Tweetjacked: The Impact of Social Media on Corporate Greenwash

Thomas P. Lyon[†] and A. Wren Montgomery[1]

June 30, 2012

Abstract

We address gaps in institutional theory's understanding of the effects of enhanced stakeholder information, now offered by the advent of social media, by introducing the rich economics literature on information, disclosure and green wash. We identify a set of key differences between social media and traditional media, drawing on both the literatures of economics and institutional theory. With these differences in mind, we present a theoretical framework for understanding greenwash whose key feature is that citizens and activists decry corporate hypocrisy when they learn that a company does not "walk the talk". The framework provides insight into firm behavior under a variety of scenarios regarding the level of consumer information, and allows us to draw out a series of propositions regarding the impact of social media on corporate decisions of whether to greenwash, and if so, via what channels. We conclude with a number of suggestions for future research.

Keywords: greenwash, social media, corporate social responsibility, information disclosure, legitimacy, decoupling.

[†] Ross School of Business, 701 Tappan Street, University of Michigan, Ann Arbor, MI 48109. 734-615-1639. tplyon@umich.edu.

[‡] School of Business, Goodes Hall Room 401, Queen's University, Kingston, ON, Canada, K7L 3N6. 613-331-1553. wmontgomery@queens.ca.

Tweetjacked: The Impact of Social Media on Corporate Greenwash

Abstract

We address gaps in institutional theory's understanding of the effects of enhanced stakeholder information, now offered by the advent of social media, by introducing the rich economics literature on information, disclosure and green wash. We identify a set of key differences between social media and traditional media, drawing on both the literatures of economics and institutional theory. With these differences in mind, we present a theoretical framework for understanding greenwash whose key feature is that citizens and activists decry corporate hypocrisy when they learn that a company does not "walk the talk". The framework provides insight into firm behavior under a variety of scenarios regarding the level of consumer information, and allows us to draw out a series of propositions regarding the impact of social media on corporate decisions of whether to greenwash, and if so, via what channels. We conclude with a number of suggestions for future research.

Keywords: greenwash, social media, corporate social responsibility, information disclosure, legitimacy and decoupling.

INTRODUCTION

The advent of Web 2.0 introduced an array of social media tools to consumers and other corporate stakeholders, allowing for novel forms of interacting, sharing and connecting via the internet. Including blogs, social media, online petitions and wiki pages, these technological and social tools are redefining interactions between corporations and civil society in a number of areas (Fieseler et al., 2010). With previously unheard of access to information and networks, consumers and activists alike are finding a new voice in their interactions with corporations.

Fast-food giant McDonald's offers an important lesson in the power of the new social media. When the company launched a Twitter campaign around the hashtag #McDStories, it hoped to give customers and suppliers a venue to share positive stories about the farmers that produce the ingredients for Big Macs and Chicken McNuggets. The initial tweet read "when u make something w/pride, people can taste it. McD potato supplier #McDStories." Almost immediately, the Twitterverse pushed back with a flood of negative #McDStories about food poisoning, low labor standards, and animal welfare concerns at the fast-food chain. Within hours, the embarrassed company pulled the campaign. This case of "tweetjacking" is already considered one of the biggest corporate social media disasters of 2012 (Thomases, 2012).

The McDonald's incident offers a vivid example of the speed and impact with which social media can create a backlash when corporations try to project an image that strikes consumers as hypocritical. This is a particularly important issue for the rising tide of corporate communications around corporate social responsibility (CSR) and sustainability. Over 75% of the S&P 500 have sections of their websites devoted to disclosing information about their social and environmental policies and performance (Alves, 2009). Green advertising grew almost

300% between 2006 and 2009 (TerraChoice, 2009), and sales of green products and services are projected to climb from $230 billion in 2009 to $845 billion by 2015 (Tolliver-Nigro, 2009).

As corporate green claims have mushroomed, however, consumers have grown increasingly skeptical about their authenticity. They have good reason to be wary: fully 98% of the products making environmental claims in 2009 misled consumers by committing one or more of the "seven sins of greenwashing" (TerraChoice, 2009). Delmas and Burbano (2011) define greenwashing as "the intersection of two firm behaviors: poor environmental performance and positive communication about environmental performance" (p. 65). Greenwashing encompasses a range of intentional actions to "mislead" consumers (Delmas and Burbano, 2011) through providing "disinformation" (Ramus and Montiel, 2005) about the firm or its products. Laufer (2003) identifies a suite of strategies that companies use to greenwash, all of them relying on the limited ability of stakeholders in civil society to gather information, communicate, and monitor corporate actions.

Greenwashing is not without risk for companies, as can be seen in the increasing denunciation by environmental activists and concerned citizens of corporate environmental efforts as PR campaigns. For example, Starbucks Corporation was recently accused of greenwashing for promoting recycling on its cups with the slogan "help us help the planet" on its cup holder sleeves (Conrad, 2007). Although Starbucks uses cups made of 10% recycled material, the cups themselves are not recyclable in most cities due to their plastic coating. BP has also been heavily criticized for misleading the public with its multimillion-dollar advertising campaign announcing its commitment to alternative energy sources, when in reality BP allocates 93% of its total investment funds for the development and extraction of oil, gas and other fossil fuels and less than 5% for solar and wind power (Cuff, 2012; Gray, 2008). The company's

claims to social responsibility have meant that BP attracts more attention when it makes mistakes: oil spills at BP were significantly more likely to be reported in the media than equivalent spills at Exxon (Luo et al. 2012). The Coca-Cola Company similarly came under attack and was awarded a Polaris Institute "greenwashing award" when it announced that the company had cut back its water usage by about 4% annually in order to reduce its water footprint (Polaris Institute, 2005). Coke was criticized because its bottlers do not generally disclose how much water they are taking, and hence it is impossible to verify the company's claim.

The impact of greenwash on consumer confidence has led to calls for further theoretical work on whether "CSR engagement of a firm is authentic or simply a façade" (Castello and Lozano, 2011, p. 24). Management research has drawn heavily on institutional theory to illuminate corporate CSR activities (e.g. Aguinis and Glavas, 2012; Bansal and Clelland, 2004; Campbell, 2007) and greenwash behavior (e.g. Bansal and Clelland, 2004; Ramus and Montiel, 2005). This research builds on early seminal theoretical work on institutional pressures (DiMaggio and Powell, 1983) as well as on legitimacy, decoupling and symbolic management (Meyer and Rowan, 1977; Pfeffer, 1981; Westphal and Zajac, 1994). However, while providing valuable insight, institutional theory may be limited in its ability to fully explain the impact of the growing use of social media on greenwashing. This is due in part to institutional theory's limited exploration of power interactions and the relative roles of elite and grassroots power in the creation and maintenance of institutions (Clegg, 2010; Lawrence, 2008). As a result, existing theory offers few examples of the likely impact of upsetting these power relations by offering consumers enhanced access to information and communication tools through social media. Furthermore, existing theory tends to treat decoupling and symbolic management as costless

(Kim and Lyon, 2012), making it difficult for the theory to explain how social media will affect the risk to companies of corporate greenwashing.

In contrast, economic theory has a rich literature on the role of information dissemination, corporate environmental and social disclosures, and the impacts of greenwash. As a discipline, economics emphasizes theoretical rigor, empirical testing, and the balancing of costs and benefits by individual actors who are assumed to make rational decisions. It is thus well poised to explicate the mechanisms through which greenwash is promulgated and through which activists and concerned citizens may oppose it. However, economics provides little explanation for corporate and consumer behaviors that are not fully "rational," such as the fact that 27% of respondents in research commissioned by the Federal Trade Commission interpreted the unqualified claims "green" and "eco-friendly" as suggesting the product has no negative environmental impact whatsoever (US Federal Trade Commission 2010, p. 45). Here, drawing from the institutional theory literature may enrich the economic understanding of the role of legitimacy, norms and values in better understanding and predicting corporate behaviours around CSR as social media access grows.

We suggest that expanding our understanding of greenwash, and the impacts of social media on such corporate activities, is one area where drawing on work at the nexus of institutional theory and economics may be particularly fruitful. While economic approaches to understanding organizations focus on rationality and efficiency, institutional theory emphasizes a more socialized environment in which organizations' actions are constrained by taken-for granted norms and values (Granovetter, 2005; Roberts, 2008). Work at the intersection of these two areas of research has been called a "challenging endeavor" yet one that offers much promise (Roberts, 2008, p. 560). Theoretical integration may also be especially important in advancing

the understanding of CSR in management research (Aguinis and Glavas, 2012). In examining research at this nexus we seek to offer novel perspectives on two questions. First, how might combining the theoretical approaches of institutional theory and economics provide new insight to the literature on CSR, and greenwash specifically? And, how will social media alter corporate greenwash behaviors and environmental communications?

This paper begins with an overview of the institutional theory literature on CSR, focusing specifically on the use of CSR to enhance legitimacy and on the temptation for firms to decouple or greenwash such activities. Second, we address gaps in institutional theory's understanding of the effects of enhanced stakeholder information, now offered by the advent of social media, by introducing the economics literature on information, disclosure and greenwash. Next, we identify a set of key differences between social media and traditional media, drawing on both the literatures of economics and institutional theory. With these differences in mind, we present a theoretical framework for understanding greenwash whose key feature is that citizens and activists decry corporate hypocrisy when they learn that a company does not "walk the talk". The framework provides insight into firm behavior under a variety of scenarios regarding the level of consumer information, and allows us to draw out a series of propositions regarding the impact of social media on corporate decisions of whether to greenwash, and if so, via what channels. We conclude with a number of suggestions for future research.

THEORETICAL FOUNDATIONS

Institutional theory, legitimacy and greenwash

Corporate social responsibility has been the subject of a large and growing literature across numerous disciplines, institutional theory among them. In a detailed review of the

literature, Campbell (2007) makes a cogent argument for the important effect of various institutional forces on corporate CSR behaviors. Institutional forces have been found to affect both the "extent of and types of CSR actions and policies firms choose to implement" (Aguinis and Glavas, 2012, p. 941). While a broad literature has examined the impact of CSR practices on financial outcomes, CSR has also been widely recognized as a tool to enhance and manage corporate legitimacy (Campbell, 2007; Schultz and Wehmeier, 2010; Margolis and Walsh, 2003; Bansal and Clelland, 2004; Castello and Lozano, 2011; Laufer, 2003). Adapting Suchman's (1995) definition, Bansal and Clelland (2004, p. 94) define corporate environmental legitimacy specifically as "the generalized perception or assumption that a firm's corporate environmental performance is desirable, proper or appropriate," while illustrating that such legitimacy can reduce a firm's exposure to unsystematic risk.

The very fact that CSR practices hold numerous advantages, both for firms and for society as a whole, provides incentives for misuse. Meyer and Rowan (1977), in their foundational work on organizational legitimacy, warn of this possibility, suggesting that organizations may manage outside impressions by decoupling elements of their core internal activities from the more visible and public aspects of the organization. The authors speculate that firms would actively avoid monitoring and inspection of their practices in order to maintain this façade, and enhance legitimacy. Westphal and Zajac (1994; 1998) and Pfeffer (1981) have approached this same issue in terms of symbolic versus substantive management practices, allowing corporations to appear to meet external demands while maintaining internal autonomy.

Such decoupling behaviors have been of particular concern as the social pressures for organizations to participate in socially and environmentally responsible activities have grown. In an extensive review of the management and institutional literature on CSR, Aguinis and Glavas

(2012) find firms partaking in “symbolic rather than genuine actions” to both meet “minimum requirements” and to “appease stakeholders” (p. 941). Bansal and Clelland (2004) likewise point out the incentives for firms to simply “greenwash” their activities through public relations efforts in order to enhance legitimacy and reduce risk. Ramus and Montiel (2005) find differences between corporate commitments to environmental policies and actual implementation, concluding that many environmental commitments are simply greenwash. Through such decoupling activities greenwash allows firms to “creatively manage their reputations” by deflecting blame and hiding undesirable activities while protecting and enhancing corporate legitimacy (Laufer, 2003, p. 255).

Underlying the institutional approach to decoupling and greenwash is this ability of corporations to successfully separate their public activities from what happens “backstage.” However, little research to date has explored the implications of increased transparency on the success of such practices and the resulting impacts on corporate legitimacy. We therefore turn to the literature on information economics to enrich the institutional approach to greenwash.

Economics of information, disclosure and greenwash

Traditional economic models of market competition assumed all actors had complete information. As acknowledged by the 2001 Nobel Prize in Economic Sciences, however, more recent work has shown that market efficiency can be severely affected when some actors know more than others (Akerlof, 1970; Spence, 1973; Rothschild and Stiglitz, 1976). Indeed, the “great recession” of 2008 exemplifies the disastrous results that can occur when markets are poorly informed.

When companies make claims about corporate sustainability and CSR, consumers are at a severe informational disadvantage. Often it is the production process, not the quality of the final product, that is of concern. Even repeated use of a product will not reveal anything about whether it was made with recycled materials, organic methods, or by fairly compensated workers. Economists refer to such products as "credence goods," because the consumer has no independent means of assessing the company's claims. How markets respond to the disclosure of information about corporate environmental and social performance is an important research question.

The economics literature on corporate environmental and social disclosure is growing rapidly. It makes a clear distinction between mandatory disclosure (imposed either by government regulations or rankings by independent third parties) and voluntary disclosure. Most of the empirical literature has focused on mandatory disclosure programs such as the Toxic Release Inventory in the US (Konar and Cohen, 1994; Hamilton, 1995), the Green Ratings Program in India (Gupta and Goldar, 2005; Powers et al., 2010), climate ratings by environmental organizations (Beatty and Shimshack, 2009), or state-mandated electricity bill inserts (Delmas at al., 2010). In general, the evidence suggests that stock markets respond to environmental transparency by punishing firms with poor environmental records, but that firms with good records often receive no direct financial rewards (Laplante and Lanoie, 1994; Hamilton, 1995; Konar and Cohen, 1996; Khanna et al., 1998; Gupta and Goldar, 2005; Beatty and Shimshack, 2010).

A key difference between mandatory and voluntary disclosure is that voluntary disclosure introduces "selection effects" in the sense that firms can choose whether or not to disclose. One might expect that firms are more likely to disclose information if they have positive information

to report. Indeed, this is exactly what the theoretical literature on voluntary disclosure shows: a manager only discloses information voluntarily when the firm has "good news," that is, when it performs better than market expectations (Milgrom, 1981; Verrecchia, 1983).

Much of the academic literature on voluntary environmental disclosure aims to explain the extent of attention to environmental matters in corporate annual reports, corporate social responsibility reports, and 10K securities filings (Patten, 1991; Patten, 2002; Al-Tuwaijri et al., 2004; Clarkson et al., 2008). Surprisingly, there is no academic consensus on whether voluntary environmental disclosures and environmental performance are even positively correlated. Economic models of disclosure imply a positive relationship, since firms with better performance will have more positive outcomes to disclose (Milgrom and Roberts, 1981; Verecchia, 1983), and there exists some empirical literature to support this view (Al-Tuwaijri et al., 2004; Clarkson et al., 2008). Yet, to the contrary, some researchers find that firms increase their disclosures after an accident or other negative event in an attempt to bolster their tarnished reputations (Patten, 1991; 1992). In light of these mixed findings, it is not surprising that many environmental advocates are distrustful of voluntary environmental disclosures and wary of greenwash.

Although one would expect that voluntary disclosures would be associated with higher share prices, the effects of voluntary environmental actions and disclosures on financial performance are mixed. In some cases, stock markets reward exemplary performance (Klassen and McLaughlin, 1996; Dasgupta et al., 2001; King and Lenox, 2001). However, some research finds good news that is a function of corporate participation in environmental management systems (Wang and Yuan, 2004; Alberton et al., 2009; Canon-de-Francia and Garces-Ayerbe, 2009), or voluntary programs like the Carbon Disclosure Project (Kim and Lyon, 2011) or

Climate Leaders (Fisher-Vanden and Thorburn, 2011) is not valued by the market, and may even meet a negative response. Even environmental awards may receive a negative response from the markets if they are not issued by governmental agencies (Jacobs et al., 2010; Lyon et al., 2011). A neutral response may occur because external parties cannot distinguish greenwash (Lyon and Maxwell, 2011) or symbolic action (Pfeffer, 1981; Westphal and Zajac, 1994; Delmas and Montes-Sancho, 2010) from substantive action. A negative response may occur because firms are pressured into taking action so that what appears "voluntary" is in fact coerced, and hence should not be expected to be profitable (Reid and Toffel, 2009; Fisher-Vanden and Thorburn, 2011).

INFORMATION AND THE ROLE OF MEDIA

As mentioned in the Introduction, companies are already at risk of consumer backlash when they engage in greenwashing. Our interest is in how the balance of power between companies and consumers is changed by the introduction of social media. In this section, we compare and contrast old and new media to suggest that social media has the potential to both enhance and redefine the flow of information between corporations and consumers around CSR issues. In the following section we embed these insights into a framework for understanding greenwash in order to theorize about the impact of superior consumer information access through social media on corporate CSR practices. More specifically, we focus on the likelihood that firms participate in greenwash behaviours, and if they do, the likelihood that they do so via social media channels.

The media has played an important role in the often challenging task of communicating and disseminating information about corporate CSR initiatives to stakeholders, and in consumers' perceptions of corporate credibility regarding such efforts (Du, Bhattacharya, and Sen, 2010; Fieseler et al., 2010). Although the media can operate as a "watchdog" over CSR behaviors (Campbell, 2007), media have also been vital in companies' efforts to set agendas and to frame CSR and sustainability issues advantageously (Schultz et al., 2012). For example, Shultz at al. (2012), in a study of media coverage of the 2010 BP oil spill, find that the media were an essential tool in BP's successful public relations efforts and "strategy of decoupling the problem from the corporation's activities" (p. 104). Public relations research suggests that the majority of traditional media coverage of corporate CSR activities is positive, with only 15% of stories commenting on the potential use of CSR activities for corporate "spin" (Zhang and Swanson, 2006).

Institutional theory sees the media as a societal indicator of legitimacy, reflecting the opinions of the general public (Deephouse and Suchman, 2008), as well as an important source of legitimacy that is in and of itself able to influence opinions through agenda-setting (McCombs and Shaw, 1972). The media therefore holds a dual role in institutional theory as both a reflection and an arbiter of organizational legitimacy. Literature on social movements and activism has similarly illustrated the vital role of the media in movement formation, translation of ideas to the general public, and issue coverage (Gitlin, 1980), showing an important role for the media in social change (King and Haveman, 2008). Leading media outlets such as the *New York Times* and *Wall Street Journal* can be particularly effective in exercising influence and setting the agenda for more minor media outlets (Boyle, 2001; Deephouse and Suchman, 2008),

and are therefore frequently targeted by those organizations seeking to retain or enhance legitimacy.

Deephouse and Suchman (2008) acknowledge that leading "prestige media" outlets have traditionally been produced "by and for elites" (p. 56), potentially limiting or at least controlling access by outside actors, activists, NGOs, consumers and civil society. Campbell (2007) suggests that outsiders and stakeholders must be "sufficiently strong and well-organized to provide a counterbalance to corporate power" (p. 958) and efforts to mislead consumers around CSR issues. In providing an outlet for consumers and activists that is characterized by non-hierarchical, leaderless structures, or "horizontalism" (Mason, 2011), social media can offer consumers an effective antidote to elite-controlled and hierarchical corporate media structures. Benkler (2006) describes this effect as enhancing the "capacity to do more in loose commonality with others, without being constrained to organize their relationship through…traditional hierarchical models" (p. 8). Or, as Netflix CEO Steve Swasey commented after a consumer backlash over its DVD rental services that was propelled through social media, "the Internet is the great equalizer" (Taylor, 2012).

These structural differences between traditional and social media are reinforced by cost differences that similarly facilitate information exchange between consumers. Whereas traditional media tend to be cost-prohibitive for the average consumer or even NGO to participate in, social media provide an inexpensive and virtually free platform. Even well-organized and well-funded corporate media campaigns can be easily derailed by consumers willing to spend a little time registering their opinions. The ability of citizens to dominate corporate spending was demonstrated recently in the internet uprising over internet antipiracy legislation in both the U.S. and Canada. A well-funded traditional media and lobbying campaign

by the recording and motion picture industries was rapidly brought down by mass activism via social media. Website blackouts combined with an active anti-SOPA (Stop Online Piracy Act) and anti-PIPA (Protect Intellectual Property Act) campaign on Facebook and Twitter, lead numerous senators to change their positions and withdraw support (Weisman, 2012).

A great deal has been written about social media and network effects and the impacts of the broader 'networked information economy' (Benkler, 2006). What is particularly notable about social media networks, and their ability to spread information about corporate behaviors, is their ad hoc nature. Networks are quickly and easily formed around new causes, and can be made up of people that may previously have been almost entirely unconnected (Mason, 2011). The ease of communication and information exchange through such broad networks does not necessarily require coordinated action, but instead may be the result of the "coordinated effects of uncoordinated actions of a diverse range of individuals acting on a wide range of motivations" (Benkler, 2006, p. 5). Where consumer interactions with corporations were once relegated almost exclusively to private communications such as letters, phone calls or discussions with friends, stakeholders can now easily make their opinions and complaints heard publicly. While consumer dissatisfaction was once a "lonely experience," consumers can now find "affirmation and social support" through sharing such experiences (Ward and Ostrom, 2006, p. 228). These social media-supported sites and networks can easily and rapidly escalate complaints or negative corporate information in response to greenwash.

The lack of media gate-keepers, hierarchies and cost barriers that define social media also lead to novel forms of interactions between corporations and consumers. Whereas corporate branding was once sufficient to bolster relationships with customers, interaction and trust have become much more salient in the social media world with customers better able to measure the

authenticity of information (Yeomans, 2012). Fieseler et al. (2010), in a detailed study of a corporate CSR blog, term the more specific and direct of these symmetric interactions "micro-dialogues". Such communications are the result of increased consumer demand for engagement and input around CSR issues, and are wide-ranging, including "raising issues, discussing priorities, and solving and implementing" (p. 610). While conversations between users, and between corporations and users, can be beneficial, rapid conversations and information sharing between users have also been linked to the likelihood of a social contagion and a topic or issue going "viral," whether it is positive or negative. Social media illustrate the necessity of some degree of transparency and authenticity in establishing and retaining relationships with stakeholders (Fieseler et al., 2010; Yeomans, 2012), a divergence from the "myth and ceremony" traditionally at the heart of legitimacy (Meyer and Rowan, 1977).

We summarize the foregoing discussion of social media's impact on access to and exchange of information in Figure 1 below, which undergirds our assessment of social media's impact on greenwash in the next section.

Insert Figure 1 about here

THEORETICAL FRAMEWORK: GREENWASH AND SOCIAL MEDIA

We incorporate the foregoing observations about social media into a theoretical framework for understand corporate greenwash and how it is affected by the risk of backlash from citizens and activists. We then develop a series of propositions regarding how social media change the likelihood of greenwash and the channels companies use for corporate communications. Misleading consumers can be accomplished in many ways, including outright lying (Laufer, 2003). However, a careful review of activist complaints about greenwashing

reveals that companies seldom lie about their activities. (Lyon and Maxwell 2011) This should not be surprising, as the Federal Trade Commission (FTC) in the US, and similar bodies in other countries, are charged with preventing consumer fraud. Instead, companies tend to use subtler methods to mislead.

Laufer (2003) identifies a suite of strategies that companies use to greenwash: "confusion," "fronting," and "posturing". Confusion (p. 257) is achieved via "careful document control and strict limits on the flow of information made available to regulators and prosecutors". Fronting (p. 257) involves the corporate creation of "front groups" that appear to be grassroots efforts to shape legislation and create new norms of industrial practice. Posturing (p. 256) involves the use of public relations tactics to project a corporate image of ethical leadership and committed corporate culture, when the reality to which the image supposedly refers does not exist. Although all three of these strategies are important, TerraChoice's (2009) study of the "sins of greenwashing" reveal that by far the most common sin is the "Sin of the Hidden Tradeoff," defined as suggesting a "product is green based on an unreasonably narrow set of attributes without attention to other important environmental issues". A classic example of a hidden tradeoff occurs when an electric hand dryer proclaims "This product protects the environment. It saves trees from being used for paper towels". The hidden tradeoff: producing electricity, especially from coal, harms the environment. The Sin of the Hidden Tradeoff is a form of what Laufer calls "confusion," and it motivates the framework to follow. However, the impact of social media on greenwashing is likely to be similar for fronting and posturing as well.

In the framework, which is based on Lyon and Maxwell's (2011) economic model of greenwash, a firm's production process has multiple environmental impacts, and the firm may make progress on some or all of them. Progress is not guaranteed, however, and firms differ in

how likely they are to achieve environmental successes. Firms do not lie, but they do not have to disclose information about their failures. In fact, companies in the model do exactly what most people and organizations do all the time: they engage in selective disclosure, disclosing positive information and withholding negative information. When investors hear about a corporate environmental success story, their opinions of the firm go up, and so does the company's stock price.

Lyon and Maxwell (2011) illustrate that voluntary disclosure provides opportunities for companies, but also carries risks. Activists are skeptical about corporate environmental claims, and disapprove of corporate hypocrisy. Hearing a corporate claim may motivate an activist to investigate whether the company has "skeletons in the closet" that it hasn't disclosed. If so, the activist may attack the firm's reputation in the media, causing a hit to its stock price. Thus, companies must think carefully about when to promote their environmental accomplishments. If a company has nothing but successes to report, then of course it should go ahead and report them. Conversely, if a company can't say anything good about its environmental performance, it is better not to say anything at all. The tough calls come for companies with mixed environmental records, that is, companies with some successes to report, but some failures to own up to, as well. These companies face a tradeoff when they engage in selective disclosure – they may enjoy a short-run increase in share price but risk a longer-run penalty.

Which types of firms are most likely to greenwash when they find themselves with a mixed environmental record? Although one might expect that "brown" firms with poor reputations would be most likely to greenwash, the model demonstrates that in fact firms with middling reputations are most likely to greenwash. A firm that is already considered brown gains a lot by promoting its successes, but has little to gain by withholding information about its

environmental "dark sides." After all, it already has a bad reputation. It may as well fully disclose both its successes and its failures, take credit for its successes, and avoid the risk of being labeled a greenwasher. On the other hand, a firm that is already considered "green" has less to gain from disclosure in the first place because it already has a good reputation. Even if the "green" firm keeps quiet about its environmental performance, people will still view it favorably. Bansal and Clelland (2004) similarly find empirical evidence that when a firm's environmental legitimacy is high, further promoting CSR activities can expose a firm to unnecessary levels of unsystematic risk, and even lead stakeholders to question the firm's motivations in making such disclosures. Middling firms, then, have the most to gain from trumpeting the occasional environmental success. They can boost their reputations enough that it is worthwhile risking activist attacks.

Social media's influence on corporate environmental disclosure

Social media increase the information available to consumers and activists, and thereby increase the scrutiny companies face in a variety of ways that are summarized in Figure 1 above. In the world of traditional media, it is difficult and costly to get airtime. Companies are willing to pay to make their case to a broad cross-section of people, but most citizens cannot afford advertising on television or radio, or in newpapers and magazines. Thus, citizens tend to rely on activists to police corporate environmental claims. Groups like Greenpeace have honed the art of corporate campaigning, undertaking newsworthy stunts that allow them to gain access to media coverage despite very limited budgets. Social media change the game by radically reducing the cost of communicating information to others. With a "tweet," a citizen can now alert her friends and followers to corporate hypocrisy. Instead of relying on activist groups to

fact-check corporate claims and craft media campaigns to share their findings, ordinary citizens can become activists themselves. In this section we incorporate these observations into our proposed framework for understanding greenwash.

When one recognizes that social media enhance the flow of information consumers receive about companies, our framework has an immediate implication with regard to the impact of social media on corporate environmental communications.

Proposition 1: Social media make all forms of greenwash less likely.

Regardless of whether environmental communication is about the company or a particular product, social media make it easier for consumers to find out whether there is another side to the story that make the communication look hypocritical. This improved access to information increases the risks faced by companies when they communicate selectively about their environmental performance, and makes them less likely to greenwash. An interesting illustration of the use of social media to police greenwash comes from the website www.greenwashingindex.com. The site's mode of operation is announced on its home page: "If you've seen an ad promoting the environmental qualities of a product or company, post it here, rate it, then come back to see what other users say. While you're here, view and rate other ads too". The site makes it easy for users to share especially egregious ads via Facebook, Twitter and other social media sites.

Our analysis also has specific implications for different types of firms and industries. Elaborating on the findings of Lyon and Maxwell (2011), Figure 2 shows what happens in our framework as activists become more fully informed, and hence more likely to detect and punish

greenwash. The figure focuses on the case where a company has a mixed environmental record, with some successes to report but also some notable failures. If consumers are poorly informed, then all companies will greenwash when they have mixed records, because a backlash is unlikely. As consumer information improves, companies start to differentiate themselves through their communication strategies. Firms with middling reputations will continue to greenwash, but firms with strong green reputations opt not to promote their successes when they also have failures to own up to. Firms with poor reputations choose to disclose both their successes and their failures, since the unexpected successes will outweigh the anticipated failures, and create an overall positive impact on corporate financial performance. Finally, as consumers become very well informed, greenwash is eliminated. Middling firms then sort into two groups. Browner firms move toward more complete disclosure, for reasons explained above. Greener firms, on the other hand, reduce their environmental disclosures and opt to remain silent when they have mixed environmental records.

Insert Figure 2 about here

It is important to keep in mind that the figure focuses on the tough yet realistic situations where a company has a mixed record to report. As mentioned earlier, if a company has nothing but successes to report, then of course it should go ahead and report them; conversely, if a company can't say anything good about its environmental performance, it is better not to say anything at all. Green firms are more likely to find themselves in the former situation, and brown firms are more likely to find themselves in the latter one. Thus, because they are more likely to have good news to share, green firms will on average engage in more positive

environmental communication than will brown firms – but they will be more likely to remain silent when they have a mixed record to report. The foregoing analysis implies a pair of propositions regarding the way social media will affect different types of firms.

Proposition 2: Social media will make firms with green reputations less likely to promote their environmental successes when they have mixed environmental records.

Many firms are already reticent about promoting their CSR activities. A recent survey of CSR managers found that "Many managers worry that by overtly promoting their participation [in CSR] stakeholders might view the activity as self-serving. In fact, many respondents reported minimal or no attempts of self-promotion...By keeping a lower profile, managers felt that stakeholders would be more likely to stand up for the firm because they viewed their CSR as being motivated by the benefit to the community" (Peloza, 2005, p. 16-17). Proposition 2 suggests that the growth of social media will tend to make relatively green firms increasingly reticent to promote their environmental successes, especially after they have had a negative event to deal with.

A study of greenwashing by Nielsen Online compared blogger reactions to similar efforts undertaken by two companies in the same industry. Despite General Electric's highly visible "Ecomagination" campaign, "when it comes to energy efficiency issues, bloggers cite Whirlpool as beating GE on that measure. Bloggers claim GE has an inconsistent – and often contradictory – track record, but praise Whirlpool for focusing on smaller measures, such as energy-efficient appliances and its partnership with Energy Star", the report notes. In another comparison to blogger reaction to the marketing of 'fair trade' coffee, the report noted that bloggers praise

Dunkin' Donuts' "relatively demure PR stance", stating that Dunkin' Donuts rarely broadcasts its 100% fair trade certification. In contrast, bloggers critique Starbucks for its excessive "lip-service" (Frazier, 2008).

> **Proposition 3**: Social media will make firms with brown reputations more likely to fully disclose both their good and bad environmental outcomes when they have mixed environmental records.

This proposition is consistent with existing empirical evidence regarding how greater scrutiny from stakeholders affects corporate disclosure behavior. For example, Reid and Toffel (2009) examine which firms are more likely to disclose to the Carbon Disclosure Project as a function of the pressures they face from activists and from regulatory threats. They find that firms in environmentally sensitive industries (such as oil, utilities, or transportation) are more likely to disclose to the CDP in response to shareholder resolutions against them than were other firms. Similarly, Patten (1992) studied the disclosure behavior of major oil companies in the wake of the Exxon Valdez oil spill, and found that on average they doubled the amount of space in their annual reports devoted to environmental issues. This increase in disclosures was effectively required for Exxon, which had to describe the event to shareholders. More intriguingly, other major firms in the industry also increased their disclosure behavior, presumably because of the greater scrutiny the whole industry faced after the accident.

The impact of social media in emerging economies is likely to be rather different than in developed countries. Emerging economies typically have relatively weak systems for monitoring and enforcing environmental laws (Blackman 2010). A growing number of them

have turned to information disclosure programs as an alternative to traditional regulation (Gupta and Goldar, 2005; Powers et al., 2010). Social media will further enhance the flow of information regarding corporate environmental performance to government officials as well as consumers. This leads to our next proposition.

> **Proposition 4**: Social media will have a greater impact on corporate environmental performance in emerging economies than in developed economies, controlling for levels of information technology penetration.

Of course, fewer consumers in emerging economies have smartphones and laptops than in developed economies. Controlling for the different levels of information technology penetration, however, social media are likely to have greater impact in the emerging world. As an illustration, consider the impact of Alfred Donovan, age 92, and his son John, 62, who manage a website devoted to complaints about Royal Dutch Shell. The site receives over two million hits per month, and among other things serves as a venue for disgruntled Shell employees to share negative information about the company's environmental impacts. It has been used as a source of information by environmental regulators in Russia, a country whose economy is still struggling and which is not known for strong environmental enforcement. For instance, in a recent dispute between Shell and Russia's environmental regulator over drilling for gas at Sakhalin Island, Shell was "eventually forced to relinquish its majority stake in the project, costing Shell billions in lost revenue. Later, the regulator, Oleg Mitvol, publicly acknowledged the Donovans' help in getting information about alleged claims of environmental abuses by Shell" (Hotten, 2009).

In short, social media decrease the cost of monitoring corporate behavior, and make it easier for consumers to call attention to and mobilize opposition against corporate communications that are deemed to be greenwash. This impact will be felt in different ways by different types of firms when they have both good and bad news to report. Firms with relatively green reputations will become less likely to promote their green accomplishments, while firms with relatively brown reputations will become more likely to disclose their full environmental impacts. These impacts are likely to be even more pronounced in emerging economies than in developed countries.

Corporate use of social media for environmental communication

We have emphasized how the growth of social media will affect corporate greenwashing, without distinguishing between the various channels corporations can use to communicate to their stakeholders. We now move on to explore what our framework may imply for corporate use of social media as opposed to traditional media for environmental communication. The McDonald's case described in the Introduction provides a vivid example of how quickly corporate communication via social media can backfire. Social media are such a new phenomenon that there is no academic research of which we are aware that actually measures the strength of response to greenwash communicated through social media as compared to the response to greenwash communicated through traditional media. However, it is hard to imagine traditional media shutting down a corporate communication campaign as quickly as did social media in the McDonald's case. If it is true that corporate social media communications are more vulnerable to stakeholder backlash, then our framework implies a series of additional propositions about how social media are likely to be used by corporations to communicate about

overall corporate image and about specific products. Here we draw on the model's implication that green firms will engage in more positive environmental communication than will brown firms, because they are more likely to have good news to share. This immediately implies

> **Proposition 5**: Firms that choose to communicate environmental information via social media are likely to be greener than the average firm.

If communications through social media are more vulnerable to being challenged as greenwash, then the firms that opt to use social media to communicate environmental performance will be the ones that face less risk of a greenwash backlash. Again, there is little empirical research on the use of social media by different types of firms. However, Ottman's (2011) recent book on green marketing provides examples of several firms that are using social media successfully, including Seventh Generation, Whole Foods, and Timberland, all of which have strong environmental reputations. An interesting implication of our analysis is that smaller niche firms focusing strictly on green products – like Seventh Generation, which focuses on green home and cleaning products – are more likely to use social media, because they are less likely to have negative impacts for which they can be attacked.

Proposition 5 will play out in different ways for firms operating in different markets. Firms in traditionally dirty industries – such as oil and gas, electricity, iron and steel, pulp and paper, and chemicals – face severe risks of being labeled as greenwashers. It is virtually impossible for firms in these industries not to create sizable environmental impacts. If they disclose positive environmental results, they must anticipate the risk of attack for greenwashing. A recent study of corporate communication of CSR initiatives found that "legitimating attempts

will be seen more skeptically where the general legitimacy is seen as very low" (Schultz & Wehmeier, 2010). This is echoed by Alan Jeffers, an Exxon spokesperson, who once complained that "We get criticized for not doing enough for the environment, and then get criticized if we do run an environmental campaign" (Becker, 2008). Firms in these industries are unlikely to be in the position of having only positive environmental news to report, and risk strong consumer backlash from making green claims. This immediately leads to,

> **Proposition 6**: Firms in traditionally dirty industries are less likely to use social media to communicate their environmental performance.

Finding the right disclosure strategy for brown firms is not easy. As shown in Figure 2, among firms with mixed environmental records, brown firms are more likely to provide full disclosure, especially as consumer information increases. However, social media may not be the best place for full disclosure of corporate environmental performance. Twitter imposes a limit of 140 characters per tweet, hardly enough for partial disclosure of even one corporate activity. Thus, although brown firms may opt to produce detailed corporate sustainability reports, they are less likely to use social media for their CSR communications.

Finally, we turn to corporate communication about specific green products, rather than communication designed to "green" the company's overall reputation. Although individual products may also have a mix of green and brown attributes (e.g., organic Oreos), they are less likely to suffer mixed records than are entire corporations. This makes it somewhat easier for companies to communicate about green products without fear of being attacked for greenwashing than to communicate about their overall reputation for being environmentally

friendly. Our earlier logic, applied at the product level, immediately leads to the following proposition.

Proposition 7: Firms will tend to use social media to communicate about their greenest products.

An interesting example is Procter and Gamble's Tide Coldwater (Ottman et al., 2006). The company partnered with the Alliance to Save Energy (ASE), which audited and certified P&G's claim that the product could save consumers $63 year if they switched from warm water to cold water washes. ASE sent emails to consumers, encouraging them to go to Tide.com's interactive web site, where they could register to get a free sample, share their friends' email addresses, and track their personal network as their friends logged on to receive their own free samples. Although consumer goods companies are not noted for being particularly green – they ranged from #92 to #466 in Newsweek's latest Green Rankings of the Fortune 500 US firms (Newsweek, 2011) – the campaign was highly successful, in part because the product really did what it claimed to.

DISCUSSION AND CONCLUSIONS

As CSR activities become ever more widespread, greenwash is a mounting concern, creating growing consumer skepticism about corporate environmentalism and threatening to undermine the credibility of corporate communications. We have argued that the advent of social media is likely to help slow the growth of greenwash, if not ultimately eliminate it.

The advent of social media is predicted to reduce corporate greenwash across the board. This impact will be felt in different ways by different types of firms, however. Firms with green reputations will become less likely to promote their green accomplishments when they have bad news to report as well, while firms with brown reputations will become more willing to disclose their full environmental impacts. These impacts are likely to be even more pronounced in emerging economies than in developed countries. In addition, social media will be used for environmental communications by some types of firms and for some types of products more than others. Because firms that greenwash are more likely to be punished if they communicate via social media, we hypothesize that firms which choose to communicate via social media will tend to be in relatively clean industries, will tend to be greener than average even within their industry, and will tend to be smaller niche firms that focus solely on green products. In addition, we expect that firms will tend to use social media to communicate about their greenest products.

Our contribution is threefold. First, we contribute to the literature on decoupling in institutional theory, specifically on decoupling of CSR behaviors from organizational facades (Aguinis & Glavas, 2012; Ramus & Montiel, 2005) in order to enhance corporate legitimacy. By drawing on economic models and empirical research on the role of information, organizations scholars can adapt theory to account more clearly for the role of information in CSR. Second, we present a theoretical framework for understanding corporate greenwash where citizens and activists decry corporate hypocrisy when they learn that a company does not "walk the talk". Using the key characteristics of social media relative to traditional media, we then elaborate a series of propositions regarding how social media change the landscape of corporate greenwash. Third, and more broadly, we attempt to illustrate the potential for new insights to be found at the nexus of institutional theory and economics as we strive to understand – and even encourage –

corporate CSR behaviors. The combination of rapidly emerging technological advances and increasingly urgent environmental pressures means that developing both new theory and practical insights will require researchers to look beyond traditional boundaries.

There is room for much more work in this general area. To begin with, empirical work testing our propositions would be highly worthwhile. Second, the interaction between old and new media deserves more attention. We have treated them as separate, in order to clarify the key differences between them. But in practice, feedback from one information medium to another often helps to increase the impact of both. In a crisis situation, even social media users have been found to rely more on newspaper articles than tweets or blogs, yet Twitter users are more likely to share such articles than are non-users (Schultz et al., 2011). While mass media 'translates' goals and objectives for broad public consumption, specialized outlets provide important communications and announcements to target activist audiences while also serving as a source of information to mass media outlets (King and Haveman, 2008). With regards to greenwash, successful activist campaigns, such as the campaign against bottled water and Greenpeace's Barbie rainforest destruction campaign, have used an intricate mix of social and traditional media for exposure. Further examining the roles and strengths of each of these sources, as well as consumer and corporate reactions to each as regards the monitoring of greenwash behaviors will provide interesting future studies.

Another important area for further work is the role of ecolabels as a response to consumer skepticism about corporate green claims. Such labels offer an independent certification substantiating the company's claims and thereby increase consumer confidence. Yet the growing number of ecolabels threatens to overwhelm and confuse, rather than enlighten, consumers (Harbaugh et al., 2011). Social media may offer a solution to the problem of label

proliferation. An interesting example is the website www.goodguide.com , which offers ratings of many consumer products and can be accessed via a free app for iPhones and Android devices. A user can scan barcodes while at the store and access quantitative ratings of products, and tweet the results to friends.

A final promising area is the use of social media within specific consumer segments. The Natural Marketing Institute has tracked green consumer attitudes for years, and identifies five consumer segments. The most environmentally-oriented group are the "LOHAS" (Lifestyles of Health and Sustainability) consumers, estimated to comprise 19% of the U.S. population. The representative member of the group is a married, educated, middle-aged female. These consumers actively seek out information about the environmental and social impacts of the products they buy, and a striking 71% report a willingness to boycott a brand whose practices they dislike (Ottman 2011, p. 25-28). Social media, however, are more popular with younger consumers such as the "Drifters," who tend to be young urban professionals, driven more by trends than deeply held beliefs about consumption. Products targeted towards Drifters are well-suited to positive communication through social networks that is designed to create new fads and trends, such as the Gap Red T-shirt, which raises money for AIDS and has become the best-selling item ever sold at Gap (Krishna and Rajan, 2009). Furthermore, because Drifters are less environmentally conscious than LOHAS consumers, they are less likely to uncover negative information about products marketed as green, and hence less likely to generate complaints about greenwash.

The tools of information technology are changing many aspects of modern life. The emergence of social media, in particular, holds out the potential for much better information sharing and coordination across citizens and consumers. There are many reasons to believe these

new tools will improve the quality of corporate environmental communications, and reduce greenwashing. Future research will reveal just how beneficial they turn out to be.

REFERENCES

Aguinis, H., and A. Glavas (2012). 'What We Know and Don't Know About Corporate Social Responsibility: A Review and Research Agenda', *Journal of Management* 38 (4), 932-968.

Akerlof, George A. (1970). 'The Market for 'Lemons': Quality Uncertainty and the Market Mechanism', *The Quarterly Journal of Economics* 84, 488-500.

Al-Tuwaijri, S. A., T. E. Christensen, and K. E. Hughes (2004). 'The relations among environmental disclosure, environmental performance, and economic performance: a simultaneous equations approach, *Accounting, Organizations and Society* 29, 447-471.

Alves, I. (2009). 'Green Spin Everywhere: How Greenwashing Reveals the Limits of the CSR Paradigm', *Journal of Global Change and Governance*, I/1, 1-26.

Bansal, P., and I. Clelland (2004). 'Talking trash: Legitimacy, impression management, and unsystemmatic risk in the context of the natural environment'. *Academy of Managment Journal ,* 47 (1), 93-103.

Benkler, Y. (2006). *The Wealth of Networks: How Social Production Transforms Markets and Freedom.* New Haven, CT: Yale University Press.

Becker, B. (2008). 'Baseball Team Clashes With Environmentalists Over Oil Company Advertising', *New York Times*, July 27, http://www.nytimes.com/2008/07/27/us/27stadium.html, accessed, 2012.

Benkler, Y. (2006). *The Wealth of Networks: How Social Production Transforms Markets and Freedom*, Yale University Press.

Blacconiere, W. G. and Patten, D. M. (1994). 'Environmental Disclosures, Regulatory Costs, and Changes in Firm Value', *Journal of Accounting and Economics*, 18, 357-377.

Blacconiere, W. G. and Northcut, W. D. (1997). 'Environmental Information and Market Reactions to Environmental Legislation', *Journal of Accounting, Auditing and Finance*, 12, 149-178.

Blackman, A. (2010). 'Alternative Pollution Control Policies in Developing Countries', *Review of Environmental Economics and Policy*, **4,** 234-253.

Boyle, T. P. (2001). 'Intermedia agenda setting in the 1996 presidential election. *Journalism and Mass Communication Quarterly ,* 78 (1), 26-44.

Campbell, J. L. (2007). 'Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility'. *Academy of Managment Review , 32* (3), 946-967.

Cañón-de-Francia, J. and Garcés-Ayerbe, C. (2009). 'ISO 14001 Environmental Certification: A Sign Valued by the Market?', *Environmental and Resource Economics,* 44:245–262.

Castello, I., and Lozano, J. M. (2011). 'Searching for New Forms of Legitimacy Through Corporate Responsibility Rhetoric'. *Journal of Business Ethics , 100*, 11-29.

Clarkson, P. M. Li, Y., Richardson, G. D., and Vasvari, F. P. (2008). 'Revisiting the Relation Between Environmental Performance and Environmental Disclosure: An Empirical Analysis', *Accounting, Organizations and Society*, **33**, 303-327.

Clegg, S. (2010). 'The state, power, and agency: Missing in action in institutional theory?', *Journal of Management Inquiry ,* **19** (1), 4-13.

Conrad, D. (2007, September 17). *More corporate greenwashing: Starbucks' cups, eco-friend or eco-foe?* Organic Consumer Association: http://www.organicconsumers.org/articles/article_7176.cfm, accessed June 2012.

Cuff, M. (2012, April 12). *Activists accuse BP of 'cutting corners' in Gulf oil spill clean-up.* Retrieved 2012, from The Guardian: http://www.guardian.co.uk/environment/2012/apr/12/activists-bp-gulf-oil-spill

Dasgupta, S., Laplante, B., and Mamingi, N. (2001). 'Pollution and capital markets in developing countries'. *Journal of Environmental Economics and Management,* **42**, 310– 335.

Deephouse, D. D., and Suchman, M. (2008). Legitimacy in Organizational Institutionalism. In R. Greenwood, C. Oliver, K. Sahlin, and R. Suddaby (Eds.), *The Sage Handbook of Organizational Institutionalism* (pp. 49-77). Thousand Oaks, CA: Sage.

Delmas, M. A., and Burbano, V. C. (2011). 'The Drivers of Greenwashing'. *California Management Review ,* **54** (1), 64-87.

Delmas, M. A. and Montes-Sancho, M. J. (2010). 'Voluntary Agreements to Improve Environmental Quality: Symbolic and Substantive Cooperation', *Strategic Management Journal*, **31**: 575–601.

Delmas, M., Montes-Sancho, M., and Shimshack, J. (2010). 'Mandatory Information Disclosure in the Electricity Industry', *Economic Inquiry* **48**, 483-498.

DiMaggio, P. J., and Powell, W. W. (1983). 'The Iron Cage revistied: Institutional isomorphism and collective rationality in organizational fields'. *American Sociological Review , 48*, 147-160.

Du, S., Bhattacharya, C. B., and Sen, S. (2010). 'Maximizing Business Returns to Corporate Social Responsibility (CSR): The Role of CSR Communication'. *International Journal of Management Reviews ,* **12** (1), 8-19.

Fieseler, C., Fleck, M., and Meckel, M. (2010). ‘Corporate Social Responsibility in the Blogosphere’. *Journal of Business Ethics* , **91**, 599-614.

Fisher-Vanden, K. and Thorburn, K. (2011). ‘Voluntary Corporate Environmental Initiatives and Shareholder Wealth’, *Journal of Environmental Economics and Management*, in press.

Frazier, M. (2008). ‘Do People Care About Your 'Green' Message? Yes: Nielsen Report Shows Perils of Exaggerating Ecological Good Deeds!’, *Advertising Age*, March 31, 2008, http://adage.com/article/news/people-care-green-message/126067/ accessed June, 2012.

Gitlin, T. (1980). *The Whole World is Watching: Mass Media in the Making and Unmaking of the New Left.* Berkeley: University of California Press.

Granovetter, M. (2005). ‘The impact of social structure on economic outcomes’. *Journal of Economic Perspectives* , **19**, 33-50.

Gray, L. (2008, December 22). *Activists ejected after presenting greenwash award to BP.* Retrieved 2012, from The Telegraph: http://www.telegraph.co.uk/earth/earthnews/3903090/ Activists-ejected-after-presenting-greenwash-award-to-BP.html

Greenwood, R., Oliver, C., Sahlin, K., and Suddaby, R. (2008). Introduction. In R. Greenwood, C. Oliver, K. Sahlin, and R. Suddaby (Eds.), *The Sage Handbook of Organizational Institutionalism* (pp. 1-46). London, UK: Sage.

Gupta, S. and Goldar, B. (2005). ‘Do stock markets penalize environment-unfriendly behavior? Evidence from India’, *Ecological Economics,* **52**, 81–95.

Hamilton, J. T. (1995). ‘Pollution as News: Media and Stock Market Reactions to the Toxics Release Inventory Data’, *Journal of Environmental Economics and Management*, **28**, 98-113.

Harbaugh, R., Maxwell, J. W. and Rousillon, B. (2011). ‘Label Confusion: The Groucho Effect of Uncertain Standards’, *Management Science*, **57**, 1512-1527.

Hotten, R. (2009). ‘92-year-old's website leaves oil giant Shell-shocked: How online protesters are using 'gripe site' as the focus for their complaints about big business’, *The Guardian*, October 25, http://www.guardian.co.uk/media/2009/oct/26/shell-gripe-site-trafigura, accessed June, 2012.

Jacobs, B.W., Singhal, V.R. and Subramanian, R. (2010). ‘An Empirical Investigation of Environmental Performance and the Market Value of the Firm’, *Journal of Operations Management*, **28**: 430-441.

Krishna, A. and Rajan, U. (2009). ‘Cause Marketing: Spillover Effects of Cause-Related Products in a Product Portfolio’, *Management Science*, 55: 1469–1485.

Khanna, M., Quimio, W. R. H. and Bojilova, D. (1998). ‘Toxic Release Information: A Policy Tool for Environmental Protection’, *Journal of Environmental Economics and Management*, **36**, 243-266.

Kim, E-H and Lyon, T.P., (2011). ‘Strategic Environmental Disclosure: Evidence from the DOE’s Voluntary Greenhouse Gas Registry’, *Journal of Environmental Economics and Management*, **61**(3), 311-326.

Kim, E-H and Lyon, T.P. (2011). ‘When Does Institutional Activism Increase Shareholder Value?: The Carbon Disclosure Project’, *The BE Journal of Economic Analysis and Policy*, 2011. Volume **11**(1) (Contributions), Article 50.

Kim, E-H and Lyon, T.P. (2012). ‘Beyond the Dichotomy of Symbolic versus Substantive Actions: Evidence from Corporate Environmental Management’, Working Paper, University of Michigan.

King, A.A., and Lenox, M.J. (2001). ‘Does It Really Pay to Be Green? An Empirical Study of Firm Environmental and Financial Performance’. *Journal of Industrial Ecology*, **5**, 101-116.

King, M. D., and Haveman, H. A. (2008). ‘Antislavery in America: The Press, The Pulpit, and the Rise of Antislavery Societies’. *Administrative Science Quarterly ,* **53**, 492-528.

Klassen, R.D., and McLaughlin, C. (1996). The Impact of Environmental Management on Firm Performance. *Management Science*, **42**, 1199-1214.

Konar, S. and Cohen, M. A. (1997). ‘Information as Regulation: The Effect of Community Right to Know Laws on Toxic Emissions’, *Journal of Environmental Economics and Management*, 32, 109-124.

Laplante, B., and Lanoie, P. (1994). Market response to environmental incidents in Canada. *Southern Economic Journal,* **60**, 657–72.

Laufer, W. S. (2003). ‘Social accountability and corporate greenwashing’. *Journal of Business Ethics ,* **43**, 253-261.

Lawrence, T. B. (2008). Power, Institutions and Organizations. In R. Greenwood, C. Oliver, K. Sahlin, and R. Suddaby (Eds.), *The Sage Handbook of Organizational Institutionalism* (pp. 170-197). Thousand Oaks, CA: Sage Publications.

Lyon, T., Lu, Y. Shi, X., and Yin, Q. (2011). ‘How Do Shareholders Respond to Sustainability Awards? Evidence from China’, University of Michigan Working Paper.

Lyon, T. and Maxwell, J. (2011). ‘Greenwash: Corporate Environmental Disclosure under Threat of Audit’, *Journal of Economics and Management Strategy*, 20: 3-41.

Margolis, J. D., and Walsh, J. P. (2003). 'Misery Loves Companies: Rethinking Social Initiatives by Business'. *Administrative Science Quarterly , 48* (2), 268-305.

Mason, Charles F. (2011). 'Eco-Labeling and Market Equilibria with Noisy Certification Tests', *Environmental and Resource Economics*, 48: 537-560.

Mason, P. (2011, February 7). *From Paris to Cairo, these protests are expanding the power of the individual.* Retrieved 2011 from The Guardian: http://www.guardian.co.uk/commentisfree/2011/feb/07/paul-mason-protest-twitter-revolution-egypt/print

McCombs, M. E., and Shaw, D. L. (1972). The agenda-setting focus of mass media. *Public Opionion Quarterly* **36**, 176-187.

Meyer, J. W., and Rowan, B. (1977). 'Institutionalized Organizations: Formal Structure as Myth and Ceremony'. *American Journal of Sociology ,* **83** (2), 340-363.

Milgrom, P. (1981). 'Good News and Bad News: Representation Theorems and Applications', *The Bell Journal of Economics*, **12**, 380–91.

Newsweek (2011). 'Green Rankings: U.S. Companies', *The Daily Beast*, October 16, 2011, http://www.thedailybeast.com/newsweek/features/green-rankings/2011/us.html, accessed June, 2012.

Ottman, Jacquelyn A. (2011). *The New Rules of Green Marketing: Strategies, Tools, and Inspiration for Sustainable Branding.* Sheffield, UK: Greenleaf Publishing.

Ottman, J. A., Stafford, E. A. and Hartman C. L. (2006). 'Avoiding Green Marketing Myopia: Ways to Improve Consumer Appeal for Environmentally Preferable Products', *Environment: Science and Policy for Sustainable Development*, **48**, 22-36.

Patten, D. M. (1991). 'Exposure, Legitimacy, and Social Disclosure', *Journal of Accounting and Public Policy*, 10, 297-308.

Patten, D. M. (1992). 'Intra-Industry Environmental Disclosures in Response to the Alaskan Oil Spill: A Note on Legitimacy Theory', *Accounting, Organizations and Society* **17**, 471-475.

Patten, D. M. (2002). 'The Relation between Environmental Performance and Environmental Disclosure: A Research Note', *Accounting, Organizations, and Society*, **27**, 763-773.

Patten, D. M. and Nance, J. R. (1998). 'Regulatory Cost Effects in a Good News Environment: The Intra-industry Reaction to the Alaskan Oil Spill', *Journal of Accounting and Public Policy*, 17, 409-429.

Peloza, J. (2005). 'Corporate Social Responsibility as Reputation Insurance', Working paper, Center for Responsible Business, UC Berkeley.

Pfeffer, J. (1981). Management as Symbolic Action: The Creation and Maintenance of Organizational Paradigms, in L. L. Cummings and B. M. Staw (eds.), *Research in Organizational Behavior*, 3: 1-52. Greenwich, CT: JAI Press.

Polaris Institute. (2005). *Coca-Cola Company wins corporate greenwash award.* Retrieved 2012, from PolarisInstitute.org: http://www.polarisinstitute.org/coca_cola_ company_wins_corporate_greenwashing_award

Powers, N.P., Blackman, A., Lyon, T.P., and Narain, U. (2011). Does Public Disclosure Reduce Pollution? Evidence from India's Pulp and Paper Industry. *Environment and Resource Economics*, **50**, 131-155.

Ramus, C. A., and Montiel, I. (2005). 'When are corporate environmental policies a form of greenwashing?' *Business and Society ,* **44** (4), 377-414.

Reid, E. and Toffel, M. (2009). 'Responding to Public and Private Politics: Corporate Disclosure of Climate Change Strategies', *Strategic Management Journal*, **30,** 1157–1178.

Roberts, P. W. (2008). Charting progress at the nexus of institutional theory and economics. In R. Greenwood, C. Oliver, K. Sahlin, and R. Suddaby (Eds.), *The Sage Handbook of Organizational Institutionalism* (pp. 560-572). Thousand Oaks, CA: Sage.

Rothschild, M. and Joseph S. (1976). "Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information," *The Quarterly Journal of Economics*, **90**, 629-649.

Spence, M. (1973). 'Job Market Signaling', *The Quarterly Journal of Economics*, **87**, 355-374.

Schultz, F., and Wehmeier, S. (2010). 'Institutionalization of corporate social responsibility within corporate communications: Combining institutional, sensemaking and communication perspectives'. *Corporate Communications ,* **15** (1), 9-29.

Schultz, F., Kleinnijenhuis, J., Oegema, D., Utz, S., and van Atteveldt, W. (2012). 'Strategic framing in the BP crisis: A semantic network analysis of associative frames'. *Public Relations Review ,* **38**, 97-107.

Schultz, F., Utz, S., and Göritz, A. (2011). 'Is the medium the message? Perceptions of and reactions to crisis communication via twitter, blogs and traditional media'. *Public Relations Review ,* **37**, 20-27.

Suchman, M. (1995). ‘Managing legitimacy: Strategic and instiutional approaches’. *Academy of Management Review* , **20,** 571-610.

Taylor, C. (2012, January 6). *The lowly petition has gone viral: Corporate titans beware.* Retrieved 2012 from The Globe and Mail: http://www.theglobeandmail.com/news/technology/digital-culture/social-petition-has-gone-viral-corporate-titans-beware/article2293673/print/

TerraChoice Environmental Marketing (2009). ‘The Seven Sins of Greenwashing: Environmental Claims in Consumer Markets’, http://sinsofgreenwashing.org/findings/greenwashing-report-2009/, accessed June, 2012.

Thomases, H. (2012, January 25). *McDonald's Twitter mess: What went wrong.* Retrieved 2012, from Inc.: http://www.inc.com/hollis-thomases/mcdonalds-mcdstories-twitter-mess.html.

Tolliver-Nigro, H. (2009). ‘Green Market to Grow 267 Percent by 2012’, Matter Network June 29, 2009, www.matternetwork.com/2009/6/green-market-grow-267-percent.cfm, accessed June, 2012.

United States Federal Trade Commission (2010). *Proposed Revisions to the Green Guides*, http://www.ftc.gov/os/fedreg/2010/october/101006greenguidesfrn.pdf, accessed June, 2012.

Verrecchia, R. E. (1983). ‘Discretionary Disclosure’, *Journal of Accounting and Economics*, 5, 179-194.

Ward, J. C., and Ostrom, A. L. (2006). ‘Complaining to the masses: The role of protest framing in customer-created complaint web sites’. *Journal of Consumer Research* , **33**, 220-230.

Weisman, J. (2012, January 18). *In fight over piracy bills, new economy rises against the old.* Retrieved 2012 from The New York Times: http://www.nytimes.com/2012/01/19/technology/web-protests-piracy

Westphal, J. D., and Zajac, E. J. (1994). ‘Substance and symbolism in CEOs' long-term incentive plans’. *Administrative Science Quarterly* , **39**, 367-390.

Westphal, J. D., and Zajac, E. J. (1998). ‘The Symbolic Management of Stockholders: Corporate Government Reforms and Shareholder Reactions’. *Administrative Science Quarterly* , **43**, 127-153.

Yeomans, M. (2012, March 8). *#FAIL: authenticity is the key to avoiding social media screw-ups.* The Guardian: http://www.guardian.co.uk/sustainable-business/authenticity-social-media-sustainability-communications?intcmp=239, accessed June 2012.

Zhang, J., and Swanson, D. R. (2006). ‘Analysis of News Media's Representation of Corporate Social Responsibility’. *Public Relations Quarterly* , **51** (2), 13-17.

FIGURES

FIGURE 1

The Role of Media in Corporate-Stakeholder Information Flows

Traditional Media	Social Media
Hierarchical	Non-hierarchical, 'horizontalism'
Elite controlled and owned	No gate-keepers - NGO and consumer access
Static or slow-moving	Rapid response, dynamic
Costly	Free or low cost
Commercial speech	Relationships and trust
Uni-directional communication	Interaction and conversations between corporation and stakeholders.
Private response	Public response
Channel specific	Based on networks, ad hoc and shifting
Formal fact-checking, regulation	Fewer controls but broad monitoring

FIGURE 2

Disclosure Behavior of Firms with Mixed Environmental Records
as Activists Become Better Informed

	Low Information	Medium Information	High Information
Green Firm	Greenwash	No Disclosure	No Disclosure
Middling Firm	Greenwash	Greenwash	Split: greener firms stop disclosing, browner ones disclose fully
Brown Firm	Greenwash	Full Disclosure	Full Disclosure