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Tone at the top: CEO environmental rhetoric and environmental performance

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ABSTRACT

In this study we attempted to ascertain the environmental leadership and commitment of the CEO as evidence of "tone at the top" in the belief that this would lead to enhanced environmental performance. We measure "tone at the top" by the environmental disclosure score which is collected from a content analysis of CEO letters to shareholders. We adopt the two environmental performance measures: (1) Environmental Impact Score (EIS) from *Newsweek* Green Ranking and (2) Modeled Hazard Population Results (MHPR) based on Risk-Screening Environmental Indicator (RSEI) models built by EPA. The results indicate that the environmental disclosure score from the CEO letter is inversely correlated with environmental performance. The overall findings support legitimacy theory in that CEOs essentially "spin" firms' environmental performance so it looks better than it actually is.

The impact of climate change, air pollution, water pollution, toxins in the land, water and air and nuclear meltdowns have all affected millions of lives throughout the world. Corporations and their executives have contributed to both environmental degradation and in trying to reduce its impact. In a sense corporations in environmentally sensitive industries can either be leaders or laggards in dealing with environmental issues.

The CEO of a corporation can set a tone for her/his organization by demanding that the organization be a leader in supporting the environment. This tone can permeate the corporate environment and result in an organization which considers environmental factors to be key components in decision-making. Consequently, this can lead to superior environmental performance within the industry.

In this study the relationship between CEO environmental leadership as evidenced by CEO rhetoric on the environment and environmental performance is examined. CEO environmental leadership is determined through an examination of the CEO letter to shareholders. Environmental performance is assessed using the Environmental Impact Score (EIS) from *Newsweek's* green ranking and the Modeled Hazard Population Results (MHPR) based on Risk-Screening Environmental Indicators (RSEI) models.

The results indicate that the environmental emphasis in the CEO letter is inversely correlated with environmental performance. Thus, what was believed to be tone and the top seems to lend itself to a greenwashing perspective. Furthermore, the results support legitimacy theory and the results of the study on environmental reputation reported by Cho, Guidry, Hageman, and Patten (2012) and Freedman and Stagliano (2010).

The remainder of this study is structured as follows. In the next section the background leading to the hypothesis tested is provided. The methodology including the sample, years studied, content analysis and research model is presented. Results, analysis and conclusions are in the last section.

1. Background

CEO leadership can provide a direction for an organization. The management literature is replete with studies on the use of strategic management by CEOs (see, for example, Waldman, Siegel, and Javidan (2006) and House and Aditya (1997)). In terms of the environment, they may engage in environmental leadership because of moral and ethical reasons which is consistent with the view of what constitutes an effective leader (Jones, 1995). From a strategic perspective they may support environmental initiatives because they believe that it is a more profitable approach. Furthermore they may believe that a positive environmental reputation can enhance their status and that of their firm.

Leadership in this area can take many forms. Sharma and Vrendenburg (1998) describe a number of strategies that managers and firms can utilize to enhance their environmental leadership and performance. They may include creating a culture of environmental awareness and innovativeness, pursuing community engagements concerning the environment, preempting regulations and being a first mover in the industry in terms of the environment (Sharma & Vrendenburg, 1998). A CEO who provides this type of leadership and creates a culture where

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the environment is a key variable to decision-making can be said to be demonstrating “tone at the top” in terms of the environment.

A CEO who is providing environmental leadership should be able to create a firm whose environmental performance is better than the average firm in a given industry. In this study we will examine firms from environmentally sensitive industries to determine if their environmental performance is related to CEO environmental leadership. A positive relationship between these variables would support this notion.

If there is a significant positive relationship between what the CEO says and what the company does in terms of the environment then this would help to support that “tone at the top” can make a difference in environmental performance. As the environmental management literature indicates a good leader is a moral leader (Jones, 1995) and by using strategic environmental leadership (Sharma & Vrendenburg, 1998) environmental performance can be enhanced.

In contrast with the above perspective, there is another view that a leader who seems to be embracing an environmental perspective, but is really engaged in public relations. Instead of creating a real environmental culture the CEO is creating a façade so that it appears that the firm is a good environmental actor when in fact it is just an actor. They may pursue this policy to improve or create an image to look favorable to the stakeholders. The major problem with this approach is that it is really a short term strategy. Just like what happened with BP, at some point the firm's true nature will materialize and the firm and its stakeholders will suffer the consequences. However, if the CEO leaves before anything bad is discovered the CEO will reap some undeserved rewards.

If there is a significant negative relationship this would support legitimacy theory in that the CEO is “talking the talk,” but not “walking the walk.” Legitimacy theory has been utilized by a number of environmental accounting researchers (see, for example, Cho and Patten, 2007; Deegan, 2002; Patten, 2002) to explain the inverse relationship between environmental disclosure and environmental performance. Firms, in a sense, are trying to enhance their environmental reputation by spin. They emphasize the positive and limit the negative. Since the CEO letter is a voluntary reporting document trying to make the company and its CEO look good this should not be surprising. However, as was stated earlier, the truth of this lack of congruence between the contents of the letter and environmental performance will sometime become evident. If justice is served, both the CEO and the company will reap their appropriate reward.

From the two opposite perspectives discussed above, it is an empirical question whether there is a positive or negative relationship between what the CEO says and what the company does in terms of the environment.

1.1. CEO environmental leadership/reputation

Attempting to ascertain whether CEOs are environmental leaders or whether they have earned good environmental reputations is a difficult task. Sharma and Vrendenburg (1998) utilized a case study approach with unstructured interviews to ascertain top management views about environmental matters. Only seven companies were analyzed so this approach is not effective where larger samples are being utilized. Waldman et al. (2006) surveyed top managers (but not necessarily the CEO) and received responses from 112 US and Canadian firms. What the researchers were attempting to discover was the relationship between transformational leadership and corporate social performance. Environmental performance is one component of corporate social performance.

In the environmental accounting literature, Cho et al. (2012) examined the perception of the firm's environmental reputation with environmental performance and disclosure. To ascertain the environmental reputation they utilized membership in the Dow Jones Sustainability Index (DJSI) and *Newsweek*'s reputation scores. The authors found that there was a significant negative association between environmental reputation and environmental performance thus supporting legitimacy theory.

The 2010 study by Freedman and Stagliano examined firms with good reputations for sustainability and matched them with firms that were not included on any of the lists the researchers utilized for ascertaining sustainable reputations. The researchers combined three sources for sustainable reputations: DJSI, the Global 100 list and the Globescan survey of environmental experts. There was no difference in the environmental performance between the ones with a sustainable reputation and those without one.

None of the prior approaches specifically focuses on the role of the CEO in terms of the environment. Although Sharma and Vrendenburg (1998) focused on top management they did not concern themselves with the role of just the CEO. Waldman et al. (2006) were examining top management in terms of social responsibility and not focusing on the environment. Neither Cho et al. (2012) nor Freedman and Stagliano (2010) were concerned with the CEOs leadership, but rather with the reputation of the firm as a whole.

The CEO letter which is an integral part of the annual report to shareholders (ARS) reflects what the CEO considers are the important issues confronting the firm. In the Global Reporting Initiative (GRI) it is a place that the CEO is expected to provide information about the firm's environmental policy (GRI, 2012). However, the ARS does not need to conform or include what is required by the GRI. In a sense what is included in the letter is voluntary. If the CEO has a focus on environmental policy and performance in the letter then that is providing a measure of her/his environmental leadership. For that reason we will utilize the CEO letter as a basis for determining environmental leadership and/or environmental commitment by the CEO. The letter in a sense represents our view of “tone at the top.”

Based on the above discussions, the null hypothesis to be tested in this study is as follows:

H1. There is no relationship between the environmental disclosures in the CEO letter to shareholders and environmental performance.

2. Methodology

2.1. Sample

Large firms tend to produce more emissions than small firms. In this study we focus on large US firms in the industrial sectors that have significant environmental impacts. Measuring environmental impacts is a demanding task. Researchers have used various metrics from several perspectives to measure them. Recently, composite scores that account for greenhouse emission, toxic releases and a wide range of pollution releases to air, water and land are utilized in academia and media. Arguably the most recent attempt of this type is the *Newsweek* Green Ranking, particularly its Environmental Impact Score (EIS). Although the accuracy and comprehensiveness of this score have not been established, earlier evidence (e.g., Cong & Freedman, 2011, 2013) indicates that the score captures some critical aspects of firms' environmental impacts. Hence we use the EIS score of *Newsweek* Green Ranking US 500 in Year 2009 (GR2009 hereafter) as a main proxy for firm's environmental performance.

GR2009 assigns environmental impact scores to the largest 500 US firms. More than two thirds of the firms in GR2009 are not in heavily polluting industrial sectors. We selected only the firms in four heavily polluting industries: Oil & Gas, chemical, paper, and utilities industries. The industries include SIC codes 1311, 2911, 2611, 2621, 2800, 4911, 4924, 4931, and 4991. We also require that all firms in our sample be public companies because the ARS filed with the SEC is one of the main data sources for this study.

Basically, the EIS score in GR2009 relies on data sources from the US EPA. Typically there is a two years' time lag between the pollution