

Understanding Corporate Environmental Management and Firm Performance: Is Transparency the Key?

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EXTENDED ABSTRACT

The link between environmental management and corporate performance has been researched for decades. Porter and van der Linde (1995) argued that improving environmental performance reduces waste, increases productivity, and therefore improves corporate performance; conversely, Walley and Whitehead (1994) argued that the costs associated with improved environmental performance are so high that firms rarely realize any financial benefits. Different approaches have been used to investigate this “pay to be green” question empirically. These include surveys of managers (e.g., Melnyk, Sroufe and Calantone, 2002), field studies on environmental practices (e.g., Sroufe, 2003), and models using accounting-based (e.g., ROA) or market-based (e.g., price per share) measures of financial performance (e.g., King and Lenox, 2001; Jacobs, Singhal and Subraminian, 2010). Nonetheless, evidence is mixed in support of the view that better environmental management enhances corporate performance.

In a meta-analytic review of the literature, Albertini (2013) provides some insight for understanding these contradictory findings. She acknowledges that corporate environmental management is a construct measured by variables that can be categorized into one of three types: (1) environmental management, (2) environmental performance, and (3) environmental disclosure. Her meta-analysis reveals a positive (significant) link between corporate environmental management and corporate financial performance. However, she finds that this relationship is much stronger when environmental management variables are used rather than environmental performance or disclosure variables.

Our study explores the linkages among environmental management, environmental performance, and environmental disclosure variables with financial performance measures. Specifically, we examine S&P 500 companies with and without environmental quality management or environmental management systems (EQM/EMS) implemented to reduce the environmental footprint of their operations. We use data retrieved from Bloomberg (2016) using the *Financial Analysis Environmental, Social and Governance* function. Companies are not required to disclose information on environmental or social policies/practices; Bloomberg compiles these data from published company materials. Given the varying degrees of transparency among firms voluntarily reporting these data, Bloomberg also provides an ESG disclosure score. We have data on a number of environmental performance variables (e.g., greenhouse gas emissions, water use, electricity use, waste discarded, etc.) as well as financial measures (e.g., ROA, 5 year average ROE, etc.).

We address the following research questions. (1) How do companies with EQM/EMS differ from those without in terms of firm characteristics (e.g., industry sector, market capitalization)? (2) How does EQM/EMS implementation affect the adoption of specific environmental policies (e.g., Energy Efficiency Policy, Waste Reduction Policy, Emissions Reduction Policy)? (3) Do companies with EQM/EMS have improved environmental performance? (4) Do companies with EQM/EMS have improved financial performance? and (5)

What role does disclosure play in understanding the link between EQM/EMS, environmental performance and financial performance?

We find that companies with EQM/EMS are significantly more likely to adopt specific environmental policies. Moreover, companies with EQM/EMS perform significantly better financially than those without (e.g., higher 5 year average ROE). However, contrary to what is expected, these companies do not exhibit better environmental performance than those companies without EQM/EMS. Additional analysis suggests that these apparently anomalous results may be explained by different levels of disclosure between groups.

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