THE SUPPLY OF CORPORATE SOCIAL RESPONSIBILITY DISCLOSURES AMONG U.S. FIRMS

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Abstract: Corporate social responsibility (CSR) is a dramatically expanding area of activity for managers and academics. Consumer demand for responsibly produced and fair trade goods is swelling, resulting in increased demands for CSR activity and information. Assets under professional management and invested with a social responsibility focus have also grown dramatically over the last ten years. Investors choosing social responsibility investment strategies require access to information not provided through traditional financial statements and analyses. At the same time, a group of mainstream institutional investors has encouraged a movement to incorporate environmental, social, and governance information into equity analysis, and multi-stakeholder groups have supported enhanced business reporting on these issues. The majority of research in this area has been performed on European and Australian firms. We expand on this literature by exploring the CSR disclosure practices of a size- and industry-stratified sample of 50 publicly-traded U.S. firms, performing a content analysis on the complete identifiable public information portfolio provided by these firms during 2004. CSR activity was disclosed by most firms in the sample, and was included in nearly half of public disclosures made during that year by the sample firms. Areas of particular emphasis are community matters, health and safety, diversity and human resources (HR) matters, and environmental programs. The primary venues of disclosure are mass media releases such as corporate websites and press releases, followed closely by disclosures contained in mandatory filings. Consistent with prior research, we identify industry effects in terms of content, emphasis, and reporting format choices. Unlike prior research, we can offer only mixed evidence on the existence of a size effect. The disclosure frequency and emphasis is significantly different for the largest one-fifth of the firms, but no identifiable trends are present within the rest of the sample. There are, however, identifiable size-effects with respect to reporting format choice. The primary trends are that the use of websites is increasing in firm size, while the use of mandatory filings is decreasing in firm size. Finally, and also consistent with prior literature, we document a generally self-laudatory tone in the content of CSR disclosures for the sample firms.

Key Words: Corporate Disclosure, Non-financial Information, Corporate Social Responsibility Reporting, Content Analysis

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Introduction

Corporate social responsibility (CSR) activity is an area of intense and increasing interest both on the practice and academic fronts. Investor interest in firms that engage in these activities has grown dramatically. Between 1995 and 2005, investments of professionally-managed assets grew from $7 trillion to $24.4 trillion, while the share of these assets invested in socially responsible investments grew from $639 billion to $2.29 trillion (Social Investment Forum [SIF] 2006).[1] At the same time, large institutional investors and multi-stakeholder groups -- including the UN Principles for Responsible Investment project, the Global Reporting Initiative (GRI) and the CERES, a coalition of investors and public interest groups – have focused attention on the materiality of social and environmental information to equity analysis. The magnitude and growth of socially-responsible investing (SRI) assets has driven an equally dramatic growth in the need for information. The objective if this study is to document the disclosure patterns of CSR by U.S. firms.

Investors are not the only interested parties; CSR activity provides an increasing focus of product-development and marketing practitioners. Research demonstrates that certain types of CSR activity produce value for firms in terms of brand loyalty and marketing advantages (Brown and Dacin 1997; Sen and Bhattacharya 2001). As Handleman and Arnold (1999, p. 36) note,

> "In any community, it is common to find retailers donating to local charities, sponsoring little league sports teams, and proudly displaying the national flag. These actions demonstrate the retailer's adherence to unwritten but powerful normative rules of acceptable social conduct, such as becoming involved with the community and promoting national pride."

While the question of what exactly motivates firms to engage in CSR practices is a matter for ongoing research, it is clear from both the growth in SRI assets and customer markets for socially-responsible goods that there is a need for information on these practices. The historical emphasis of traditional financial information does not answer the needs of these parties, who require information not only about future earnings but also about the firm's social and environmental responsibility and interactions with the environment and home communities (Adams 2004; Anderson et al. 2005). The concern with non-financial factors as well as with equity returns results in a demand for greater accountability from managers. According to the SIF (p. 5), "[i]ssues now occupying mainstream consciousness – corporate

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[1] This amount includes approximately $1.49 trillion in assets owned by institutions (SIF 2006).

governance, transparency, accountability, and greater disclosure – have long been central to the practice of social investing."

Much of the work in this area is directed at examining disclosures from European and Australian firms, and nearly all multi-national studies indicate international differences in disclosure behavior. It is not established, therefore, how U.S. corporations have responded to these increased demands for information. Furthermore, prior research evaluating the content of CSR disclosures has focused primarily on a single reporting format (generally the annual report, more recently, the corporate website). Gray et al. 1995a has suggested that the use of a single format for analysis purposes may be significantly limiting the understanding that can be derived about CSR disclosure behavior. We therefore extend this literature by exploring the entire identifiable body of public disclosures made by the sample firms during 2004. A major contribution of our paper is the development of a means to assess directly the emphasis that management places on disseminating a given type of information; prior research has largely relied upon frequency of disclosure alone as a proxy for emphasis. In this paper, we evaluate the state of reporting of social and environmental responsibility (often known as corporate social responsibility, or CSR) reporting among a sample of U.S. firms to determine what types of information are being provided and through what means of transmission. We perform a content analysis on the disclosures made by a size- and industry-stratified sample of 50 publicly-traded U.S. firms during 2004.[2] Results suggest that companies disclose a wide variety of CSR information through mandated and voluntary media. Consistent with prior research, we find size and industry-driven differences in disclosure behavior. Our results suggest differences in the pattern and volume of disclosure in U.S. firms when compared with other studies examining global enterprises.

In the next section, we review the relevant theory and research and present the research questions and hypotheses. Then we describe the research method and discuss the results. We conclude with the implications of the study for reporting activists, accounting firms, regulators and academics who are reconsidering the nature of corporate reporting of non-financial information.

Literature Review, Research Questions, and Hypotheses

It is difficult, from an academic and theoretical perspective, to disentangle the differences between a firm's decision to engage in CSR activities and the decision on why, how, and when to report on those activities to stakeholders. The choice of broad theoretical framework depends on whether the researcher approaches the question of CSR from an economic or an ethical standpoint (Cetindamar and Hu-

[2] Disclosures include those made through mandatory filings, such as 10-Ks, as well as voluntary reports and company websites.

soy, 2007). Ethical theories indicate that these activities should be promoted because they are the "right thing" to do.[3] Economic theories indicate that these activities should be promoted only to the degree that they create shareholder wealth through increasing profit.[4] Virtually all theoretical approaches carry the implication that it is not enough to partake of a CSR action, it is necessary then to disseminate information about the action that has been taken. A matter of significant difference between the theories pertains to what actions should be taken, and who should be informed of them. To some extent, the answer to the first drives the answer to the second: if the primary goal of the activity is to enlist the support of a particular party, the firm will of necessity publicize the activity through channels likely to reach that party. Therefore, before launching an exploration of the approaches to disclosure, we offer a brief overview of the "why" of CSR activity.

Neo-Classical Economics

Bird et al. (2007) adopt a traditional economic approach to the question, suggesting that managers should apply net present value (NPV) analysis to all potential CSR activities and take only the actions that result in a positive NPV and thus, increase shareholder wealth. An important element of this theory in the CSR context is the neo-classical notion that the shareholder is the only stakeholder of significant interest. This study finds that markets are slow to impound the valuation implications of non-event-type actions into market prices, with the exception of diversity initiatives. While the authors do not explicitly consider the matter of information dissemination, the implication of their approach is that disclosure should take place through the channels to which shareholders are accustomed (i.e., mandatory filings such as annual reports and 10-Ks). A problematic issue for the traditional neo-classical approach to CSR is that unlike production decisions, CSR activities and their outcomes may not yield the mathematical tractability necessary for reliable NPV analysis.

Marketing Strategy

Another stream of inquiry that suggests that CSR may be motivated mainly by wealth concerns is found in the marketing literature (see Robin and Reidenbach 1987 for an extensive survey of this literature). Brown and Dacin (1997) provide empirical evidence that consumer beliefs about products are influenced by the information that they possess both about corporate ability (the producer's competitive advantage) and about the producer's corporate social responsibility, even though the CSR policies are often

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[3] Robin and Reidenbach (1987) define corporate CSR as actions driven by the social contract and corporate ethics as the set of carefully considered moral guidelines under which the business operates. However, they highlight the commonalities between the two and distinguish between actions undertaken for the purpose of fulfilling organizational values and those undertaken strictly to influence profitability.

[4] For a compelling and step-by-step refutation of the proposition that the only moral duty that a manager has is to maximize profits, see Kolstad (2007), who also concludes that justifications of CSR activities based on expected profits also cannot be sustained under ethical theory.

unrelated to the company's ability to produce. Both items are key elements in creating a good corporate reputation, posited by numerous theorists to provide a source of economic benefits to an organization (see Brown and Dacin 1997 for a review of this literature). Brown and Dacin (1997) find that negative CSR perceptions are shown to exert negative effects on consumer behavior, while positive CSR perceptions exert positive effects on consumer behavior. They note that even though there is potential economic value to doing so, it can be difficult to communicate corporate positions built around developing CSR associations: a need potentially answered by CSR disclosures in the public forum.

Handelman and Arnold (1999) provide further evidence on wealth creation through marketing activities subsumed under CSR. They suggest that consumers appear to possess a demand for intangible factors indicating congruence with local social norms and values, and that the firm's promotion of these elements may yield a strategic angle equal to that of competitive positioning and product attributes. Consistent with Brown and Dacin (1997), they find that negative institutional associations exert a significant negative effect on customer perceptions and behavior, and suggest that stakeholders have a "minimal level of institutional actions" below which even highly positioned firms begin to experience negative consequences. Hooghiemstra (2000) suggests that CSR activity is a form of impression management for the firm. This image management theory – which encompasses matters of corporate identity and corporate image – is likewise driven by direct economic concerns such as customer perceptions and access to capital markets, etc. The marketing-oriented literature on CSR activity suggests these actions are a strategic tool to build and maintain customer loyalty and market share. The implications for disclosure are that the primary targets for information are the existing customers and members of the public with a general interest and that the content of the disclosure will be chosen to emphasize congruence with customer values.

Political Economy

A third theoretical approach considers these actions through the lens of the political economy (Dowling and Pfeffer, 1975; Guthrie and Parker, 1990; Gray et al. 1995a; Deegan and Gordon, 1996; Cormier and Gordon, 2001; Deegan, 2002; O'Donovan, 2002; Maignan and Ralston, 2002; Campbell et al. 2003). In this approach the firm is not considered to be an economic entity that can be divorced from its social context; it is instead an organic organism that is a party to a social contract with the other members of its context. In order for the firm to survive, it must obtain the support and approval of its stakeholders, whether those be primary stakeholders (those without whose support the firm cannot function at all, including customers, suppliers, or providers of labor and capital) or secondary stakeholders (who are indirectly affiliated but in a position to significantly influence the firm's success, including regulators and media) (Clarkson, 1995). CSR activity and the consequent disclosure is a part of the ongoing communication process required in order to enlist and maintain that support (Gray et al. 1995a). Under this general heading, researchers have variously advanced theoretical arguments based on stakeholder theory (Clarkson, 1995; Hooghiemstra, 2000; Maignan and Ralston 2002) and on legitimation (i.e., Gray et al. 1995a; Campbell 2000) to explain both CSR activities and disclosure.

Legitimation pertains to efforts on the part of the firm to establish, maintain, or repair public perception of its dedication to stakeholder norms and values, thus evincing respect for the "social contract" that permits it access to capital and labor markets and other economic resources necessary to ensure organizational survival. Dowling and Pfeffer (1975) outline three means to establishing or improving legitimacy: adapting operations to conform to existing societal expectations, altering social definitions to conform with existing firm operations; or engaging in communication to promote its public identification with socially legitimate symbols, values, and institutions. The degree to which the organization is visible and/or relies on social and political support drives the concern for legitimacy (and consequent access to resources and support) (Dowling and Pfeffer 1975). [5] A potential issue with applying legitimacy theory to CSR activity is that social norms and values are largely a function of temporal matters – as issues are brought to the attention of society, they seem to replace other issues of prior focus (Guthrie and Parker 1990; Gray et al. 1995a; Campbell 2000 and 2003; Campbell et al. 2003; Bird et al. 2007). Therefore, in order for legitimacy theory to yield firmly testable hypotheses it must be possible to identify both the population with whom the firm is concerned with establishing legitimacy and the values that the population holds at the specific point in time.

Closely related to legitimacy theory is stakeholder theory. Balmer et al. (2007) elaborate upon this view, stating (p. 10) that "…in contrast to the traditional legal/economic perspective, which disregards all non-marketplace interaction and avows that the corporation's sole responsibility is to maximize its shareholders' wealth, stakeholder theory takes a more pragmatic stance that sees shareholders as one among multiple contributors to the firm" and that this view indicates that management has a moral obligation to all contributors, not only the shareholders. However, in the area of CSR it is difficult to distinguish between the drivers and implications of legitimacy theory versus stakeholder theory, as the target population according to both theories will be the community of individuals providing access to resources, or those in a position to enhance or diminish the firm's ability to access resources. While theories derived from the political economy result from a very different framework of reasoning, they share this drive to secure access to resources with the neo-classical and marketing approaches. Therefore, regardless of the

[5] An example of this type of activity and disclosure can be found in Hill (2001), who states that at TXU Europe, sustainability and disclosure are driven by the desire to "'bring the outside in' through the dialogue process…[continuing] the engagement by taking our refocused strategy 'inside out', gaining enhanced reputation and consequent added value to shareholders as increased share price. [The company believes] that stakeholder accountability involves a process. This includes the following activities: managing stakeholder dialogues to identify issues, awareness raising around sustainability issues, facilitating the development of actions and change, measuring performance through indicators and reporting progress back to stakeholders." (p. 33)

motivation of an individual firm, the observable output is likely to be very similar: promoting a variety of CSR activities, and ensuring that the target population is kept apprised of this behavior.

Institutional Theory

The recent upsurge in interest in CSR activities on the part of investors and customers raises the specter of yet another theoretical standpoint: institutional theory. Institutional theory suggests a process of organizational convergence (isomorphic behavior) (DiMaggio and Powell, 1983; Dacin, 1997). The isomorphic argument possess implications both for CSR action and disclosure: to the extent that managers of contemporary organizations have been inculcated with the belief that CSR activity is necessary (for purposes of adding to market share, incrementing stockholder wealth, or for straightforward ethical principles) it is possible that the surge in this type of activity – and related disclosure – represents a form of normative isomorphism. To the extent that the upsurge in such activity is perceived by managers to be a competitive requirement irrespective of the need to deploy ethical principles or to derive gains from specific sources, it may be mimetic. Institutional theory also proposes selective use of information dissemination to direct attention to desirable factors and to deflect it away from controversial or unacceptable activities (Meyer and Rowan 1977; Elsbach and Sutton 1992). This suggests that CSR disclosure may be deployed in an effort to forestall undesirable regulation, or to emphasize what the corporation is doing "well" while downplaying what it is not. However, in an environment where CSR activity and disclosures are part of the accepted norm, the predictions of institutional theory converge with those discussed above: CSR activity will be undertaken and disclosed by any firms requiring the appearance of legitimacy. Thus, for the purposes of this study, we view institutional theory as representing another variant of the political economy-based theories discussed above.

Shareholder Demands and Intangible Assets

An additional stimulus for disclosure may be categorized as a pragmatic management response to a demand situation. The intense growth in SRI assets suggests an increasing demand for CSR disclosures (and presumably, for CSR actions); these disclosures may be a simple response to the information needs of shareholders. Financial data is historical in nature and yields a limited perspective of the firm, insufficient to permit a sophisticated understanding of the firm's future prospects.[6] A majority of top executives at multinational firms believe that non-financial performance measures outweigh financial performance measures in terms of creating long-term shareholder value (PricewaterhouseCoopers 2002). From an academic perspective, Lev (2001) argues that when the market value of a corporation is decoupled from the

[6] See Cole and Jones (2005) and Holder-Webb and Cohen (2007) for a review of the literature pertaining to this issue.

value of its underlying tangible assets, non-financial information offers a tool to measure the large proportion of intangible value currently unaccounted for in traditional corporate reporting. Clark et al.. (2005) and Chua (2006) also indicate that changing circumstances, including an increasingly global business environment, have amplified the importance of intangible issues. While these concerns are relevant to the interests of all equity holders, they are of particular import to SRI investors.[7] SRI investing does not disregard rigorous financial analysis; it simply adds to that analysis a consideration of the social and environmental consequences of the investments, such as environmental, health and safety, diversity, and human resources issues. Traditional financial statements are not adequate to supply the informational needs indicated by this type of investing activity. Many international companies have therefore responded by providing a variety of CSR disclosures.[8]

While some critics may suggest that CSR reporting constitutes mere public-relations or damages sources of shareholder value through dissipating comparative advantages, empirical evidence suggests that deploying CSR policies does not harm the market prospects of the publicly-traded firm, and in some instances has been shown to improve those prospects (Al-Tuwaijri et al. 2004; Dowell et al. 2000; Hamilton et al. 1993; Orlitzky et al. 2003; and Waddock and Graves 1997a, 1997b). As a result of the combined financial and non-financial benefits, Kinder (2005) notes that incorporating CSR policies into decision-making is emerging as an element of fiduciary duty for investment managers.

Despite the growing trends in SRI investing and the benefits to implementing CSR policies, reporting on these issues continues to be inconsistent. In particular, there is heterogeneity in responses based on geographical dispersion (Ambachtsheer 2005). In general, CSR disclosures are more commonly provided and more heavily used by investing parties outside of the U.S. This may be a function of the lack of regulation of or attestation services for these disclosures in the U.S., compared to other industrialized nations.[9] The lack of regulation and attestation standards for CSR disclosures in the U.S. has not diminished the demand for this information as a basis for SRI investing practices, but may have engendered variability in reporting practices among U.S. firms.

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[7] The Social Investment Forum reports that shareholder activism pertaining to social and environmental concerns is on the rise. They find that shareholder resolutions on these topics increased from 299 proposals in 2003 to 348 in 2005 (SIF 2006). Many of these items pertained to investor demand for increased disclosure and transparency. This activism is not limited to individual investors; the SIF also reports that social and environmental factors are increasingly important to mainstream asset managers (SIF 2006).

[8] KPMG International (2005) reports that 64 percent of the top 250 companies of the global Fortune 500 provide CSR reports. Ambachtsheer (2005) finds that 37 percent of investment managers worldwide predict that SRI performance indicators will become mainstream disclosures within five years, while 73 percent of this group predicts that these indicators will become mainstream disclosures by ten years.

[9] See Simnett et al. (2006), as well as Kolk (2003, 2005) for a discussion of these issues. KPMG International (2005) reports that 30% of the top 250 firms of the global Fortune 500 offered assurance statements (generally provided by a major accountancy firm) with their CSR report.

As discussed above, it is difficult to identify a single comprehensive theory that both has unambiguous implications for CSR disclosure behavior and delivers empirically testable hypotheses. Therefore, the initial exploration of the CSR disclosures for U.S. firms relies on a non-directional research question:

RQ1: What CSR reporting is being provided by U.S. firms?

While the annual report has been the primary focus of researchers exploring CSR disclosures (Gray et al. 1995a, 1995b; and Campbell 2000, 2003, among others), Gray et al. 1995b note that all forms of information entering the public environs should be considered to be part of the accountability structure, and thus provide avenues for CSR reporting. Campbell et al. (2003) argue that stockholders are relatively less concerned about legitimacy issues than non-investor stakeholders, and thus for effective legitimation, the firm should employ disclosure venues other than the annual report (which may not be read by the non-investors). O'Donovan (2002) concurs, indicating that the level of sophistication of the non-investor stakeholders is such that an annual report is less likely to be read and that the proliferation of specialized environmental reports may be a response to this issue. Maignan and Ralston (2002) and Patten (2002) departed from the analysis of annual reports and explored the CSR content of web pages. Because the theories discussed above are largely couched in terms of disclosure to less-sophisticated investors, we consider the full panoply of public disclosure opportunities, posing the following research question:

RQ2: What reporting formats are U.S. firms choosing to provide CSR disclosures?

The literature identifies several firm-specific characteristics that have been shown to affect CSR disclosure behavior for foreign firms, including management decision horizons, systematic risk, social constraints (Deegan and Gordon 1996), attitude of the chair of the board (Campbell, 2000), ROE and fixed asset ratios (Cormier and Gordon 2001), and capital intensity, age of the firm, strategic posture, and the existence of a social responsibility committee (Gray et al. 1995a). KPMG International (2005) reports industry trends in dedicated CSR disclosures, where industrial sectors with significant reputation exposure have typically tended to be more forthcoming on environmental issues.[10] Furthermore, it is known that large firms are disproportionately exposed to reputation and political costs (Watts and Zimmerman 1986). A survey of prior literature yields the information that the only trends that are consistently associated with CSR disclosure behavior in foreign firms are size and industry, although Gray et al. (1995a) caution that size may not be a continuous function as first, small organizations may have unobservable means of communications, and second, financial size may be less important than political exposure and public visibility.

Therefore, we present the following hypotheses:

[10] These are industries that are often involved in operations that potentially pollute the environment, such as chemical manufacturers, computers and electronics, utilities, automotive manufacturing, and oil and gas sectors. Likewise, pharmaceutical manufacturers are also exposed to negative reputation effects as a result of perceived inequities in cost and access to medicines.

H1: CSR disclosures for U.S. firms will vary by industry.

H2: CSR disclosures for U.S. firms will be subject to a firm-size effect.

Finally, prior literature has explored the question of the content of CSR disclosures, in an effort to discern whether these items constitute legitimate informative activities or simple public relations releases. Some of the consumer-market driven theories above do not distinguish between the two approaches, as the substance of the CSR activity is less relevant than the public perception among the consumer base. Guthrie and Parker (1990, p. 165) reflect similar concerns, suggesting that CSR disclosures are made in an effort to

> "demonstrate a constructive response to social pressure and avoid further regulation of their disclosures. In this way they may seek to pacify sociological demands made on business while attempting to win or maintain support from particular targeted constituencies. Such a disclosure strategy may include emphasizing the corporation's positive contributions to social welfare and highlighting its attempts to minimize its harmful effects on various elements of society."

The constructiveness of the response would seem to be a key issue. Consistent with this and with the marketing approach, Deegan and Gordon (1996) and Deegan and Rankin (1996) find that the majority of environmental disclosures are self-laudatory and contain little quantitative detail. This finding extends to a selection of firms that is known to possess "bad news" with respect to environmental matters and thus is demonstrated to disclose in a very biased manner. Cormier and Gordon (2001) argue that CSR disclosures will be avoided in areas where a firm has a poor track record, thus raising the perceived proprietary costs of releasing the information. Therefore, we propose the following hypothesis:

H3: CSR disclosures of U.S. firms will be generally positive in content.

Research Design

As discussed above, prior research on CSR disclosures focuses mainly on large multi-national firms. While such firms provide a sample that is conveniently comparable to studies of financial disclosures, they are less useful for obtaining an impression of generalized disclosure practices. Therefore, we depart from the existing CSR disclosure literature in two ways: first, we ensure the capture of a broad spectrum of firms in order to determine the degree to which disclosure patterns identified among large firms are generalizable to smaller ones, and second, we expand the disclosure net beyond the studies of annual reports or corporate websites to include the possibility that firms are communicating these matters to other constituents than shareholders.

The Sample

In this study, we use a stratified random sampling technique. With stratified random sampling, researchers control the relative quantity of each stratum, rather than letting random processes control it. This guarantees the proportion of different strata within a sample and therefore produces a final sample that has more equal representation of each sub-group from the population than simple random methods provide (Neuman, 2005).

The sampling frame for industry was limited to publicly-traded U.S. firms listed on Compustat, excluding those engaged primarily in providing financial services, investment funds, and trusts.[11] Based on the general SIC and NAICS categories represented by these firms, the largest general industry sector is manufacturing (39%), followed by firms engaged in production of intellectual property, including software and publishing (13%), those working with extractive natural resources, including agriculture, forestry, and extractive activities (12%), and those engaged primarily in sales, including wholesalers and retailers (11%). No other general industry sector yielded more than 5% of the sampling frame during 2004. Due to the significant share of the industrial market represented by manufacturing enterprises, we subdivided the category into those engaged primarily in simple manufacturing, and those engaged in manufacturing pursuant to significant research and development activities. This process yielded five industry sectors: manufacturing (simple), manufacturing (R&D intensive), extractive natural resources, intellectual property generation, and sales. Each general industry category was scrutinized to determine which sub-section of the category offered the greatest depth of firms that could be considered to be relatively homogeneous (as established by 4-digit SIC codes). Within each industry grouping, the largest collection of firms with identical 4-digit SIC codes was chosen as the representative sample. This process yielded the industries examined in the current paper: simple manufacturing (MFG), as represented by manufacturers of surgical equipment; R&D intensive manufacturing (R&D), as represented by pharmaceutical preparation and manufacturing firms; extractive natural resources (OIL), as represented by crude petroleum and natural gas extractors; intellectual property generation (SOFTWARE), as represented by software publishers; and sales (RETAIL), as represented by supermarkets and other grocery stores.

All Compustat firms within each of these industries were ranked by size (total assets and sales) and stratified into quintiles according to their relative position in the rankings by these measures.[12] A random sample of two firms from each size quintile within each industry was chosen. See Table 1 for a listing of sample firms, by industry, and size quintile.

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[11] These entities operate under substantially different reporting requirements and may or may not have active operations.

[12] The identification of quintiles and position within quintiles was qualitatively unaffected by the choice of variable (total assets or sales) as proxy for firm size.

The Data

Public data sources (Edgar, Lexis/Nexis Academic Universe, and company and investor-relations websites) were searched in order to identify the body of publicly-disclosed information items for that firm for calendar year 2004. This process resulted in the identification of 863 public information bursts. Website content was captured into documents to ensure that the content remained fixed across the data collection and analysis period. We define an "information burst" as a single stand-alone document (i.e., 10-K, specialized CSR report, proxy statement, etc.) or a homogenous unit of text (i.e., employee diversity webpage[s], product information sheet for a given product or product line, etc.). Table 2 provides a frequency table for reporting format category and information burst type for the full set of identifiable public disclosures.

The Analysis Technique

Content analysis is a way of codifying text and content of written narratives into groups or categories based on selected criteria, with the end goal of transforming the material into quantitative scales that permit further analysis (Weber 1988). It has been widely used in the literature examining non-financial disclosure behavior (see Gray et al 1995a; Deegan and Gordon 1996; Deegan and Rankin 1996; Milne and Adler 1999; Campbell 2000; Holder-Webb 2007; Holder-Webb et al. 2007, among others). A content analysis was performed on each burst of information by a trained member of the research team. A list of CSR variables was developed based on the major categories indicated by the GRI's reporting guidelines for stakeholder engagement. Stakeholder groups identified by the GRI guidelines are communities, civil society, customers, shareholders and providers of capital, suppliers, and employees, other workers, and their trade unions. The resulting variable list (shown in Appendix 1) is a reflection of the tradeoff between the desire to capture the fullest possible set of variables and the need to condense the source data.

Prior literature (e.g., Gray et al 1995a; Deegan and Gordon 1996; Deegan and Rankin 1996; Milne and Adler 1999; and Campbell 2000) relies upon either word counts or page counts to quantify the volume of disclosure. These mechanical approaches present difficulties when the potential exists for information to be repetitively offered (word counts implicitly overestimate the volume of unique disclosure) or where information may be scattered throughout the document or interleaved on a page with information from a separate category. Yet, as Gray et al. (1995b, p. 80) state, "the extent of disclosure [is an] indication of the importance of an issue to the reporting entity." In an effort to provide a more sensitive and nuanced picture of disclosure behavior than that provided by studies employing simple word and page counts to evaluate the extent of disclosure, we construct a scale whereby each information burst is evaluated as a single unit for the extent of disclosure of any given type present in the entire burst. This coding scheme represents a conceptual analysis with phrases or words as the level of analysis.

The coding scheme represents a conceptual analysis with phrases or words as the level of analysis. Each document in the sample was read to determine how intensively it covered a given variable. Each variable was coded for this intensity using a 7-point Likert scale (i.e., 0=No mention of [variable]; 1=[Variable] mentioned but only in reference to another document or statement; 2=Brief mention of [variable] with little or no detail; 3=Discussion of [variable] with some detail but not extensive detail; 4=Detailed discussion of [variable]; 5=Discussion of [variable] comprises over 50 percent of the document text; and 6=Document completely dedicated to discussion of [variable]). The traditional 5-point Likert scale was increased to 7-items when differentiating between our definitions of information intensity. In addition, our seven levels do not include a "neutral" middle score as a traditional 5-point Likert scale on "level of agreement" might. Increasing the levels in this manner permits the treatment of the ensuing disclosure rating as an interval scale variable for purposes of applying more advanced statistical tests. This coding scheme incorporates both coding for the existence (codes of zero versus non-zero) and the relative degree of dedication to the different information types (codes of 1-6).

To check for inter-rater reliability, three researchers used the specified coding system on 41 documents from five companies in the sample. Coders were compared for their level of inter-rater reliability using correlation coefficients. Coefficients exceeding 0.70 or 70 percent are considered reliable (Frey et al. 2000; Neuendorf 2002). Seven of the twelve variables had inter-rater correlations of 100 percent. All of the remaining five variables had inter-rater correlations of at least 85%, exceeding the cut-off rate established in the literature. Of those five variables, three had qualitatively significant discrepancies on a limited number of disclosures for the raters. For these items, the directions for the content coding instrument were clarified and further training was provided to the coders before resuming data collection. This process resulted in a set of translation rules that was applied to the entire sample. A summary of the directions is provided in Appendix 1.

A packet of all disclosure items, including website content, was assembled for each firm. Items were randomly assigned to coders to reduce the potential for coding errors due to researcher familiarity biases.

Analysis and Discussion

Quantity of CSR Reporting Provided by U.S. Firms

Research Question 1 asks what CSR reporting is being provided by U.S. firms. Of the 863 information bursts collected, 357 (41.4%) contained some CSR information. Table 3 shows the reporting rates by disclosure category. Information is provided in the community relations, health/safety, and diversity/human resources categories with some frequency (with 16%, 11.6%, and 10.8% of the original 863 disclosures featuring these types, respectively). See Appendix 2 for a selection of sample disclosures from the original source documents. Of the 50 sample firms, six provided no CSR disclosures at all: Foodarama (Grocery quintile 1), Genelabs (Pharma quintile 2), Icagen (Pharma quintile 2), Kestrel Energy (Oil quintile 1), Panhandle Royalty (Oil quintile 2), and W&T Offshore (Oil quintile 4).

Having established the general state of affairs with respect to the full package of public disclosures made by the sample firms in 2004, we limit the remaining discussion to the 357 information bursts that contained CSR disclosures. Table 4 displays the number of information bursts containing information pertaining to the specific study variables. The community relations and humanitarian initiative variables post the highest frequencies (each appearing in approximately 24% of information bursts offering CSR content contained each type of disclosure) consistent with the findings for the disclosure categories. Disclosures of environmental programs and employee health/safety issues were also common, with over 15 percent of CSR disclosures containing this type of information. Figure 1 provides a depiction of the frequency of disclosure aggregated across general categories. The emphasis on community disclosures is consistent with political economy theories suggesting CSR undertaken in pursuit of building or maintaining legitimacy with the social environment. Disclosures in the health and safety category are primarily aimed at customers, suggesting support for the use of these items to build or maintain consumer loyalty and market share. Diversity and HR disclosures may be made in order to secure the support of the providers of labor capital and possible as marketing tools to demonstrate convergent values with consumer bases.

Table 4 also shows a measure of disclosure that takes into consideration the degree to which the information bursts are dedicated to conveying information about the given variable (Intensity). Intensity is computed by multiplying the number of information bursts disclosing variable X at any given level of the Likert-scale coding Y (where $0 \geq Y \geq 6$) by Y, and summing them across variables. This measure captures both the frequency of information bursts featuring a particular type of disclosure, and the degree to which the information bursts are dedicated to the type of disclosure. The portfolio of public disclosures for a firm represents multiple information bursts disseminated through multiple media, as discussed below. It is unlikely that any given target population (with the possible exception of a buy-side analyst following the firm) will encounter the entire package of disclosures. The Intensity score incorporates the assumption that companies that are highly motivated to disclose a particular type of information both will disclose it in more venues (to increase the probability that the target audience will encounter it) and will dedicate more space within a given venue to conveying the information (to increase emphasis and direct audience attention more effectively to the information). Higher levels of Intensity thus indicate a greater emphasis on disclosure of the given variable. This is also true in a relative sense, where higher levels of Intensity for a given frequency of disclosure indicates that the information bursts were more dedicated to disclosure of that variable. Appendix 3 provides an illustration of the computation of the Intensity score.

Table 4 shows that while community relations matters were the most frequently reported item, it appears from the Intensity scores that humanitarian initiatives were more intensively discussed; that is, when information on humanitarian initiatives appeared, it consumed relatively more of the document in which it appeared than did community relations. Political giving again occupies the lowest position, indicating that when it was mentioned within an information burst it was not given particular attention within the burst. Figure 2 provides a depiction of the Intensity scores for the disaggregated CSR variables. Firms do not only frequently disclose in the community category, they provide heavy emphasis on these matters when they are introduced. While Figure 1 does not suggest a particular emphasis on environmental matters, it is clear from Figure 2 that certain types of environmental issues, proactive environmental management policies, are important for managers to convey. They may not appear with the frequency of the health and safety disclosures, but when they do appear, they appear prominently. The focus on these matters, as on the individual Diversity and HR variables, also lends support to the legitimacy and stakeholder arguments for CSR actions and disclosures. If these arguments are true, it appears that firms are most concerned at this time with demonstrating values that converge with those of their customers, employees, and communities.

It appears from the data presented in this section that CSR reporting is not uncommon among U.S. firms, but that the amount and degree of coverage of various elements of CSR is highly variable. Nearly half of all public disclosures made during 2004 by the sample firms contained at least some element of CSR reporting. In particular, community relations and humanitarian initiatives were frequently reported, as well as environmental and health and safety matters. The least commonly disclosed information pertains to political giving; this is consistent with the perceived lack of disclosure of this type of information reported by SIF (2006). Less than two percent of all disclosures made during 2004 included this type of information, and less than four percent of all disclosures containing CSR information included it. Coverage of this topic remains skimpy, despite numerous shareholder resolutions attempting to address perceived reporting deficiencies.

Reporting Formats for CSR Disclosures

Research Question 2 asks what reporting formats U.S. firms choose to convey CSR disclosures. Reporting media were collapsed into the format categories outlined in Table 2: mandatory filings; websites; governance documents other than proxies; product fact sheets; CSR reports or brochures; press releases; and other. Figure 3 provides a pie chart representing the relative frequencies (percentages) of each format category within the full sample of 863 information bursts. Of the 863 disclosures, websites are the most common medium (37.31%), while stand-alone governance documents are the second most common medium (19.58%). Mandatory filings are represented in approximately the same numbers as product fact sheets (12.05% and 9.04%, respectively). Consistent with the findings of Kolk (2003) the issuance of stand-alone CSR reports or brochures is relatively uncommon (4.52%).

Figure 4 provides a pie chart representing the relative frequencies (percentages) of each format category for information bursts that featured CSR content (n=357). Of these 357 disclosures, websites are a more common medium for providing CSR content (46.22%) than suggested by the distribution shown in Figure 3 (37.31%). These figures stand in contrast to the findings of Patten (2002) who observed, based on disclosures in 2000, low volume of social responsibility disclosures on corporate websites; it is probable that observed differences are due to temporal effects arising from waves of technological adoption. Press releases are the second-most popular medium, constituting 15.41 percent of information bursts with CSR content. The third most common format for providing these disclosures is the body of mandatory filings, at 12.89 percent. A comparison of the information presented in Figures 4 and 5 suggests a predilection for distributing CSR activity information through mass-media approaches such as corporate websites and press releases, and also suggests a target audience other than shareholders. This approach would generally be consistent with the marketing and political economy theories, as firms attempt to communicate their goal convergence or legitimacy status to their communities and non-investor stakeholders. Mandatory filings are also strongly represented in the distribution of information venues, suggesting that managers also wish to communicate their policies to shareholders. It is possible that if the general perception is that CSR activity is a useful marketing tool, it may provide a proxy for the intangible benefits of the marketing strategy and thus be generally considered to have value-relevance.

Table 5 shows the reporting of CSR disclosure categories by reporting format category.[13] In general, the most common format for delivering CSR data is via the company's website. Beyond the website, there is a fair amount of dispersion in the frequency of use of other formats. Over half of community relations information (55.7%) is provided through websites, with the remainder being primarily provided through press releases (22.1%). Diversity and human relationship disclosures are also provided largely through websites (43%) but many are also provided through mandatory filings (25.8%). Environmental disclosures are made mainly through websites (44.1%) but are also commonly made through CSR reports and brochures (20.6%). Employee health and safety information is likewise provided though websites

[13] The category-level results reported in Table 5 are generally qualitatively indicative of the underlying variables. Differences are found in the Diversity and Human Relations category, where workforce retention matters are more commonly reported in mandatory filings than on websites, and diversity and human capital initiatives are frequently (although not most frequently) reported in CSR reports and brochures. There is also a difference in the Human Rights and Supply Chain category, where human rights matters are most commonly reported in CSR reports and brochures and next-most commonly on websites.

(40%) but also often through mandatory filings (18.0%). Human rights and supply chain matters are discussed on websites (35.5%) as well as in CSR reports and brochures (19.4%). Political giving disclosures are split between mandatory filings, websites, governance documents, and "other" media. The proposition of relationships between format choices and disclosure types suggested by the comparison of Figures 4 and 5 is supported with a chi-square test (Yates' continuity-adjusted to accommodate low cell counts for some items) at $p<.001$.

It is evident from the analysis of this data that the venues most preferred by corporations for disseminating CSR information are corporate websites and press releases. It is also evident that the content of mandatory filings is expanding to include this type of information, especially in employment-related categories. CSR reports are not common, but include a broad range of topics and depth of coverage when they are offered.

Industry Differences in CSR Reporting

Hypothesis 1 asks to what extent there are industry-sector differences in CSR disclosures for U.S. firms. Table 6 shows disclosures by industry for each of the disclosure categories. Panel A of Table 6 displays the frequency of information bursts containing CSR disclosures. Panel A suggests inter-industry differences in disclosure pattern, consistent with prior literature, while Panel A displays mean and median Intensity scores for each disclosure category, by industry. Figure 5 provides a depiction of frequencies for each disclosure category, by industry.

Pharma frequently disclosed Community, Diversity and HR, and Health and Safety information. This would be consistent with the political economy theories as well as stakeholder wealth-maximizing: this is an R&D intensive industry that relies very heavily on the intellectual property developed through human capital. It is also a manufacturing industry with a very high public profile due to the nature of its product and frequent public-policy controversy over the availability and pricing of its products. The other manufacturing industry, Surgical Equipment, also disclosed these items most frequently. The legitimation argument is plausible in that this sector also relies on human capital issues; however, the marketing and political economy theories imply that the closer a firm is to consumers the more likely it is to engage in CSR. Therefore, the fact that this industry sector generally markets to other businesses rather than individual consumers suggests that the legitimation argument is less pronounced with respect to the Community category. The difference in median scores between Pharma and Mfg suggests that Community matters may indeed have been considered more important by Pharma firms, while providing assurances as to the safety of its processes and products seems to have been more strongly emphasized by Mfg. The Pharma sector arguably has similar issues with respect to the need to assure its constituencies of the safety of its processes (which as chemical manufacturing, may generate industrial accidents) and products (drug efficacy and safety). While theory suggests that reduced disclosure levels may be a function of the possession of "bad" news away from which managers wish to deflect information, it is also possible that the R&D intensiveness of young firms in this industry may result in fewer processes and products about which to make CSR disclosures.

As would be predicted by both the marketing and political economy theories, the sector with the closest ties to the consumer base and the community (Grocery) yields the most intensive efforts to disclose CSR information of nearly all types. Frequency and intensity (in mean and median terms) of all categories except for political giving are high in this sector. Software emphasizes employment issues (diversity and HR) and the safety of its processes and products (health and safety). As another industry that generates substantial intellectual property, it seems reasonable to interpret the diversity disclosures as an attempt to establish and maintain legitimacy with the firm's human resources. The health and safety disclosures for this industry revolve largely around security issues with various pieces of consumer software; given the context and nature of these firms, these may be at least as much of an effort to regain legitimacy (after reports of hacking, viral infections, and exposure to identity theft) as they are an effort to build or maintain it. In the context of regaining legitimacy, the only significant area of focus for the Oil sector is in the category of environmental matters. Other items are disclosed, but at fairly low rates and intensities.

Statistical tests of these industry differences on the firm level yields mixed results. The large differences between mean and median values shown in Panel B of Table 6, and the small sample sizes for each cell (10 firms per industry) suggest the use of non-parametric tests. Median tests yield statistical significance (at $p<.1$) for the community, diversity and HR, environment, and health and safety disclosure categories. Results of a Kruskal-Wallis test are generally supportive of the median tests. The statistical evidence at hand, then, provides support for H1, in that inter-industry differences exist in CSR disclosure frequencies.

Hypothesis 1 also extends to the question of whether there are industry-driven differences in reporting format choice. All theoretical approaches that suggest that CSR activity and disclosure are aimed at securing the loyalty of a particular customer base or access to labor or financial capital indicate that the choice of disclosure venue will be a function of the particular constituency with whom the company is attempting to establish legitimacy. That is, legitimacy efforts aimed at shareholders may well be conveyed in mandatory filings (which are distributed to all shareholders), those aimed at customers will be conveyed through product fact sheets, while those aimed at poorly defined constituencies are more likely to be conveyed through mass-media such as press releases or corporate websites. Therefore, in Table 7 we provide an analysis of inter-industry patterns in format choices.

Website disclosure is popular with all industries; however, beyond that, there appear to be marked industry differences in preferred venue for disclosure. The overwhelming majority of CSR disclosures in the Pharma industry are made through websites, suggesting the existence of a somewhat nebulous constituency. The Grocery sector, consistent with theoretical implications that this retail industry will be primarily concerned with communities and customers, makes most of its CSR disclosures through the mass-media approaches of websites and press releases. Manufacturing CSR disclosures are made websites and press releases, with a relatively large number made through mandatory filings as well. The use of mandatory filings, according to the theory, suggests a concern with shareholder expectations of the value of CSR activity. The Pharma, Grocery, and Mfg firms also produce relatively large numbers of special-purpose CSR reports. The existing theoretical literature does not yield clear expectations about these special-purpose statements. They are perhaps intended to serve as a marketing function, but this does not explain why they would be produced with any regularity in a sales environment primarily characterized by business-to-business transactions. Software firms use websites to disseminate this information, although not as extensively as the Pharma firms do. Software firms also use product fact sheets to convey CSR information, primarily that concerned with production process and product safety matters. Oil firms make use of websites, but also make considerable use of mandatory filings and governance documents. This suggests both a concern for the perceptions of the general public and for communicating sources of shareholder value. A chi-square test for association between industry and format choice rejects the null at $p<.001$, indicating that there are industry-driven differences in reporting format choice, and providing additional support for H1. The findings here stand in contrast to those of Maignan and Ralston (2002) who were unable to identify industry differences in website presentation of CSR disclosures. This could also be temporal effects, as Maignan and Ralston's (2002) data was based on disclosures made in 1999.

Firm-Size Differences in CSR Reporting

Hypothesis 2 asks to what extent CSR disclosure of U.S. firms is a function of firm size. Table 8 shows disclosures by category and by size. Panels A and B are based on relative firm size – that is, quintile rankings by industry category – based on total assets for each firm. According to Table 1 there is reason to believe that industries are not evenly distributed along the size continuum. Therefore, in Panels C and D of Table 8 we replicate the statistics based on absolute size – that is, quintile ranking the entire sample according to size and assigning firms to rankings irrespective of industry membership. Panel E displays the new industry distribution among the absolute size rankings. Panel E suggests that firms in the Grocery sector are disproportionately bunched near the top two absolute quintiles; all other firms are relatively evenly distributed among the absolute size quintiles.

Panel A of Table 8 is suggestive of a general size effect, with the largest firms within each industry disclosing CSR activity with the greatest frequency. Panel B also reflects this, indicating that the largest firms within each industry also place greater emphasis on their CSR activity when they discuss it.

What is interesting about Panels A and B, and not suggested by the literature, is that below the top quintile, the disclosures are on the whole not increasing in frequency and intensity with size. Other than a dramatic increase in disclosure for the very largest firms within each industry, no clear trends are discernable from Panels A and B.

In Panels C and D the firms have been re-ranked to create absolute size quintiles. As with the previous panels, these show evidence of a marked increase in disclosure among the very largest firms. Kruskal-Wallis and median tests indicate significant differences, likely as a function of the dramatic differences in median values between the largest quintile and all other firms. Below the largest quintile, there is little discernable pattern among either the frequencies or intensities of disclosure. While the prior literature in general suggests a firm-size effect for CSR disclosures (Gray et al. 1995a; and Deegan and Gordon 1996 for example), there is no evidence in this sample for a continuous effect. While Gray et al. (1995a) suggest that size may not be a continuous function for CSR because smaller firms may have alternative channels of communication, this explanation is not entirely consistent with our findings in this paper, which indicate that the smallest firms are disclosing with frequencies and intensities comparable to mid-size firms. Alternatively, Gray et al. (1995a, p. 70) posit that financial size may be less relevant than "political presence and public visibility" – difficult constructs to measure.

In an effort to explore the potential for size effects further, we examine reporting format choice by absolute size quintiles. Results are presented in Table 9. The use of websites to disseminate CSR information is roughly increasing with firm size, while the use of mandatory filings is roughly decreasing in firm size as is the use of press releases. These findings are not consistent with the speculation of Gray et al. (1995a) who, as noted above, suggest that smaller firms make more use of informal unobservable channels of communication with their constituencies. The findings are consistent with the proposition that smaller firms, who are required to make mandatory filings anyway, take advantage of those filings to also disclose their CSR activities and thus reduce the marginal direct costs of producing this information. They also make use of the relatively less costly press release, which may be consistent with the arguments of Gray et al. (1995a). These findings are also inconsistent with those of Patten (2002) who found low levels of CSR disclosure on websites. No clear pattern is identifiable with respect to the release of special-purpose CSR reports. A chi-square test (continuity-adjusted for low expected cell counts) rejects the null hypothesis of no associate between format choice and size at $p<.001$. In summary, we offer mixed evidence with respect to Hypothesis 2: there do appear to be statistically significant differences between disclosures from the very largest firms and all other firms, but we are not able to provide evidence of any other size-related trend in disclosure frequency or intensity. We are, however, able to document clear size-driven trends with respect to the reporting format choices.

Positive Content

In light of prior research (i.e., Deegan and Gordon 1996; Deegan and Rankin 1996; and Adams 2004, among others) we advance Hypothesis 3, that the content of CSR disclosures will be generally positive (or, as Deegan and Gordon 1996 refer to them, "self-laudatory"). We expect these disclosures to show the company in a favorable light, relative to less-favorable information. In order to accomplish tests of this hypothesis, all disclosures of study variables were evaluated by members of the research team to determine their degree of positive or negative content (or spin). Inter-rater reliability was assessed following the technique used for the main content analysis and described above. As with the main analysis, reliability levels were within conventional bounds. Documents were coded on a scale of one to five (inclusive) where a score of one was assigned to documents that were presented in an overall negative manner and a score of five to documents that were presented in an overall positive manner. Documents presented in a neutral manner received a score of three. The assessment was based on the presentation rather than the content of the information itself. That is, information about strong governance structures may be considered positive by some investors, however, the coding pertains to the manner in which the company presented the information, not its intrinsic content. See Appendix 4 for examples of favorable (positive) and unfavorable (negative) disclosures.

Table 10 presents information on positive/negative rating frequencies for the CSR disclosures. Panel A shows how many disclosures fell into each mutually-exclusive rating category. Overall, disclosures were positive in tone, consistent with the proposition that CSR disclosures may have a significant marketing role. Panel B considers reporting frequency of positive and negative disclosures by size quintile. These results suggest that smaller companies tend to make more neutral disclosures than larger ones. It is possible that this reflects a conservative tendency on the part of the smaller and presumably riskier firms. However, consistent with Panel A, the majority of disclosures regardless of the size of the firm within its industry are positive in tone. Panel C aggregates the positive and negative ratings into means and medians for each size quintile. All means cluster between 4.00 and 4.50 reflecting the overall positive tone of these disclosures with no significant difference based on size quintiles. Panel D presents mean and median tone by industry sector; results indicate a clustering of mean ratings between 4.19 and 4.58, reflecting an overall positive tone with no significant industry differences.

Table 11 presents mean positive and negative ratings. Panel A shows mean ratings based on disclosure category. The community relations category, which includes the frequently-reported community relations and humanitarian initiatives variables, has the most positive tone of all disclosure types. This lends support to the proposition that these disclosures are made to improve the company's reputation and/or decrease its political costs. The only significant outlier in this table is the tone of disclosures of political costs. These disclosures appear, on average, to be neutral in tone rather than positive.

Panel B of Table 11 presents an analysis of mean positive and negative ratings by format category. An ANCOVA analysis (not separately reported) modeling the mean positive or negative rating as a function of the reporting format category yields statistically significant results (Adj R^2=.178). A post-hoc Bonferroni test yields the information that the mean ratings for mandatory filings are significantly different than CSR reports or brochures, press releases, and other formats (p<.000, 000, and .021, respectively). Mean ratings for website disclosures are significantly different from those of governance documents (excluding proxies) at p<.001. Mean ratings for governance documents, excluding proxies, are also significantly different from CSR reports or brochures and press releases at p<.001. Mean ratings for product fact sheets are significant different from those for press releases at p<.018.

The results presented in Tables 10 and 11 are supportive of Hypothesis 3, that disclosure content is generally positive. These results are consistent with the findings of earlier research that suggests that CSR disclosures are predominantly self-laudatory. They are consistent with the prediction of the marketing theories that suggest that firms engage in CSR activity in an effort to woo customers. They are also consistent with the predictions of the political economy-based theories that suggest that corporations will focus on what they do "well" in the hopes of deflecting attention away from what they do poorly. This is, in fact, one of the primary venues of legitimation outlined by Dowling and Pfeffer (1975). Thus, these findings broadly lend support both to the marketing and political economy theories. The findings also indicate that firms are less "self-laudatory" when reporting CSR information in a document that is audited or reviewed and when reporting CSR data in venues commonly used to convey governance information. Unregulated, unattested-to documents such as press releases and websites contain, on the whole, information that is more positive in presentation.

Conclusions

The objectives of this study are to explore and describe CSR reporting practices among U.S. firms. We find first that CSR reporting is not uncommon among U.S. firms sampled in the study; 44 of 50 firms provided some CSR disclosures, and approximately 41% of public disclosures made by the sample firms contained some form of CSR reporting. The most common types of information disclosed during the period pertained to community relations, health and safety matters, and diversity and HR. Environmental matters were not discussed as often as these categories, but received considerable focus when they were introduced. Consistent with complaints levied by shareholders and activists (SIF 2006), political giving was very infrequently discussed and received minimal attention and detail when it was. In general, the volume, type of information, and intensity of focus of the CSR disclosures made by the sample firms appear to be consistent with the expectations of marketing and political economy-based theories, including legitimation and stakeholder theories. Finally, the U.S. appears to lag foreign firms in terms of the rates of disclosure of CSR activities. This may be a function of the regulatory and/or attestation environment as many other nations regulate non-financial and CSR data; several nations also provide for attestation to the reliability of the CSR information. It is possible U.S. firms are dissuaded from disclosing as investors may not take information seriously without assurance as to its quality. Additionally, the lack of disclosure on political giving is glaring. It is clear that shareholders have a desire for this information, yet disclosures remain spare and shallow. It is unclear whether shareholder resolutions or regulatory action will prove effective in ensuring that investors receive the information that they desire.

We then explored reporting format choices for these firms, including all public disclosures identified for 2004 for the sample firms. In contrast to prior research, we find that the corporate website is the most popular avenue for disseminating CSR disclosures, followed by press releases and by mandatory filings. This behavior is consistent both with the legitimation and stakeholder theories as well as shareholder wealth-maximization theories. Community information was disseminated primarily through websites and press releases, reflecting its usefulness to a broad and poorly-defined target audience. Diversity and HR disclosures were made primarily through websites and mandatory filings, suggesting that it confers information potentially valuable to shareholders, as well as to the broader target audience. Environmental disclosures were made primarily via websites and special-purpose CSR reports. These findings are also consistent with the expectations of political economy-based theories.

Based on prior literature, we hypothesized both industry and size effects. Industry effects were evident in the sample firms both in terms of frequency and intensity of focus and in reporting format choice. The hypothesized firm-size effects were evident only, however, for the very largest firms. Firms below the top quintile in asset size demonstrated no clear patterns or trends in frequency and intensity of analysis. Clear size trends were evident in reporting format choice, with website disclosures increasing in firm size, and disclosures through mandatory filings decreasing in firm size. The industry hypothesis is supported by the evidence in this study, but contrary to prior research, we can provide only mixed evidence for the size hypothesis. Also based on prior research, we find support for the proposition that the content of CSR disclosures is predominantly optimistic and self-laudatory. This effect, however, is attenuated when evaluating disclosures made in audited or reviewed documents vis-à-vis those made in non-reviewed forums.

The study results, therefore, provide a broad picture of CSR disclosure behavior among the sample of U.S. firms and provide some support for legitimacy, stakeholder, and marketing arguments pertaining to the corporate motivation for providing these disclosures. The study contributes to the existing literature in the area by extending deeper consideration to U.S. firms, expanding the consideration of CSR disclosures beyond a limited selection of media (as prior studies focus on the annual report alone, or on the corporate website, alone), and providing a tool for determining the amount of emphasis management places on a disclosure type that is more informative than simple frequency analysis. We also draw upon several established theories in order to better understand why managers choose to disclose this material, and to what extent the disclosure choices and content are sensitive to the business and resource context of the firm.

One potential implication from the results of this study is that perhaps the disclosures should be regulated to ensure consistency and comparability among the disclosures. This will allow comparative CSR analysis much in the way that financial statement analysis is currently undertaken. This in turn should benefit investors who want to allocate their investments among socially responsible firms. Further, the reliability of the disclosures could be enhanced if it was audited by an objective third party. Much in the way that financial statement data is given more reliability because it is audited, CSR disclosures may have more legitimacy if they received a stamp of approval from a third party. Finally, the study has implications for the marketing of more socially responsible firms. It appears with the tremendous growth in the investment in socially responsible firms, companies can explore how to capitalize on this trend through open and thorough CSR disclosures in both their audited material as well as on company websites.

As with any study, there are limitations that represent opportunities for future research. The sample firms are drawn from a limited number of relatively homogenous industries. Future studies could investigate disclosures in other industries such as those that are heavily regulated (e.g. financial services, noted by Kolk 2005 as a growing supplier of CSR disclosures). Additionally, we did not examine the role of corporate governance in determining disclosure. Thus, a follow-up study could examine whether better boards demand better disclosures of non-financial information. We also did not investigate whether the non-financial information is consistent with the financial data. It is possible that differential attention is paid to non-financial information depending on whether it corroborates or contradicts the financial data. Finally, our analysis evaluates only the presence and intensity of disclosure, not its quality. Future research should determine how much attention investors pay to the quality and/or depth of information disclosed.

Enhanced reporting may offer investors the means to better assess a company's likelihood of future success, current business acumen, or risk management systems. Indeed, it has been argued, for instance by the UNEP FI Asset Management Working Group (2004), that standards of materiality in equity pricing are changing as the role of business in global society changes. It will be essential to obtain both an understanding of investor demand for non-financial disclosures and an improved understanding of how investors use the types of non-financial disclosures examined in this paper. Only then will it be possible to consider standardizing or regulating this type of information.

A final major issue involves not only the disclosures of U.S. firms, but also of international firms as well. KPMG International (2005) notes that only 21 percent of the companies they surveyed engage with shareholders to identify the information needs of this group. The most commonly reported source for the content of CSR disclosures is the GRI, rather than active input from constituent parties. As KPMG (2005, 5) notes “It appears that the decision-making process for defining materiality, and therefore the content of sustainability reports, needs further attention if future reports are to fulfill the information needs, and therefore the consequent actions, of investors, customers, neighbors, and the public.” It is clear that it is time for researchers to investigate the demands for CSR disclosure, and to evaluate the degree to which the supply of these disclosures aligns with the demand.

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Table 1. Sample Firms

Size*	Company	Total Assets (in millions)	Size*	Company	Total Assets (in millions)
		Grocery			
1	Foodarama Supermarkets	348.636	3	Winn-Dixie Stores Inc	2618.891
1	Wild Oats Markets Inc	405.560	4	Great Atlantic & Pac Tea Co	2801.968
2	Ingles Markets Inc	1063.687	4	Supervalu Inc	6278.342
2	Whole Foods Market Inc	1519.793	5	Safeway Inc	15377.400
3	Pathmark Stores Inc	1253.400	5	Kroger Co	20491.000
		Manufacturing			
1	Cardima Inc	6.537	3	Endocare Inc	34.374
1	Cytomedix Inc	8.186	4	Possis Medical Inc	86.021
2	Bioject Medical Technol	18.370	4	Icu Medical Inc	164.768
2	Rochester Medical Corp	21.384	5	Boston Scientific Corp	8170.000
3	Memry Corp	32.988	5	Baxter International Inc	14147.000
		Oil			
1	Kestrel Energy Inc	2.991	3	Atp Oil & Gas Corp	372.147
1	Aspen Exploration	6.946	4	W&T Offshore Inc	760.784
2	Panhandle Royalty Co	54.186	4	Cabot Oil & Gas Corp	1210.956
2	Gulfport Energy Corp	78.150	5	Occidental Petroleum Corp	21391.000
3	Petroquest Energy Inc	231.617	5	Devon Energy Corp	29736.000
		Pharma			
1	Med Gen Inc	0.610	3	Seracare Life Sciences Inc	89.128
1	Lectec Corp	2.803	4	Chattem Inc	371.724
2	Genelabs Technologies Inc	29.383	4	K V Pharmaceutical	558.317
2	Icagen Inc	38.137	5	Johnson & Johnson	53317.000
3	Auxilium Pharma Inc	61.040	5	Pfizer Inc	123684.000
		Software			
1	Summus Inc/Oasys Mobile	2.406	3	Art Technology Group Inc	97.803
1	Simulations Plus Inc	4.964	4	Mro Software Inc	222.721
2	Peerless Systems Corp	12.647	4	Webmethods Inc	275.344
2	Document Sciences Corp	23.513	5	Sungard Data Systems Inc	5194.641
3	Ultimate Software Group Inc	52.546	5	Microsoft Corp	92389.000

*Size quintiles (within industries) ranked from 1 (smallest) to 5 (largest).

Table 2. Reporting Format Frequencies for Information Bursts, Full Sample

Format Category	Information Burst	Frequency	Percent
CSR Report or Brochure	CSR Report, Stand-Alone	2	.2
	S/G/E, H/E/S, Enviro, Or Citizenship Brochure	37	4.3
Governance Doc, Not Proxy	Whistleblowing/Complaint Procedures	6	.7
	Governance Guidelines	18	2.1
	Code Of Ethics/Code Of Conduct	48	5.6
	Board Committee Charters	97	11.2
Mandatory Filing	8-K (Other than Press Release)	2	.2
	Annual Report	24	2.8
	Proxy	32	3.7
	10-K	46	5.3
Other	Letter from Management, included in Annual Report	4	.5
	Analyst Conference Call	5	.6
	Letter From Mgt, Stand-Alone	5	.6
	Other	43	5.0
Press Release	Press Release	94	10.9
Product Fact Sheet	Product Fact Sheets	78	9.0
Website	Website (Company History)	8	.9
	Website (Charitable Giving And Foundations)	21	2.4
	Website (Careers And Employment)	26	3.0
	Website (Community Relations)	40	4.6
	Website (Other)	49	5.7
	Website (S/G/E)	51	5.9
	Website (About The Company)	56	6.5
	Website (Products And Services)	71	8.2
	Total	863	100.0

Table 3. Frequencies and Rates of CSR Disclosures, by Category (n=863)*

Disclosure Categories	Frequency	Percent of Total Information Bursts**
Community	140	16.2
Diversity and Human Resources	93	10.8
Environmental	68	7.9
Health and Safety	100	11.6
Human Rights and Supply Chain	62	7.2
Political	14	1.6
Other	31	3.6

*Includes all public disclosures identified for the entire sample of fifty firms

**Percentages will not sum to 100 percent, as not all disclosures include CSR information, and some disclosures contain more than one category of CSR information.

Table 4. Reporting Intensity by CSR Variable, Full Sample (n=357)*

	Number (%) of Information Bursts	Intensity Score**
COMMREL	87 (24.4)	373
HUMANAT	84 (23.5)	381
DIVERS	42(11.8)	156
HUMCAP	29 (8.1)	96
WKFRCRET	45 (12.6)	141
ENVIROPROG	63 (17.6)	253
ENVIRORAT	18 (5.0)	64
CUSTSAFETY	53 (14.8)	188
HLTH	55 (15.4)	190
HUMRTS	24 (6.7)	86
SUPPCHAIN	47 (13.2)	181
LOBBY	14 (3.9)	49

*Includes only information bursts containing some CSR disclosures.

**Sum of intensity scores [0-6] multiplied by the number of information bursts receiving each score; higher scores indicate variables that are more intensively discussed

Table 5. Format Category Frequencies (Percent) for Disclosure Categories (n=357)

Disclosure Category	**Format Categories**						
	Mandatory	*Website*	*Governance Doc, Not Proxy*	*Product Fact Sheet*	*CSR Report or Brochure*	*Press Release*	*Other*
Community	11 (7.9)	78 (55.7)	1 (0.7)	1 (0.7)	9 (6.4)	31 (22.1)	9 (6.4)
Diversity and Human Resources	24 (25.8)	40 (43.0)	2 (2.2)	1 (1.1)	7 (7.5)	6 (6.5)	13 (14.0)
Environmental	9 (13.2)	30 (44.1)	4 (5.9)	0 (0.0)	14 (20.6)	6 (8.8)	5 (7.4)
Health and Safety	18 (18.0)	40 (40.0)	5 (5.0)	10 (10.0)	8 (8.0)	9 (9.0)	10 (10.0)
Human Rights and Supply Chain	10 (16.1)	22 (35.5)	4 (6.5)	0 (0.0)	12 (19.4)	8 (12.9)	6 (9.7)
Political	3 (21.4)	4 (28.6)	3 (21.4)	0 (0.0)	0 (0.0)	0 (0.0)	4 (28.6)
Other	2 (6.5)	7 (22.6)	3 (9.7)	7 (22.6)	9 (29.0)	2 (6.5)	1 (3.2)

Table 6. Disclosures by Category and Industry

Panel A. Frequencies of Disclosure

	Frequency of Information Bursts					
Disclosure Category	*Pharma (n=89)*	*Grocery (n=104)*	*Mfg (n=79)*	*Software (n=52)*	*Oil (n=33)*	*Total*
Community	38	54	24	15	9	140
Diversity and Human Resources	28	23	20	11	11	93
Environmental	15	24	11	2	16	68
Health and Safety	25	17	26	23	9	100
Human Rights and Supply Chain	12	28	11	6	5	62
Political	5	6	2	0	1	14

Panel B. Intensity of Disclosure

	Mean (Median) Intensity Score				
Disclosure Category	*Pharma*	*Grocery*	*Mfg*	*Software*	*Oil*
Community	19.00 (0.00)	30.40 (25.50)	12.20 (0.00)	8.60 (0.00)	5.00 (0.00)
Diversity and Human Resources	11.30 (2.00)	8.90 (7.00)	8.00 (5.00)	5.40 (3.50)	5.60 (0.00)
Environmental	7.30 (0.00)	9.90 (7.00)	4.60 (0.00)	1.00 (0.00)	8.70 (1.00)
Health and Safety	9.10 (0.00)	6.80 (4.00)	9.40 (4.00)	9.70 (9.00)	2.80 (0.00)
Human Rights and Supply Chain	4.90 (1.00)	12.70 (3.00)	3.30 (0.00)	2.40 (1.00)	1.60 (0.00)
Political	2.00 (0.00)	2.10 (0.00)	0.50 (0.00)	0.00 (0.00)	0.30 (0.00)

Table 7. Reporting Format Choices by Industry

	Frequencies (%)				
Format Category	*Pharma*	*Grocery*	*Mfg*	*Software*	*Oil*
Mandatory Filing	6 (6.7)	12 (11.5)	15 (19.0)	7 (13.5)	6 (18.2)
Website	63 (70.8)	40 (38.5)	23 (29.1)	22 (42.3)	17 (51.5)
Governance Doc, other than Proxy	2 (2.2)	5 (4.8)	2 (2.5)	1 (1.9)	4 (12.1)
Product Fact Sheet	0 (0.0)	2 (1.9)	3 (3.8)	14 (26.9)	0 (0.0)
CSR Report or Brochure	10 (11.2)	7 (6.7)	8 (10.1)	2 (3.8)	5 (15.2)
Press Releases	1 (1.1)	32 (30.8)	20 (25.3)	2 (3.8)	0 (0.0)
Other	7 (7.9)	6 (5.8)	8 (10.1)	4 (7.7)	1 (3.0)

Table 8. Disclosures by Category and Firm Size

*Panel A. Frequencies of Disclosure, Relative Firm Size**

	Frequency of Information Bursts					
Disclosure Category	*Q1* *n=29*	*Q2* *n=37*	*Q3* *n=45*	*Q4* *n=37*	*Q5* *n=209*	*Total*
Community	11	8	11	7	103	140
Diversity and Human Resources	5	9	9	10	60	93
Environmental	10	6	6	1	45	68
Health and Safety	7	8	22	15	48	100
Human Rights and Supply Chain	8	17	5	3	29	62
Political	1	3	1	0	9	14

*Firms in each industry ranked on total assets; represents relative size within industry

*Panel B. Intensity of Disclosure, Relative Firm Size**

	Mean (Median) Intensity Score				
Disclosure Category	*Q1*	*Q2*	*Q3*	*Q4*	*Q5*
Community	6.70 (0.00)	3.30 (0.00)	6.20 (1.00)	3.80 (0.00)	55.20 (57.00)
Diversity and Human Resources	1.70 (1.50)	2.70 (3.00)	3.00 (1.00)	4.20 (2.00)	27.60 (21.00)
Environmental	3.60 (0.00)	3.20 (0.00)	2.10 (1.00)	0.30 (0.00)	22.30 (18.50)
Health and Safety	2.80 (0.00)	3.00 (0.00)	7.10 (4.00)	6.00 (2.00)	18.90 (13.50)
Human Rights and Supply Chain	2.70 (0.00)	8.30 (0.00)	1.60 (0.00)	0.80 (0.00)	11.50 (7.00)
Political	0.30 (0.00)	0.80 (0.00)	0.30 (0.00)	0.00 (0.00)	3.50 (1.00)

*Firms in each industry ranked on total assets; represents relative size within industry

*Panel C. Frequencies of Disclosure, Absolute Firm Size**

	Frequency of Information Bursts					
Disclosure Category	*Q1* *n=83*	*Q2* *n=52*	*Q3* *n=57*	*Q4* *n=103*	*Q5* *n=62*	*Total*
Community	25	19	15	36	45	140
Diversity and Human Resources	22	10	23	26	12	93
Environmental	12	4	16	27	9	68
Health and Safety	28	16	21	24	11	100
Human Rights and Supply Chain	16	0	9	30	7	62
Political	1	3	1	6	3	14

*All sample firms ranked on total assets; represents absolute size rankings rather than relative ones

*Panel D. Intensity of Disclosure, Absolute Firm Size**

	Mean (Median) Intensity Score				
Disclosure Category	*Q1*	*Q2*	*Q3*	*Q4*	*Q5*
Community	0.20 (0.00)	1.00 (0.00)	0.00 (0.00)	16.20 (10.00)	57.80 (57.00)
Diversity and Human Resources	2.30 (3.00)	1.80 (1.00)	2.80 (1.00)	3.40 (3.00)	28.90 (21.00)
Environmental	0.90 (0.00)	0.20 (0.00)	0.50 (0.00)	7.80 (2.50)	22.10 (18.50)
Health and Safety	2.90 (0.00)	4.10 (0.00)	7.60 (2.00)	4.70 (3.00)	18.50 (13.50)
Human Rights and Supply Chain	1.40 (0.00)	0.40 (0.00)	0.60 (0.00)	10.60 (0.00)	11.90 (8.00)
Political	0.30 (0.00)	0.00 (0.00)	0.30 (0.00)	0.80 (0.00)	3.50 (1.00)

*All sample firms ranked on total assets; represents absolute size rankings rather than relative ones

Panel E. Distribution of Industries within Absolute Size Rankings

	Number of Firms in Absolute Size Quintile				
Industry	*Q1*	*Q2*	*Q3*	*Q4*	*Q5*
Pharma	2	3	2	1	2
Grocery	0	0	1	6	3
Mfg	3	3	2	0	2
Software	3	2	3	1	1
Oil	2	2	2	2	2

Table 9. Reporting Format Choices by Absolute Size Rankings

	Frequencies (%)				
Format Category	*Q1*	*Q2*	*Q3*	*Q4*	*Q5*
Mandatory Filing	17 (20.5)	12 (23.1)	5 (8.8)	10 (9.7)	2 (3.2)
Website	24 (28.9)	9 (17.3)	29 (50.9)	54 (52.4)	49 (79.0)
Governance Doc, other than Proxy	2 (2.4)	2 (3.8)	4 (7.0)	5 (4.9)	1 (1.6)
Product Fact Sheet	3 (3.6)	14 (26.9)	2 (3.5)	0 (0.0)	0 (0.0)
CSR Report or Brochure	8 (9.6)	1 (1.9)	7 (12.3)	12 (11.7)	4 (6.5)
Press Releases	20 (24.1)	12 (23.1)	5 (8.8)	15 (14.6)	3 (4.8)
Other	9 (10.8)	2 (3.8)	5 (8.8)	7 (6.8)	3 (4.8)

Table 10. Descriptive Analysis of Favorable and Unfavorable Disclosures

Panel A. Full Sample

Positive/Negative Rating*	Frequency	Percent
Strictly Negative	0	0.0
Mostly Negative	4	1.1
Neutral	47	13.2
Mostly Positive	126	35.3
Strictly Positive	180	50.4
Total	357	100.0

*Rating pertains to the manner in which the company presented the information, not the intrinsic content of the information.

Panel B. Frequencies of Positive/Negative Ratings by Size Quintile, within Industry

	Number (%) of Information Bursts				
Positive/Negative Rating	*Q1* *n=29*	*Q2* *n=37*	*Q3* *n=45*	*Q4* *n=37*	*Q5* *n=209*
Strictly Negative	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Mostly Negative	0 (0.0)	1 (2.7)	1 (2.2)	0 (0.0)	2 (1.0)
Neutral	6 (20.7)	8 (21.6)	6 (13.3)	5 (13.5)	22 (10.5)
Mostly Positive	8 (27.6)	9 (24.3)	22 (48.9)	21 (56.8)	66 (31.6)
Strictly Positive	15 (51.7)	19 (51.4)	16 (35.6)	11 (29.7)	119 (56.9)

Panel C. Mean Positive/Negative Ratings by Size Quintile, Within Industry

Quintile	N	Mean	Median
1	29	4.31	5.00
2	37	4.24	5.00
3	45	4.18	4.00
4	37	4.16	4.00
5	209	4.44	5.00

Panel D. Mean Positive/Negative Ratings by Industry

Industry	N	Mean	Median
Pharma	89	4.19	4.00
Grocery	104	4.58	5.00
Manufacturing	79	4.32	4.00
Software	52	4.31	4.00
Oil	33	4.21	4.00

Table 11. Mean Favorable and Unfavorable Trends

Panel A: By Disclosure Category

	Positive/Negative Rating		
Disclosure Categories	*N*	*Mean*	*Median*
Community	140	4.70	5.00
Diversity and Human Resources	93	4.25	4.00
Environmental	68	4.49	5.00
Health and Safety	100	4.19	4.00
Human Rights and Supply Chain	62	4.39	4.00
Political	14	3.64	3.50
Other	31	4.23	4.00

Panel B. By Format Category

	Positive/Negative Ratings		
Format Category	*N*	*Mean*	*Median*
Mandatory Filings	46	3.72	4.00
Website	165	4.45	5.00
Governance Doc, Not Proxy	14	3.64	3.50
Product Fact Sheet	19	4.16	4.00
CSR Report or Brochure	32	4.50	5.00
Press Releases	55	4.76	5.00
Other	26	4.27	4.00

Figure 1. Information Included in CSR Disclosures, by General Type

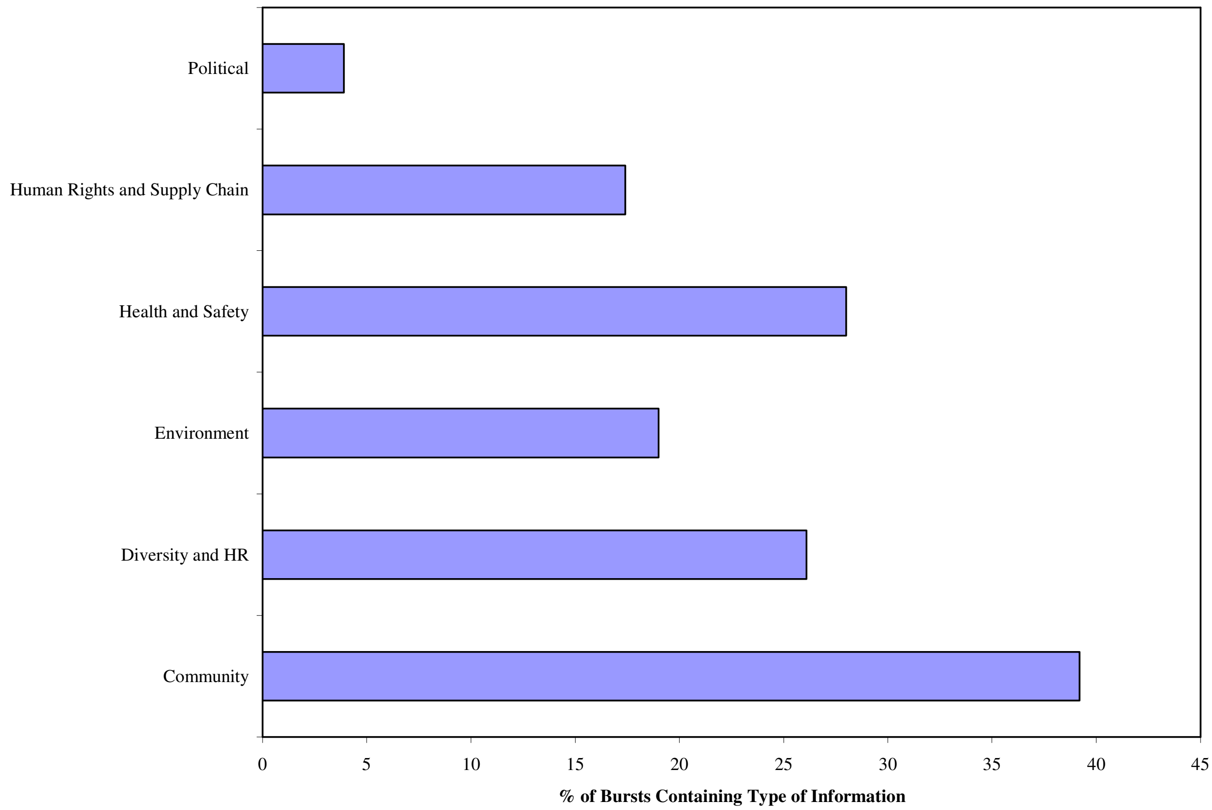

Figure 2. Intensity Scores for Disclosure Types

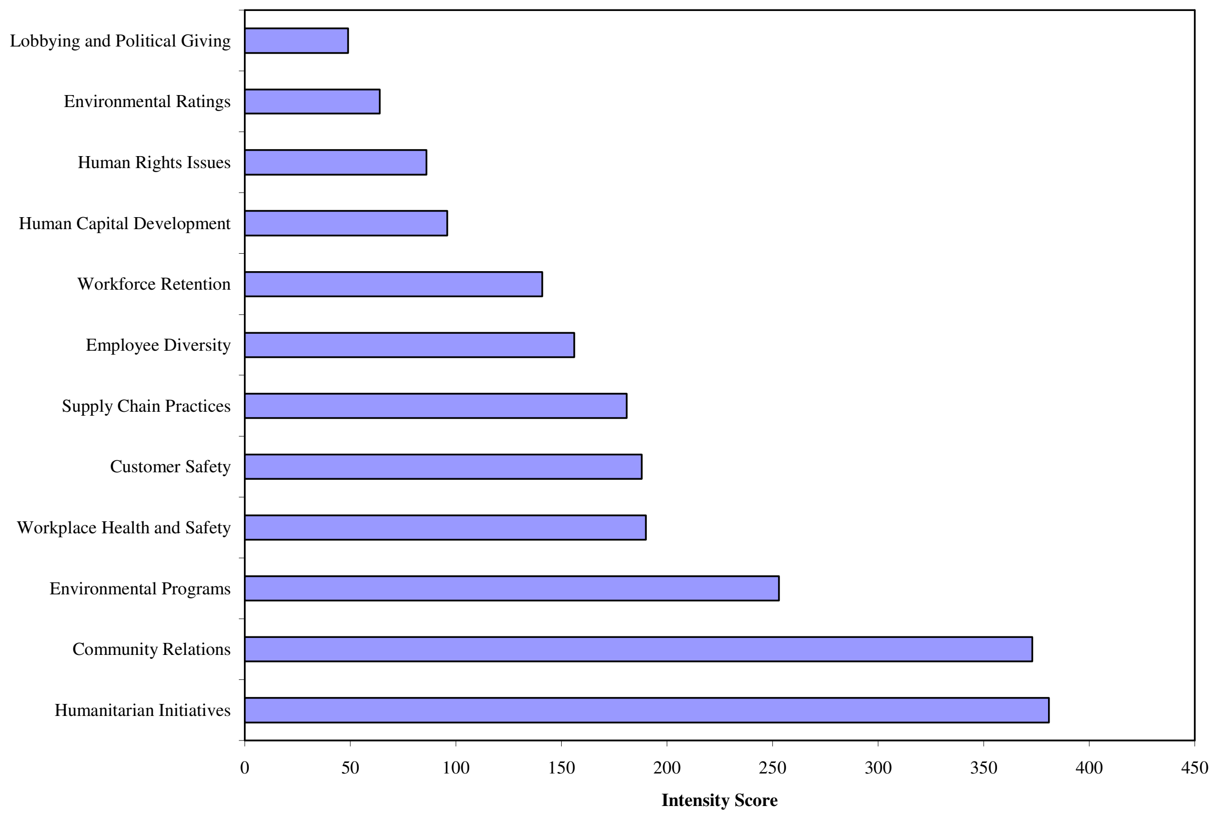

Figure 3. Disclosures by General Format, All Information Bursts (n=863)

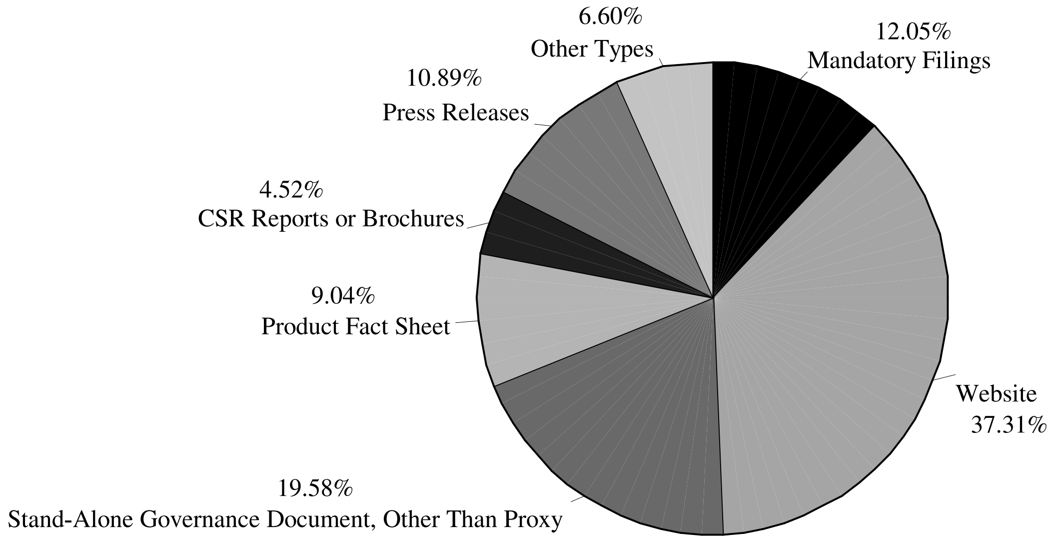

Figure 4. Disclosures by Format Category, Information Bursts Containing CSR Disclosures Only (n=357)

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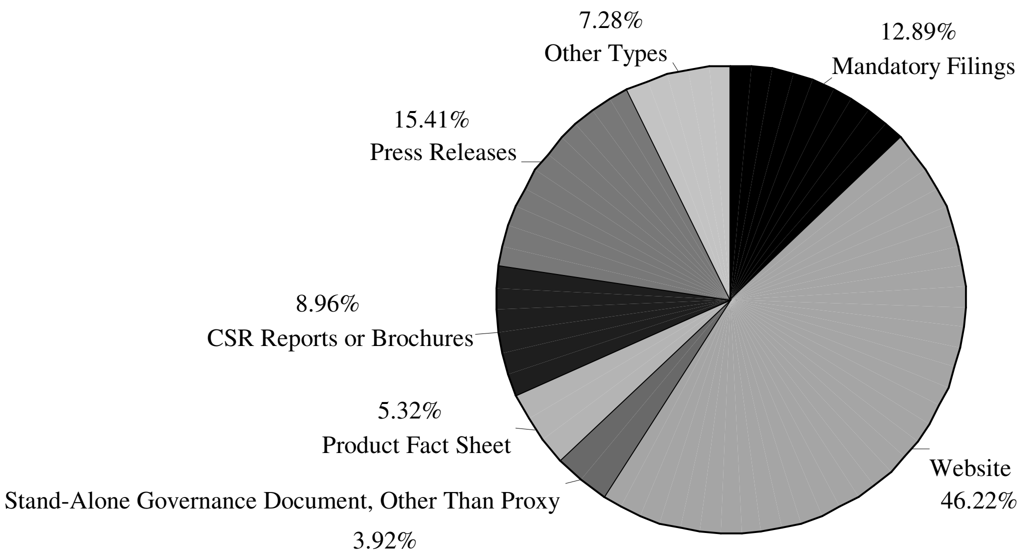
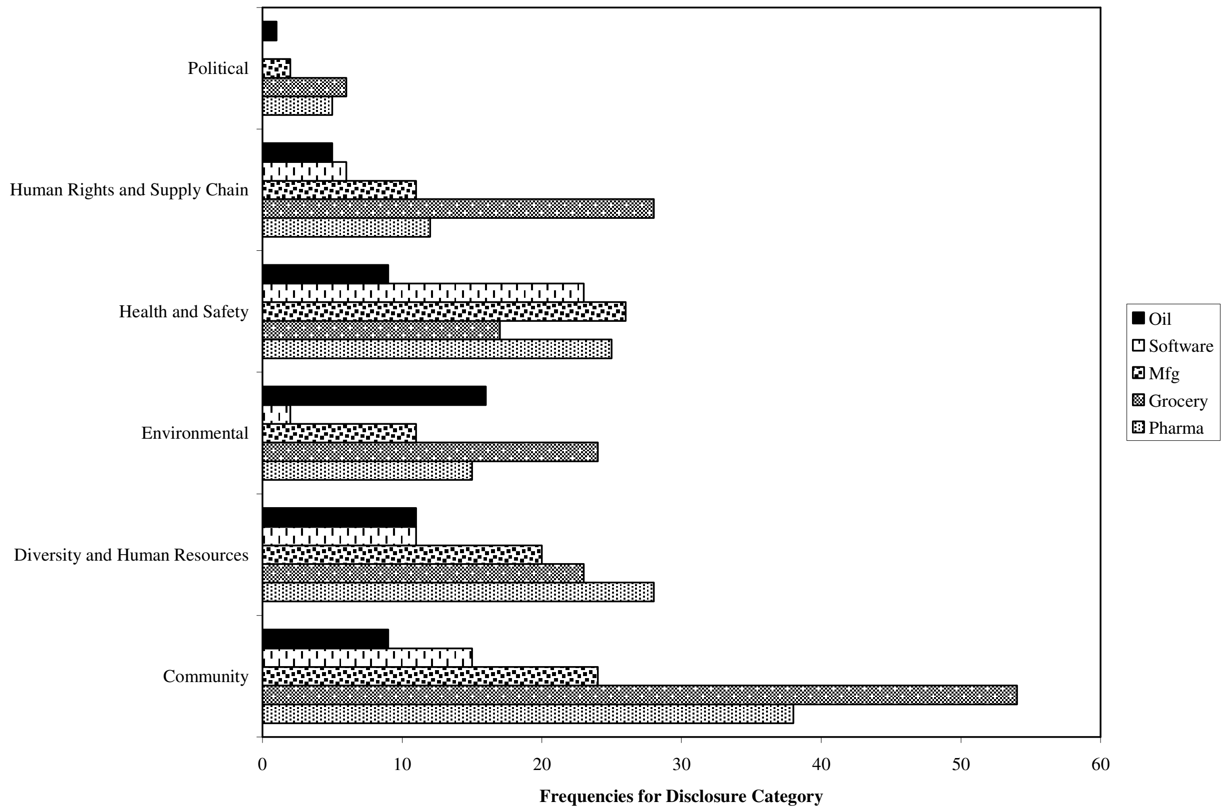


Figure 5. Mean Intensity Scores by Disclosure Category for Each Industry



Appendix 1. CSR Variables Coded in the Study

Disclosure Category	Variable	Detailed Description
Community	COMMREL	Discussion of programs designed to enhance the company's reputation in the community, including provision of goods or services at a discount to customers with financial needs. Includes community development programs, provision or funding of non-essential educational opportunities, company or related foundation funding of product development or research related to company's production function.
	HUMANAT	Discussion of the company's participation in humanitarian initiatives. Includes charitable contribution campaigns, contributions of money, services, or products to disaster relief efforts, donations of money, services, or products to indigent populations in the U.S. or abroad, and provision of educational services necessary to prevent spread of disease or maintain basic quality of life to indigent populations.
Diversity and HR	DIVERS	Discussions pertaining to existing employee diversity or diversity development initiatives. Includes diversity awards, certifications, or recognition conferred by an external party; statements of commitment to diversity in the workforce; discussions of multi-nationalism or multi-racialism within offices.
	HUMCAP	Discussion of any professional development opportunities provided to/available to employees through the company. Includes college tuition reimbursement plans; support for attending professional seminars; sponsoring of professional seminars for employees; and granting of fellowships for employees.
	WKFRCRET	Employee retention rates that do not involve comparison to other firms, benchmarks, or industry averages.
Environment	ENVIROPROG	Discussion of environmental management policies or programs. Includes estimates for waste management, recycling, and/or waste management; impact of organic/non-organic activities in biological supply chain; programs for reducing employee or community exposure to workplace toxins; statements of commitment to any environmental management practices or philosophies.
	ENVIRORAT	Discussion of external awards, certifications, notices, or other recognition pertaining to the company's environmental practices. Includes mention of censure for poor environmental practices and ratings of waste-management.
Health and Safety	CUSTSAFETY	Discussion of programs to protect customer safety or to enhance customer satisfaction. Includes defect rates; customer loyalty metrics that are not couched in terms of industry or external comparisons; potential risks associated with products.
	HLTH	Discussion of customer safety programs, initiatives, or discussion of significant customer or employee safety concerns; environmental safety issues; risks and metrics.
Human Rights and Supply Chain	HUMRTS	Discussion of human rights issues with respect to the supply/consumption chain. Includes statements of "fair" treatment of employees/suppliers; use of sweatshops; fair trade practices; and payment of "living wages" to foreign providers.
	SUPPCHAIN	Discussion of dedication, interest, or lack thereof in the quality of the supply chain. Includes description of quality or product requirements places on suppliers; unique supplier populations or unique requirements relative to standard industry practice.
Political	POLGIVING	Discussion of political giving, lobbying activities, including mention of PACs. Includes disclosure of related parties presence on relevant regulatory bodies.
Other	OTHER	Other social or environmental disclosures that do not fall within another category

Appendix 2. Selected Disclosures from Source Documents

1. Press Release Disclosing a Community Relations Initiative

"The Kroger Co. (NYSE: KR) today announced that it donated more than 26 million pounds of food last year to America's Second Harvest, the nation's largest domestic hunger relief organization. The donation, which was valued at over $42 million, ranked as the largest in Kroger's history.

'Kroger is proud to support America's Second Harvest in the fight against hunger,' said David B. Dillon, Kroger chief executive officer. 'At a time when food pantries across the nation are facing increased demand, our retail divisions are working in partnership with local food banks and food-rescue organizations to generate greater awareness of hunger relief programs, share best practices in raising food donations, and pursue new donation opportunities...Kroger's retail divisions work with more than 40 regional food banks around the country that are affiliated with Second Harvest. Kroger consistently ranks as one of the largest retail contributors of food and grocery products to the non-profit organization. The Company twice has been named 'National Retailer of the Year' by America's Second Harvest.'"[14]

2. Website Disclosing a Humanitarian Initiative

"Through Our Credo, Johnson & Johnson is committed to improving the community through a variety of programs both in the United States and abroad. In this section, you can learn about our Contributions program, Environmental commitments and Health and Safety efforts...[at] Johnson & Johnson's subsidiary in Indonesia, its employees and its companies in the region responded quickly to the massive earthquake that recently struck the central Java region of Indonesia. In addition, Johnson & Johnson disaster supplies were airlifted by Direct Relief International, a long-standing partner of Johnson & Johnson in providing critical products to assist the people affected by natural disasters. The Company also made arrangements with the American Red Cross, Islamic Relief USA, and Project HOPE for employees to make direct and immediate donations to Indonesia, which will be matched dollar-for-dollar by Johnson & Johnson."[15]

3. Website Disclosing Environmental and Health and Safety Information

"Through our contributions efforts, we are actively involved in supporting ongoing health care, educational and cultural programs. We are committed to a healthy environment through a reduction in our facility environmental impacts and our participation in conservation projects. Johnson & Johnson has established high standards for the health and safety of our workers and has worked with others in our community to share our knowledge in this area."[16]

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[14] As the only content of the press release, this disclosure was assigned an intensity code of 6 for community relations.

[15] As a portion (less than 50%) of the website information burst, this disclosure was assigned an intensity code of 4 for humanitarian initiatives.

[16] As a portion of a website information burst, this disclosure was assigned an intensity code of 2 for environmental programs and health and safety.

Appendix 3. Examples of Computation of Intensity Scores

Community Relations

Level of Dedication	No of Disclosures Per Level	
0	776	0
1	2	2
2	15	30
3	13	39
4	16	64
5	8	40
6	33	198
Total Intensity Score		373

Customer Safety

Level of Dedication	No of Disclosures Per Level	
0	810	0
1	2	2
2	17	34
3	10	30
4	9	36
5	4	20
6	11	66
Total Intensity Score		188

Lobbying and Political Giving

Level of Dedication	No of Disclosures Per Level	
0	849	0
1	2	2
2	1	2
3	5	15
4	3	12
5	0	0
6	3	18
Total Intensity Score		49

Appendix 4. Sample Favorable and Unfavorable Disclosures, from Source Documents

1. Slightly Negative Disclosure of Workforce Retention Issues

“We believe our relationship with our employees is good, thought that may not continue”

2. Neutral Disclosure of Workforce Retention Issues

“As of April 23.2004 the Company had a total of 121 employees plus 19 who performed efforts as consultants and contractors. None of the Company’s employees is represented by a labor union, and the Company has never experienced any work stoppage. The Company considers its relations with its employees to be good.”

3. Positive Disclosure of Health and Safety Issues

“Safeway Inc. (NYSE:SWY) today announced a public education and employee training program aimed at informing consumers and its employees about California tobacco laws to help curb tobacco sales to minors. The program was designed with the help of California Attorney General Bill Lockyer and Los Angeles City Attorney Rocky Delgadillo and is part of the Attorney General's statewide effort to significantly reduce the purchase of tobacco products by underage teens. ‘Safeway takes the sale of tobacco products to minors seriously. We have worked with Attorney General Lockyer to develop a program that makes Safeway a leader in helping reduce the purchase of tobacco products by underage teens,’ said Safeway Executive Vice President Larree Renda. "This new initiative will strengthen our ongoing programs and help send a clear message to minors not to attempt purchasing tobacco products at our stores.”