of data capture consistent with the hypothesis or event being investigated but to also recognise that analysis of the same data using a different method would, in all probability, result in different summary statistics.

A number of issues arise from this research. It is suggested that researchers selecting either one of the two methods my need to justify the selection given the findings of this research because the selection of the other method (to that chosen) would probably reveal a different pattern of disclosure thus precipitating different conclusions from the research.

This issue is especially important when the company or companies under scrutiny exhibit low levels of disclosure (where the relative differences between the two measures are higher and any recording errors comprise a larger proportion of the total). The record of RMC (a very low discloser over the majority of the 24 years of this study) shows the disparity. Regression analysis of normalised data by word count suggests a gradient of 3.4 whilst the same data analysed by summing page proportions would yield a gradient of almost 9. This disparity shows the advantage of recording by both methods.

References are omitted for brevity

Feature article

Legitimacy theory or managerial reality construction? Corporate social disclosure in Marks and Spencer Plc corporate reports, 1969–1997

David J. Campbell

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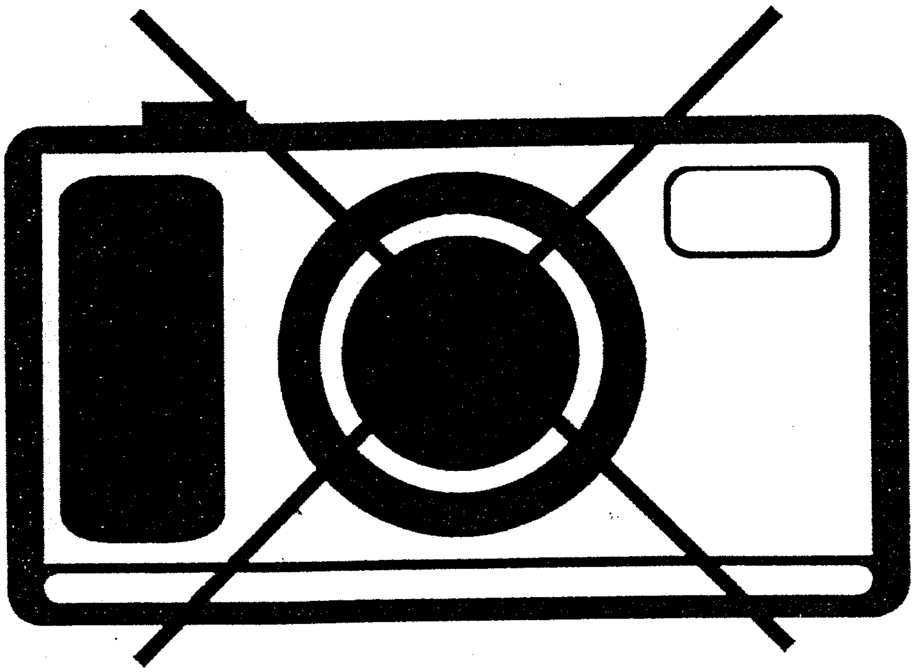

Feature article

Legitimacy theory or managerial reality construction? Corporate social disclosure in Marks and Spencer Plc corporate reports, 1969–1997

David J. Campbell

Abstract

This paper sets out to make some comment on the debate surrounding explanatory theories for the phenomenon of voluntary social disclosure. It notes that two explanations appear from the literature to be most prominent: legitimacy theory and political-economy of accounting explanations, both of which are consistent with a stakeholder understanding of the organization-society relationship. The published annual corporate reports of the British retailer Marks and Spencer Plc are analyzed over the period 1969–1997 inclusive with a view to providing insight into the causes of variability in the volume of social disclosure. The scope of sample selection in previous empirical studies is discussed and commented upon. Methods of data capture used in this empirical analysis are discussed. The paper finds that whilst the expected upward trend in CSR is notable, the more interesting feature in the longitudinal analysis is the variability in disclosure between chairmen's terms in office. It is argued that marginal variability of disclosure can be explained by the varying perceptions of reality of the successive chairmen. The limitations of existing theories as explicators of the observed phenomenon are briefly discussed.

Introduction

The phenomenon of corporate social reporting (CSR) has precipitated a substantial body of research. The literature in the field seems to fall broadly into two general categories. The first category comprises those papers that discuss CSR and its significance in describing the relationship between organizations and their constituencies (see for example Morgan 1988; Pallot 1991), and those which discuss the issues surrounding the social responsibility and organizational performance of which CSR is said to be a partial discharge (see for example Brooks

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1986). The second category (as Preston 1981, observed), comprises those papers that report upon empirical CSR studies in surveys of varying size and with a wide range of objectives in mind. In respect to this second tranche of literature (those reporting on empirical studies), the samples chosen vary in both cross-sectional and longitudinal measure. Studies have been published on CSR in several countries, but there seems to have been a concentration on studies of CSR in the major First World economies, especially in the US, the UK, Canada, New Zealand, Australia and in the Scandinavian countries.

This paper begins by briefly summarizing the most prominent explanations for CSR from the relevant literature. Within the inquiry into the organization-society interface, brief descriptions of the two most prominent explanations for CSR are entered into and commented upon. The possibility that CSR may be influenced by the personalities of senior officers is introduced and briefly discussed. Next, sample selection is discussed, particularly in respect to longitudinal 'depth' and cross-sectional 'width'. The advantages and disadvantages of the various sampling strategies are briefly discussed. The paper then discusses the methods that have been adopted in respect to capturing data on CSR from corporate reports and a justification is offered for the data capture method adopted in this paper. Next, the paper reports on the 'raw' findings of the empirical analysis. A range of categories of CSR disclosure are reported upon and other relevant comments are made that inform the enquiry upon which the paper is based. Finally, conclusions are drawn from the analysis and comment is offered on the explanations for CSR in Marks and Spencer Plc from the findings of the empirical survey.

Explanations for CSR

Those who have written on CSR agree that it is a phenomenon which it is difficult to find explanations for. It has been noted that the more cogent explanations for CSR may have a connection with the stakeholder debate that has been taking place in other areas of business research (see for example Donaldson and Preston 1995; Azzone et al 1997). However, (as Gray, Kouhy, and Lavers 1995a, point out) accounting research has been slower than some business disciplines to explain disclosure phenomenon in the light of stakeholder theory (albeit with its critics—see for example Den Uyl 1984 or for a more general critique of social accounting see Wildavsky 1994).

A relatively small number of explanations have emerged as the most commonly-discussed and the point has been made that they are not necessarily mutually exclusive (on the contrary, Gray et al 1995a suggest that are mutually supportive). It is not within the remit of this paper to provide a comprehensive review of these explanations, but an overview is offered to draw the distinction between these and the main hypothesis of this paper.

Most of the literature has reflected upon explaining CSR in terms of two broad themes. The *political economy of accounting* explanations (see for example Cooper and Sherer 1984; Tinker 1980; Burchell et al 1980) arise from the discussion about power and information asymmetries that subsist between agents and other constituencies. Explanations of just how the effects upon CSR are exerted is not immediately obvious, but the redress of the asymmetry is seen as a central part of the discharge of agents' 'responsibility' to the non-economic constituencies. The nebulous nature of the political economy explanation renders it inaccessible to empirical testing until a harder definition is synthesized.

In terms of conventional orthodoxy, however, the purpose of accounting has traditionally been to facilitate responsible stewardship of investors' funds and rational decision-making by representing the agents' perception of reality, whether economic, sociological or technological, to the principals (see Ijiri 1965; Horngren 1977; Cooper and Kaplan 1991 and Chandler 1991). Such a conventional understanding of the *raison d'être* of accounting raises the question of which (or, more likely, *whose*) understanding of reality is represented in conventional accounting—particularly in the extent to which management think they have an element of accountability in respect to those elements for which they account. Given the information and power asymmetries that subsist between company agents and other constituencies (including principals), there may be a case to argue (and this is the focus of this paper) that the succession of company senior agents may usher in slightly different perceptions of the reality that is to be communicated via the non-mandatory sections of corporate reports. This is not an enquiry into the macro understanding of accounting reality *per se* (see for example Hines 1988; Morgan 1988), but rather, an enquiry into whether, at the margins (and this point is stressed), agents' perceptions of local (i.e. specific to their company) reality may influence social disclosure as a discharge of their perception of their accountability. This hypothesis is tested in this paper and is discussed at the end.

Complementary (according to Gray et al 1995a) to the political economy understanding of CSR is *legitimacy theory*. According to legitimacy theory, organizations exist in society under an expressed or implied social contract. The early thinkers in the field (such as Hobbes, Locke and Rousseau) viewed the social contract primarily as a political theory insofar as it explained the supposed relationship between a government and its constituencies. In the modern era, the principle of social contract has been interpreted and developed for business institutions by Rawls (1971, albeit implicitly), Donaldson (1982), Dowling and Pfeffer (1975), Suchman (1995) and others.

Dowling and Pfeffer (1975) argue that organizations exist within a super-ordinate social system (see also Parsons 1960) within which, organizations enjoy legitimacy insofar as their activities are congruent with the broad goals or acceptations of the super-ordinate system. Accordingly, changes in the value system resident within the super-ordinate social system become the pre-eminent cause of cultural change within organizations and of change in the manner in which the organization relates to society. It is here that we encounter the link with CSR – legitimacy theory would suggest that social disclosure can be used to narrow the legitimacy 'gap' between how the organization wishes to be perceived and how it actually is. Maurer (1971) discusses legitimacy in terms of justification (of certain behaviours) whilst Suchman (1995) describes it in terms of manipulation and garnering societal support.

In essence, legitimacy theory suggests a convergence of the type and volume of disclosure with the concerns of the most influential stakeholders. In this regard, legitimacy theory is, in principle, empirically testable and some writers have attempted to report on this (see for example Guthrie and Parker 1989).

Apart from the two foregoing explanations for the presence and variability of CSR, the literature contains few other serious explanations. It is likely that signalling theory and agency theory may be applicable to the phenomenon, although there have been no serious attempts to do so thus far (see Watts and Zimmerman 1986; Jensen and Meckling 1976; Morris 1987; Bar-Yosef and Livnat 1984; Downes and Heinkel 1982; Fama 1980; Haugen and Senbet 1979).

This paper advances a novel explanation for changes in the volume of CSR. Tattenbaum and Schmidt (1973) identify the personal value systems of key managers as an important determinant of their leadership style and presumably, the resulting corporate culture (see also Thomas 1989). This notion seems intuitively reasonable, although the extent to which senior managers' personal values 'infect' culture and the organizations attitude to social reporting will vary from company to company. There would seem to be a case, therefore, for an empirical study to test for the extent to which the personal values of senior managers affect the company's attitude to CSR.

The potential problems of setting up such a study are considerable. The first and most obvious problem is to identify which senior officer whose succession to test disclosure against. The second is the uncertainty of the precise process of corporate report compilation within the company. It may be that in some companies, senior management have little of no input into the amount of social disclosure. This paper, however, makes the pragmatic presupposition that strategic-level managers *do* have an input, but this matter is probably a researchable topic in its own right.

This paper sets out to provide some insights into the explanations for CSR by specifically testing for the influence of senior officers on the company's volume of CSR. It is suggested that if the succession of senior management officers can be shown with a reasonable degree of confidence to have an influence on CSR, then there may be a basis for challenging the hitherto most discussed explanations of CSR.

Sample selection

The summary of twenty-five years of CSR research by Mathews (1997) shows the large number of empirical studies that have been undertaken by researchers in this area. A detailed survey of the sample taken for each of these surveys remains to be published, but for the purpose of providing a background to this paper, a large number of prior empirical studies were examined.

One of the most striking features of the samples selected for analysis is that most empirical CSR studies have privileged cross-sectionality over longitudinality. 'Deep' longitudinal studies are conspicuous by their scarcity whilst other papers privilege cross sectionality over longitudinality, some of whom select one year only.

Method

This paper set out to establish a data set from which some insights into the explanations into CSR could be made. Accordingly, and specifically in order to test for trends, a priority was placed upon longitudinality. One company was chosen and as many back issues as were available were obtained for the analysis. For the company in question (Marks and Spencer Plc), most corporate reports were available in hard copy whilst a minority were read on microfiche from files obtained from UK Companies House. The survey consists of all corporate reports between 1969 and 1997 (inclusive), excepting the years 1971 and 1972 which were unavailable to the author.

Source of data for analysis

The matter of which company communications to include in an analysis is one of the most difficult. In principle, a study of CSR would include all forms of data reaching the public (see Gray et al. 1995b), but in practice, this is rarely possible.

The overwhelming majority of researchers have taken the pragmatic view that the annual corporate report can be accepted as an appropriate source of a company's attitudes towards social reporting. This is for two reasons:

1. the company has total editorial control over the document (excluding the audited section);
2. it is usually the most widely distributed of all public documents produced by the company.

To optimise resolution, data was recorded at three locations in the each document; in the chairman's statement, in the directors' report and in 'other' locations.

Company selection

The selection of Marks and Spencer Plc as the subject of the analysis was partly serendipitous, but it was thought that this was a company that might be worthy of analysis due to a number of company-specific features:

- it has a reputation in the UK as a retailer of premium, safe products;
- it has explicitly stated that it considers itself to have a social responsibility (see for example Marks and Spencer Plc corporate report 1997, p. 5);
- in common with many other well-known high street names, it arguably has good reason to be rather more sensitive to opinion than businesses in some other commercial sectors;
- it has enjoyed a reputation for many years as a good employer with a paternalistic management regime;
- it has consistently promoted to senior positions from within, thus reducing any dilution of senior management culture and conviction by the appointment of outsiders.

In contrast to some other sectors (e.g. petrochemicals), most observers would not recognise high street retailers as being a business sector with a great deal to justify in terms of alleged 'bad behaviour'. However, given the company's reputation and the sensitivity of retailers in general to social opinion in a competitive market, it was decided that the company would present an opportunity for a longitudinal analysis of CSR spanning a number of potential trends and switch points in societal, political and economic opinion, such as the increase in ethical awareness as an issue in retailing, as well as several changes in chairmanship.

Hypotheses and switch points

The purpose of this survey is explicitly to provide some insight into the causes of changes in CSR in the company in question. However, given that only one company is studied, any conclusions drawn must obviously be heavily qualified.

A cross-sectional sample of one in any population of any size is unlikely to provide a statistically significant or generalizable analysis. Rather than attempt to draw indefensible conclusions in respect of confirming or rebutting a hypothesis with such a sample (this being a criticism of Guthrie and Parker, 1989), it is stated at the outset that the analysis in question is designed to provide indications and to provoke further discussion of any findings.

Accordingly, the method is designed to chart CSR over the period in question with a view to identifying both trends in presentation and disclosure against time, and to report any switch points at which trends changed direction. Given the sample size, it would probably be inappropriate to systematically test for association with internal or external events which may have had an antecedental effect upon the change in disclosure although some comments are made in respect to coincidence with some socio-political events.

However, it was felt that some insights into management attitude to CSR might come to light if variability between senior officers' successions could be demonstrated to be statistically significant. The matter of which senior officer to test against (e.g. chairman, chief executive, etc.) is problematic. In the case of Marks and Spencer Plc, the managing director/chief executive roles are split between several executive directors so it was thought that testing against one or more joint-CEO would muddy the analysis somewhat. The most obvious senior officer to test against thus becomes the company chairman, which, in the case of '*M and S*' is an executive role. The chairmanships are superimposed on the longitudinal graphs in this paper to show changes in CSR patterns within and between the respective terms of office.

Content analysis—what to study

The three social categories were selected because they are all, in some way, dependent upon the activities and policies of the company. Accordingly, customers as a social constituency are excluded (because the direction of dependence is the other way round).

The database into which the data was entered contained seven relevant fields.

1. year end of corporate report;
2. total pages in corporate report;
3. total non-financial pages in corporate report;
4. identity of chairman;

5. employee welfare, including equal opportunities, but excluding financial information on employee pensions;
6. community involvement including charitable work sponsored;
7. environmental disclosure including energy conservation.

Methods of data capture

It has been observed (Gray et al 1995b) that data capture and measurement in the field of CSR falls into two broad categories—the *number* of disclosures (e.g. frequency of mentions of category x) and *amount* of disclosure. The majority or researchers in the CSR field have chosen to capture data based upon the *amount* because it gives a richer data set and this paper adopts the same approach. Both number of words and page proportions were recorded for each piece of social information – a more labour-intensive approach than that taken by other researchers but one intended to give a higher level of resolution. The problem of measuring *what* is said in social disclosure (the 'quality' rather than just the quantity) is one which most researchers have found it convenient to dismiss. This is because it is almost always 'good news' that is being communicated. The surrogate for measuring the company's response to social issues is that the company discloses at all and by how much. That it doesn't account for qualitative assessment is a acceptable limitation that most empirical work has allowed.

Methods of data recording and analysis

In order to record and subsequently analyse the data collected, a database was set up in *Microsoft Excel* in which statistical associations could be drawn and graphical representations of trends and switchpoints generated. In order to ensure internal consistency, data capture was undertaken throughout the investigation by the author.

The data was entered into fields referring to the three specific locations within the corporate reports (chairman's statement, directors' report and other). When the data entry was completed, the mathematical abilities of the package were employed to generate sums of each category of social information for disclosure in the whole corporate report. Ratios were calculated to show how numerical data were related to each other as a function of time, for example by calculating total page proportions of CSR as a percentage of total non financial pages in the corporate report document.

Findings

Physical and aesthetic presentation

One of the most immediately noticeable features of the *'M and S'* corporate reports over the thirty-year period is the change in the physical presentation of the documents themselves. Two trends are potentially noteworthy: and increase in the length of the document with the passing of years and an increase in the complexity of the presentation. In the early years of the study, the reports were typically based upon a pro forma design and were 19 pages long. With the accession of Lord Raynor to the chairmanship in 1985, photographs appeared for the first time. The length increased to a peak of 80 pages in the 1990s.

Total voluntary social disclosure against time

It is not surprising to report that the aggregate social reporting increased over the period in question (see for example Spicer 1978, Dierkes and Antal 1985) but the increase was not consistent—fluctuations can be seen within the upward trend. The introduction of photographs in 1985 is responsible for the upturn in page proportions at that time (see Figure 1). The word count and page proportion count measures are relatively comparable, with the greatest periods of increase coming in the 1980s (Figures 1 and 2).

Employment-issues disclosure

In every year of the period under analysis, *'M and S'* made some voluntary disclosure in respect of its employees and their welfare. The Chairman's Statement has consistently contained a word of thanks to the company's employees, but as this was in addition to customary thanks to customers and suppliers, and was perfunctory in content, this content was excluded from the word and page count. The Director's Report

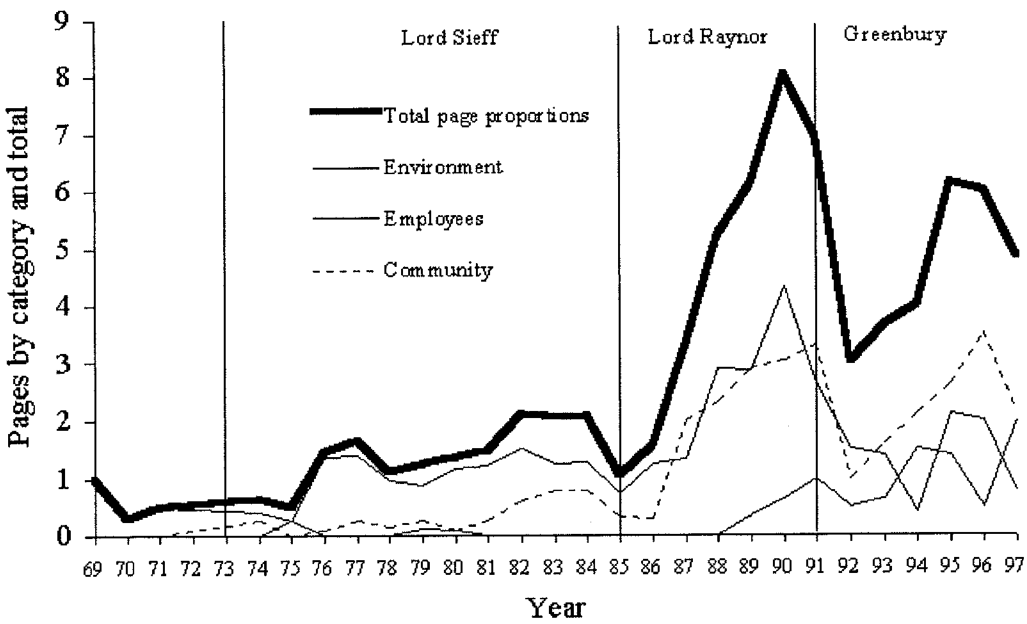

Figure 1 – Social disclosure (by category and total) by page proportion count.

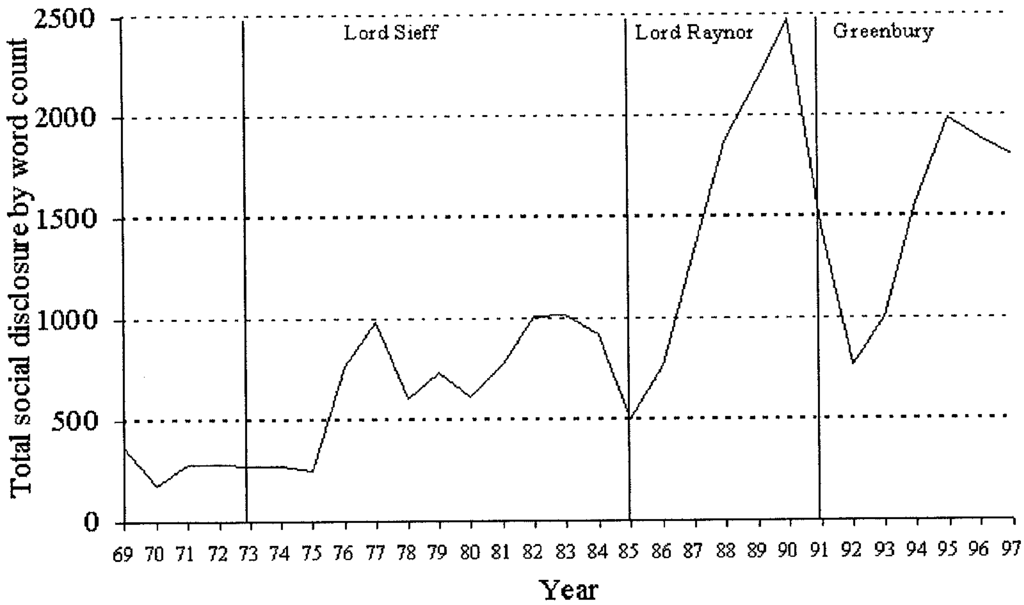

Figure 2 – Social disclosure (in all categories) by word count.

introduced a statement on employee issues in 1982, the wording of which remained substantially unchanged in subsequent years (despite any changes that may have occurred in societal opinion). A statement on equal opportunities is included in the Director's Report entry but its content has also remained almost unchanged since its initial introduction except for the inclusion of sexual orientation in 1997 as a basis upon which the company will not discriminate (see also Adams, Coutts and Harte, 1995).

The high fluctuations that occurred in employee welfare disclosure in the later years of the period arise mainly because of the variations in the space committed to the matter in separate internal employee reports.

A more sporadic approach to employee disclosure was exhibited in the Chairman's Statement (Figure 4) and in other sections of the report (Figure 3). From the late 1970s onwards, a separate (though internal to the corporate report) Employee Report was included. In later years, the Employee Report was supported by one or more annotated photographs which increased the page proportion count but obviously not the word count.

The contrast in employee welfare disclosure between Chairmen Raynor and Greenbury demonstrates the two men's emphasis on social disclosure (Figure 4). Although the employee welfare word count in Sieff's and Raynor's statements were variable, it is noticeable that Greenbury declined the opportunity to make any employee disclosures at all after his first year in office. It is probably reasonable to assume that the chairman's attitude towards employee welfare disclosure would be reflected in his own statement, and this is supportive of the hypothesis that the

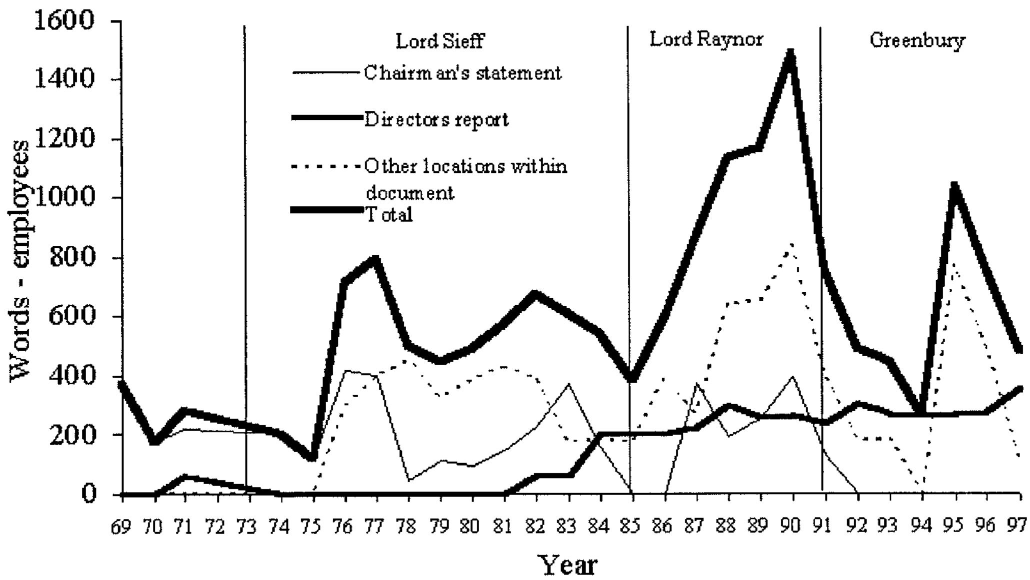

Figure 3 – Social disclosure by word count—employee welfare.

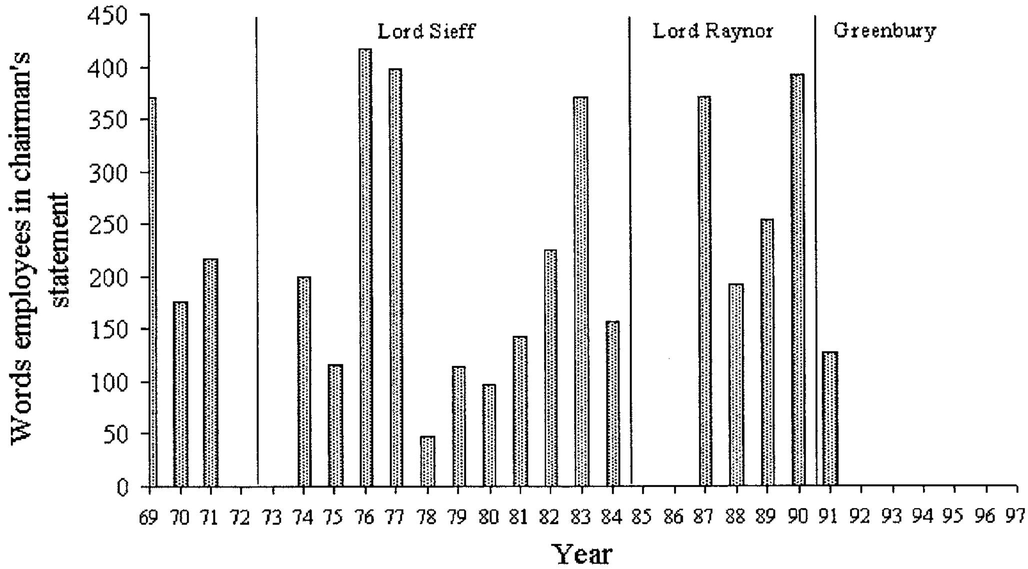

Figure 4 – Words on employee welfare in chairman's statement (note that 1972 and 1973 are missing).

chairman's attitude towards social responsibility is a major determinant of the volume of CSR.

Community disclosures

The voluntary social disclosures in respect of communities are perhaps one of the more interesting features of this analysis because of the company's explicit claims to recognise its social responsibility. The 1996 report contains the following statement:

> 'Our commitment to social responsibility is shown by the full part we play in the community . . .' (Annual report and Accounts, 1996, p. 4)

Prior to 1975, the company made no reference to the communities in which it operated which is an interesting observation given that in 1995, the corporate report stated that,

> 'Marks and Spencer Plc *has always* acknowledged a corporate responsibility to society . . .' (Annual report and Accounts, 1995, p. 30). Author's emphasis.

Over the period of this study, the amount of disclosure on community relations has fluctuated significantly (see Figure 5) and until 1986, disclosure was almost entirely located within the chairman's statement. After this date, community disclosure in the chairman's statement decreased as a significant increase was accounted for by the introduction of a separate Community Report. This innovation coincided with the accession to the chairmanship of Lord Raynor.

Within this category of social disclosure, a number of social 'campaigns' may be noteworthy including an entry in the 1994 report stating the company's opposition to Sunday trading (in response to Parliamentary proceedings in respect of this matter) and a statement in the 1981 chairman's statement (during a recession and at the time when unemployment hit a high of three million) that,

> 'We have a responsibility to help young people who have difficulty in finding jobs.' (Annual report and Accounts, 1981)

This remarkably socially aware 1981 attitude to unemployment in general was not repeated in any subsequent corporate report and may have consequently been a partial response to the high levels of unemployment at the time.

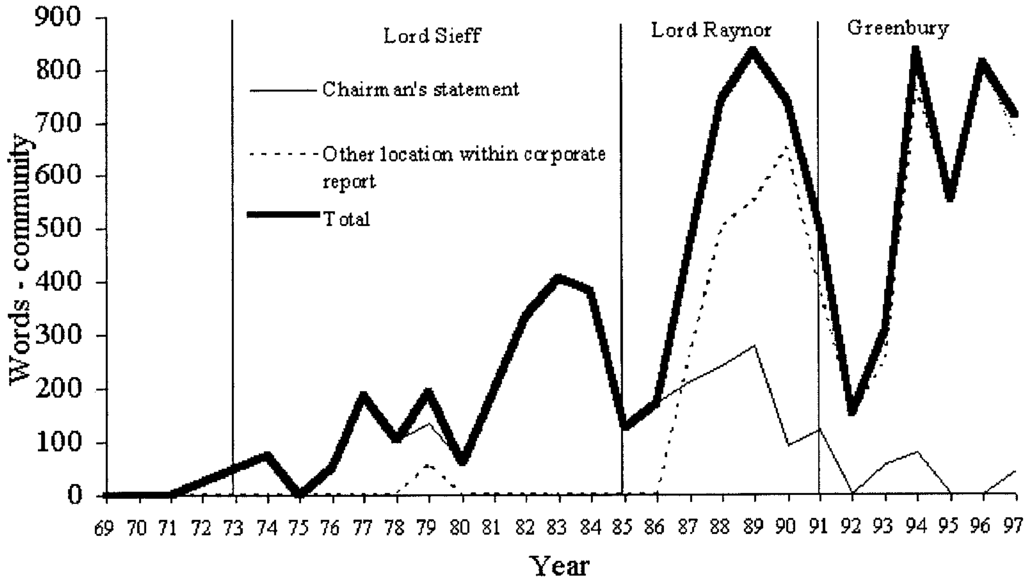

Figure 5 – Social disclosure by word count—community and community relations.

Environmental disclosure

For the purposes of this investigation, environmental disclosure was conveniently taken to mean any mention of environmental responsibility or any mention of energy conservation, energy efficiency or waste reduction. Given the longitudinal sample under analysis, it is perhaps not altogether surprising that this broad definition drew in some disclosures that were not necessarily referring to environmental disclosure in the contemporary understanding of the term.

When taken to mean reference to the natural environment, it can be reported that the first explicit disclosure on the environmental behaviour of the company was in 1989. The volume of disclosure then subsequently increased (as a trend-line) from 1989 up until the end of the period under analysis (1997). During the 1970s, however, the company made voluntary disclosures on its energy and waste performance in a period before the natural environment became a topical issue (see Worcester 1995, 1996). In context, we may postulate that such disclosures were in response to a number of external political, economic and sociological events including the mid 1970s oil price shock, the miners' strike, the three-day week, etc. The primary concern on the part of the company in making such disclosures (making the above postulate) was not so much to respond to environmental opinion, but rather to respond to a societal climate of energy shortages and its concomitant austerity. Figure 6 shows the company's environmental disclosure by word-count.

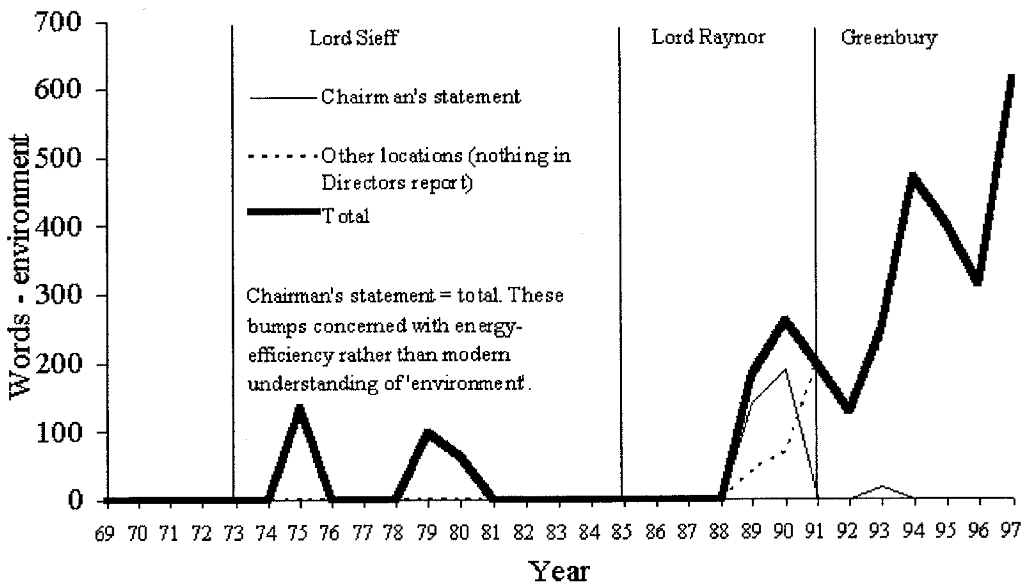

Figure 6 – Social disclosure by word count—environment.

Discussion

Consistency with legitimacy explanations

In order to test to see the extent to which the findings are consistent with legitimacy theory, we need to examine the extent to which the company's disclosures are concerned with justification (Maurer 1971), garnering societal support (Suchman 1995) or generally rising or falling as public opinion changes on the key subjects discussed in the disclosures.

This study has not made a detailed textual examination of the social disclosures that it has reported upon in terms of their volumes. Accordingly, the point is conceded that the company *may* have made some disclosures in respect to self justification or in order to garner societal support. Whether or not this has occurred is not central to the main theme of this paper. It is also possible that the variations in CSR over the period of the study accord to some extent with changes in societal opinion (such as the disclosures reported above in response to oil price rises and high unemployment).

Testing for any of these features using an empirical instrument is necessarily fraught with potential difficulties due to the problem of providing a reliable mechanism of charting changes in societal opinion (or of circumscribing and defining the value system resident within the superordinate social system).

This is a conspicuous omission in the literature that discusses legitimacy theory—it is all very well to discuss it *in vacuo* (i.e. in abstraction), but it is an altogether more challenging research task to arrive at an empirical method for accurately charting opinion change over the course of several decades.

So can we say that the findings are consistent with legitimacy theory? The answer is that they might be—but this is not the point. The significant variability of disclosure suggests, however, that legitimacy theory is not a total explanation of the phenomenon observed in this study.

We can in fact trace some trends in CSR from the '*M and S*' corporate reports that may be partially explained by legitimacy theory. There is, for example, some documented evidence of a rise in some aspects of environmental concern over recent years (Worcester 1996). In then discovering that '*M and S*' included explicit statements on environment from 1989 onwards may suggest an apparent consistency with legitimacy theory, which it may well be (i.e. an *apparent* consistency). The acknowledgement of some responsibility for the unemployed in 1981 (see above) may also be offered in evidence for this theory.

There is, however, some evidence that some aspects of '*M and S*' disclosure may actually run counter to societal opinion. Political donations, small though they were, were given directly to the Conservative Party near to the time when the Party's popularity began to decrease after the 1992 general election and 'Black Wednesday' in the same year. The company made its opposition to Sunday trading clear in the early 1990s when Parliament (presumably believing it to be a popular measure) were legislating for it. A company seeking approval (legitimacy) from society would be unlikely to espouse unpopular causes on a regular basis.

Managerial reality construction as an explicator

This paper does not reject the hypothesis that social disclosure in the *'M and S'* corporate reports may be, at least in part, consistent with a legitimacy understanding of CSR. It does, however, suggest that in the case of this company (and this observation is not necessarily generalizable), another explanation is a rather more plausible one.

Over the thirty-year period of the survey, *'M and S'* had four chairmen, all of whom were promoted from within and each of whom had previously served for several years as executive officers. It is shown by this paper that the key switch points in the aggregate volume of social disclosure coincide closely with the points of succession of consecutive chairmen.

Two 'page proportion count' ratios were calculated for each year. Firstly, the percentage of CSR information by page count over total pages in the corporate report gives some indication of the emphasis in the document on its attitude to social reporting. Secondly, the percentage was calculated of CSR information by page count over all pages in the corporate reports after the number of mandatory financial pages were subtracted (note that 'non-financial pages' is a field in the CSEAR database—see Gray et al 1995b). The latter ratios may provide a higher level of meaning insofar as it is an indication of the company's attitude to CSR in respect to other, mainly discretionary disclosure.

Both of these ratios were plotted against time. The points of chairmen's succession are superimposed over the graph (Figure 7). Even a cursory glance at this Figure reveals a striking coincidence.

It would appear (*prima facie*) from Figure 7 that two key successions of chairman may be in part responsible for the apparent switch points in the company's observable attitude to CSR. The succession from J Edward Sieff to Sir Marcus Sieff (later Lord Sieff of Brimpton) was apparently without incident in respect of CSR (in all categories). In 1985, however—the first published corporate report under The Lord Raynor—we witness not only a 'glossy' format document complete with

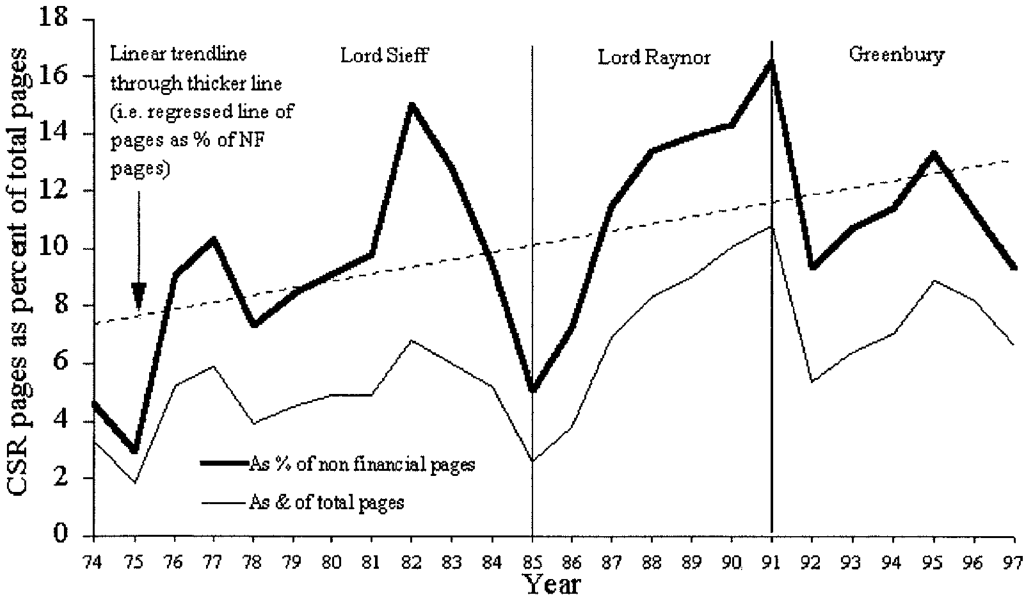

Figure 7 – Percentage of corporate report given to CSR by page proportion total.

photographs for the first time, but also an immediate reversal in Sieff's declining CSR from a high in 1981. As The Lord Raynor's chairmanship progressed, CSR increased year-on-year reaching its zenith at his retirement in 1991. At this point—the succession of Sir Richard Greenbury—CSR showed an immediate decline. Any speculation as to what effect the personality of the chairman may have had on CSR would, of course, be both premature and necessarily uninformed. It is clearly evident, however, that the switch points are both marked and closely coincident with the two most recent chairmen's successions.

Another indication of the chairman's personal influence on the volume of CSR may be seen from his personal direct input into the amount

Table 1 – CSR disclosure in the chairmanships of the three most recent *'M and S'* chairs. Observations are *CSR in all categories by page count over total non-financial pages in corporate report.* Each observation represents the calculation for a year

Sieff	*Raynor*	*Greenbury*
4.64	5.09	16.50
2.94	7.27	9.37
9.06	11.48	10.73
10.31	13.41	11.43
7.33	13.93	13.37
8.43	14.34	11.32
9.13		9.33
9.8		
15		
12.81		
9.45		

from the chairman's statement. Figure 8 shows the word count of CSR in all categories in the chairman's statements over the period in question. The same trend observed above is also in evidence here. The starkest switch point is that between Lord Raynor's retirement in 1990 and Richard Greenbury's accession in 1991. In three of the seven years of Greenbury's tenure, he chose to make no social disclosure in his chairman's statement at all. There is little doubt that one reason for this may be the dedication of other parts of the report to social matters, but the different stress on social matters between Raynor and Greenbury is probably illustrated within this measure.

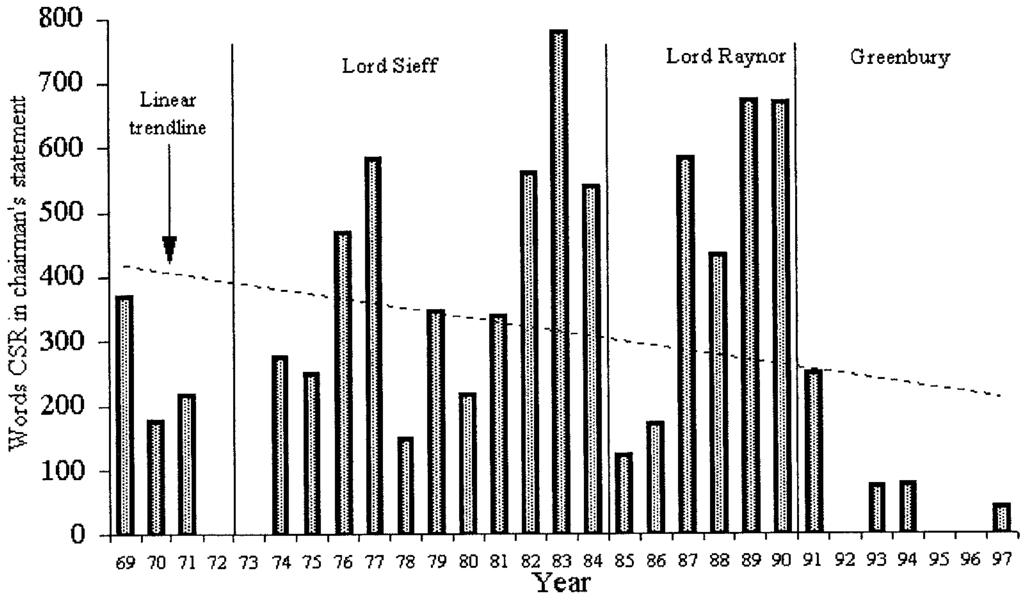

Figure 8 – Pages CSR in all categories by word count in the chairman's statement (note that 1972 and 1973 reports are missing).

Conclusions

In attempting to synthesise an explanation for CSR changes in the case of this longitudinal study, there are two observations to be made.

Firstly, the overall upward linear trend over the period from the mid 1970s to the late 1990s is ostensibly consistent with a legitimacy understanding of CSR assuming that the items addressed in the disclosures are of increasing concern to the public over the period (see Worcester 1995 and 1996). However, the observation that CSR has increased since the 1970s is not new (see for example Gray et al 1995a and 1995b).

Secondly, the fact that there are significant variabilities in CSR volume as a percentage of non-financial total between chairmen, may indicate some variations in the perception of reality by *'M and S'* under the regimes of the successive chairmen. This paper is unable to generalise this observation beyond the cross-sectional sample of one that has been its subject, but it is suggested that marginal variations (at least) in CSR volume within a broader upward trend may indicate different perceptions of reality on the part of the reporting chairmen.

Admittedly, this observation rests in large part upon the presuppositions that (a) the chair substantially imprints his perception of reality on the senior officers sufficient to affect the volume of CSR, and (b) that the chairman is the only internal independent variable that has an effect on the volume of CSR. In the case of *'M and S'* , the latter of these two presuppositions may have some credibility owing to the fact that other senior Board positions are shared (i.e. the company operates with three-to-four joint managing directors).

In conclusion, the findings of this study suggest that contractarian theories may not be totally adequate as explicators for changes in corporate social reporting. Political economy explanations do not easily lend themselves to empirical study. These have not been tested for, although most discussions suggest that within this explanation, similarities between disclosure and societal values would be expected if the explanation is to be given any credence (see Woodward et al, 1998). There does, however, appear to be a managerial influence on the company's attitude to voluntary social disclosure and this is not readily explained by the meta theories espousing stakeholder theory (see also Ullmann, 1985).

Data capture by page count has the limitation of being, of necessity, inexact—not in the counting itself (which is a systematic procedure) but in the extent to which pages can be taken to be a good indicator of social disclosure. Accordingly, this paper makes no claim other than the results may be indicative of that to which it refers.

It is argued, however, that the findings are sufficient justification for widening the enquiry to see if it can be observed in a wider sample of companies. A wider cross-sectional sample over a similar longitudinal period would provide a richer data set upon which to develop this possible explanation for CSR.

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References

Adams, C. A., Coutts, A. and Harte, G. (1995). Corporate equal opportunities (non-) disclosure. *British Accounting Review*. 27, 87–108.

Azzone, G., Brophy, M., Noci, G., Welford, R. and Young, W. (1997). A stakeholder's view of environmental reporting. *Long Range Planning*, 30 (5): 699–709.

Bar-Yosef, S. and Livnat, J. (1984). Auditor selection: an incentive signalling approach. *Accounting and Business Research*. (Autumn).

Brooks, L. J. (1986). *Canadian Corporate Social Performance*, Hamilton, Ontario, The Society of Management Accountants of Canada.

Burchell, S., Clubb, C., Hopwood, A., Hughes, J. and Nahapiet, J. (1980). The role of accounting in organizations and societies. *Accounting, Organizations and Society* 5 (27).

Chandler, I., Fetter, R. and Newbold, R, (1991). Cost accounting and budgeting, in Freeman, R. (ed.). *DRGs*. Ann Arbor: Health Administration Press.

Cooper, R. and Kaplan, R. (1991). *The design of cost management systems*. NJ: Prentice Hall.

Cooper, D. J. and Sherer, M. J. (1984). The value of corporate accounting reports: arguments for a political economy of accounting. *Accounting, Organizations and Society*. 9 (3/4): 207–232.

Den Uyl, D. J. (1984). The new crusaders: The corporate social responsibility debate. *Studies in Social Philosophy and Policy*. 5.

Dierkes, M. and Antal, A. B. (1985). The usefulness and use of social reporting information. Accounting, Organizations and Society. 10 (1): 29–34.

Donaldson, T. (1982). *Corporations and Morality*. NJ: Prentice Hall.

Donaldson, T. and Preston, L. E. (1995). The stakeholder theory of the corporation: concepts, evidence and implications. *Academy of Management Review*. 20 (1): 65–91.

Dowling, J. and Pfeffer, J. (1975). Organizational legitimacy: Social values and organizational behavior. *Pacific Sociological Review*. 18 122–136.

Downes, D. H. and Heinkel, R. (1982). Signalling and the valuation of unseasoned new issues. *Journal of Finance*. March.

Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*. April.

Gray, R., Kouhy, R. and Lavers, S. (1995a). Corporate social and environmental reporting. A review of the literature and a longitudinal study of UK disclosures, Accounting, Auditing and Accountability Journal. 8 (2): 47–77.

Gray, R., Kouhy, R. and Lavers, S. (1995b). Methodological themes: Constructing a research database of social and environmental reporting by UK companies . *Accounting, Auditing and Accountability Journal*. 8 (2): 78–101.

Guthrie, J. E. and Mathews, M. R. (1985). Corporate social accounting in Australasia. *Research in Corporate Social Performance and Policy*. 7 251–77.

Guthrie, J. E. and Parker, L. D. (1989). Corporate social reporting: a rebuttal of legitimacy theory. *Accounting and Business Research*. 9 (76): 343–52.

Guthrie, J. E. and Parker, L. D. (1990). Corporate social disclosure practice: a comparative international analysis. *Advances in Public Interest Accounting*. 3 159–76.

Haugen, R. A. and Senbet, L. W. (1979). New perspectives of informational asymmetry and agency relationships. *Journal of Accounting and Quantitative Analysis*. November.

Hines, R. (1988). Financial accounting: in communicating reality, we construct reality. *Accounting, Organizations and Society*. 13 (3): 251–61.

Horngren, C. T. (1977). *Cost accounting: a managerial emphasis*. NJ: Prentice Hall.

Ijiri, Y. (1965). *Management goals and accounting for control*. NY: North Holland.

Jensen, M. C. and Meckling, W. H. (1976). Theory of the firm: managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*. October.

Mathews, M. R. (1997). Twenty five years of social and environmental accounting research—is there a silver jubilee to celebrate? *Accounting, Auditing and Accountability Journal*. **10** (4) 481–531.

Maurer, J. G. (1971). *Readings in organizational theory: Open systems. Approaches*. NY: Random House.

Morgan, G. (1988). Accounting as reality construction: towards a new epistemology of accounting practice. *Accounting, Organizations and Society*. **13** (5) 477–485.

Morris, R. D. (1987). Signalling, agency theory and accounting policy choice. *Accounting and Business Research*. **18** (69) 47–56.

Pallot, J. (1991). The legitimate concern with fairness: a comment. *Accounting, Organizations and Society*. **16** (2) 201–208.

Parsons, T. (1960). *Structure and process in modern societies*. NY: Free Press.

Preston, L. E. (1981). Research on corporate social reporting: directions for development. *Accounting, Organizations and Society*. **6** (3) 255–262.

Rawls, J. (1971). *A Theory of Justice*. Cambridge, MA: Harvard University Press.

Spicer, B. H. (1978). Investors, corporate social performance and information disclosure: an empirical study. *The Accounting Review*, LIII (1).

Suchman, M. C. (1995). Managing legitimacy: strategic and institutional approaches. *Academy of Management Review*. **20** (3) 571.

Tattenbaum, R. and Schmidt, W. H. (1973). How to choose a leadership pattern. *Harvard Business Review*. May–June. 162–75, 178–180.

Thomas, A. P. (1989). The effects of organizational culture on choices of accounting methods. *Accounting and Business Research*. **19** (76) 363–378.

Ullmann, A. A. (1985). Data in search of a theory: A critical examination of the relationships among social performance, social disclosure and economic performance of US firms. *Academy of Management Review*. **10** (4) 540–57.

Watts, R. L. and Zimmerman, J. L. (1986). *Positive Accounting Theory*. NJ: Prentice Hall.

Wildavsky, A. (1994). Accounting for the environment. *Accounting, Organizations and Society*. **19**. (4/5) 461–481.

Woodward, D., Edwards, P. and Birkin, F. (1998). *Some evidence on executives views of corporate social responsibility and its reporting*. Proceedings from the International Conference on Accounting and Governance. 23–24 Oct. 1998. Naples, Italy.

Worcester, R. M. (1995). *Business and the environment—the predictable shock of Brent Spar*. HRH The Prince of Wales' Business and The Environment Programme. University of Cambridge Programme for Industry. 18 September 1995.

Worcester, R. M. (1996). *Greening the millennium—public opinion and the environment*. (A MORI research paper). Greening the Millennium Conference. Centre for the Study of Environmental Change, Lancaster University, UK. 27 September 1996.

Appendix—Marks and Spencer Plc, chairmen since 1969

1969–73	J. E. Sieff
1973–85	Sir Marcus Sieff/Lord Sieff of Brimpton
1985–91	The Lord Raynor
1991–99	Sir Richard Greenbury