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## ARTICLE

# Corporate Social Responsibility as Global Public Law: Third Party Rankings as Regulation by Information\*

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#### 1 INTRODUCTION

Transnational firms have increasingly become the focus of attention as active participants in the process of generating and implementing law and norms internationally.<sup>1</sup> The world's

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<sup>1.</sup> See, e.g., Larry Catá Backer, From Moral Obligation to International Law: Disclosure Systems, Markets and the Regulation of Multinational Corporations, 39 GEO. J. INT'L L. 591, 592-93 (2008) (describing the role of multinational firms in creating a flexible new governance-style set of substantive obligations tracking "public" goals, reinforced by a hard international law regime of monitoring and disclosure); see also Naomi Cahn & Anthony Gambino, Towards a Typology of Corporate Responsibility in Different Governance Contexts: What to do in the Absence of Responsible Country Governance, 39 GEO.J.INT'L L. 655 (contextual approach to possible use of international law to encourage transnational corporations to pursue "public" goals and values); Michael P. Vandenbergh & Mark Cohen, Climate Change Governance: Boundaries and Leakage, 18 N.Y.U. ENVTL. L.J. (forthcoming 2010) (outlining the role of transnational firms in providing private governance of "public" problem of global climate change regulation); Natasha A. Affolder, The Private Life of Environmental Treaties, 103 Am. J. Int'l. L. 510 (2009) (explaining the role of multinational firms in directly implementing and observing public international law treaties); Responsible Business: Self-GOVERNANCE AND LAW IN TRANSNATIONAL ECONOMIC TRANSACTIONS (Olaf Dilling et. al. eds., 2008).

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largest companies are increasingly undertaking voluntary commitments that overlap with goals and standards drawn from within the realm of traditionally public regulation.<sup>2</sup> Current activity by transnational corporations commonly features commitments to labor standards, environmental responsibility, and governance practices, as prominent elements of firms' commitments.<sup>3</sup> The geographic reach of the world's largest companies, combined with a lack of corresponding international regulatory authority, raises the question of whether voluntary self-regulation by firms through corporate social responsibility can operate as an effective channel for transnational norm implementation. While some are optimistic about the potential for firms to voluntarily undertake commitments that will aid in resolution of global public law problems,<sup>4</sup> others are doubtful that the corporate social responsibility movement will provide any

<sup>2.</sup> The majority of the world's largest companies now report on their corporate responsibility commitments. See KPMG, KPMG INTERNATIONAL Survey of Corporate Responsibility Reporting 2008 14 (2008), available at http://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/Docume nts/International-corporate-responsibility-survey-2008.pdf [hereinafter KPMG 2008] (finding that 79% of G250 now produce stand-alone sustainability reports, which is an increase in reporting relative to previous years); KPMG, KPMG International Survey of Corporate Responsibility Reporting 2005 9 (2005), available at www.kpmg.com.au/Portals/0/KPMG %20Survey%202005\_3.pdf [hereinafter KPMG 2005] (finding that 64% of the G250 reported on Corporate Social Responsibility (CSR) activity in 2004, compared with 45% in 2002). A substantial share of these large companies referenced international instruments connected with public international law and actors; in 2008, 40% of the G250 made explicit reference to the UN Global Compact, 24% referred to the ILO Core Labor Conventions and 21% the UN Universal Declaration of Human Rights. See KPMG 2008 at 29.

<sup>3.</sup> See Codes of Conduct: Expanded Review of Their Contents 8 (Org. for Econ. Cooperation and Dev., Working Papers on International Investment, Working Paper No. 2001/6, 2001) (the governance practices extend to anticorruption and anti-bribery measures targeting the integrity of public governance as well as the ethical integrity of the firm's own conduct).

<sup>4.</sup> See, e.g., Daniel C. Esty & Andrew S. Winston, Green to Gold: How Smart Companies Use Environmental Strategy to Innovate, Create Value, and Build Competitive Advantage 54-55 (2006) (arguing that environmentally responsible strategies can also be profitable and lead to competitive advantage for firms); see also Vandenbergh & Cohen, supra note 1, at 33 (arguing that private governance via the Carbon Disclosure Project, if extended to firm supply chains, could be effective in mitigating climate change in the absence of binding public international law commitments by states).

meaningful constraint on firm behavior and consequently offers a poor prospect as a governance channel.<sup>5</sup>

There are two major concerns surrounding the viability of voluntary corporate social responsibility activity by firms as a global governance mechanism.<sup>6</sup> The primary concern is whether this activity is economically sustainable for firms. If corporate social responsibility commitments simply impose costs on firms without any financial benefits, they are unlikely to act as a longterm vehicle guiding firms to adopt strategies that are in line with the goals and values of public law. Secondly, a related concern is whether firms' commitments can be accurately assessed in the international marketplace. Even if corporate social responsibility would be economically feasible for firms, problems of asymmetric information, moral hazard, and adverse selection may render commitments meaningless and limit market incentives for firms to engage on a long-term basis. considerations would tend to render voluntary commitments by firms ineffective as potential mechanisms for global regulation in relation to the public law mandates of corporate social responsibility.

Alongside the growth in voluntary corporate social responsibility activity by firms, both private and public actors have begun to try and influence corporate actors directly and to

<sup>5.</sup> See Helen Keller, Corporate Codes of Conduct and their Implementation: The Question of Legitimacy 53-58 (2006), available at www.yale.edu/macmillan/Heken\_Keller\_Paper.pdf (describing corporate social responsibility codes as toothless marketing exercises); see also Laura Dubinsky, The Fox Guarding the Chicken Coop: Garment Industry Monitoring in Los Angeles, in Corporate Responsibilities and Labor Rights: Codes of Conduct in the Global Economy 160, 161, 170 (Gill Seyfang et. al. eds., 2002) (outlining the ineffectiveness of corporate social responsibility commitments to labor standards).

<sup>6.</sup> Another key consideration is the degree of overlap between the voluntary commitments of firms and the underlying problems that would ordinarily call for regulation, such as use of common resources. The present study is primarily concerned with the potential viability of private commitments by firms and the effectiveness of attempts by third parties to regulate this activity through the provision of information. If voluntary commitments are either unsustainable or ineffective, then there is less need for concern about how well they may serve the functions of public regulation.

make corporate social responsibility commitments more robust. Public actors, such as the Organization for Economic Co-Operation and Development (OECD) and the United Nations (UN), have provided templates for corporate social responsibility that are intended to serve as common substantive reference points.8 Private actors have also developed standards and rankings that often draw on these and other "public law" reference points to compare firms and communicate relative performance to potential consumers and investors.9 intervention of private third-party actors engaged in standardsetting and bench-marking raises the question of whether this form of "regulation through information" can be an effective alternative to more traditional public means of legal enforcement, which are lacking in the international realm in relation to many of the commitments firms undertake. 10

<sup>7.</sup> See, e.g., Margaret Blair, Cynthia A. Williams & Li-Wen Lin, The Roles of Standardization, Certification and Assurance Services in Global Commerce 20-21 (Vanderbilt Law and Economics Research Paper 08-16, 2008), available at http://ssrn.com/abstract=1128143 (discussing the role of third party standards and monitoring in making corporate voluntary commitments effective in the absence of direct regulation, although paper focuses on implications for vertical integration of businesses in international setting).

<sup>8.</sup> See Org. for Econ. Cooperation and Dev., OECD Guidelines for Multinational Enterprises (2000), available at http://www.oecd.org/dataoecd/56/36/1922428.pdf; see also The United Nations Global Compact, http://www.unglobalcompact.org (last visited Oct. 24, 2010) (The Global Compact is a much less detailed collection of principles for sound business conduct, drawn from key UN instruments).

<sup>9.</sup> Some prominent examples include the Dow Jones Sustainability Index (for investments) and the Global Reporting Initiative (GRI) (for firms reporting on corporate social responsibility). The Global Reporting Initiative appears to be emerging as a dominant standard for corporate social responsibility reporting. See KPMG 2008, supra note 2, at 38 (noting that in 2008 over 77% of the G250 reporting companies referred to the GRI framework). In 2010, the UN Global Compact and GRI announced a new collaboration to integrate the substantive goals of the Compact within the reporting framework of the GRI. See The Amsterdam Global Conference on Sustainability and Transparency, UN Global Compact and GRI Announce New Collaboration (May 28, 2010), http://www.amsterdamgriconference.org/index.php?id=39&item=37.

<sup>10.</sup> See e.g., Backer, supra note 1, at 593 (urging development of hard international law to encourage monitoring and disclosure of firms' commitments); see also David W. Case, Corporate Environmental Reporting as Informational Regulation: A Law and Economics Perspective, 76 U. Colo. L. Rev. 379 (2005) (discussing the role of information disclosure as a form of regulation, particularly focusing on the potential of the GRI as a regulatory form

This paper examines *Fortune* Magazine's "Corporate Social Responsibility" rankings as a case study to provide empirical evidence in relation to these questions. The *Fortune* rankings provide comparative information about the corporate social responsibility performance of the world's largest companies. The paper uses an event study methodology to examine the market response to the rankings. The results of the event study provide information about whether the rankings themselves are perceived as providing information important to the value of the firms. Assessment of investor responses to the *Fortune* rankings also provides evidence about whether corporate social responsibility performance is viewed as enhancing the profitability of companies, and whether market pressure will tend to force "under-performing" firms to improve their performance or expand their commitments.

The paper is organized as follows. In Section 2, I review in more detail the theory of voluntary self-regulation in the form of undertaking corporate social responsibility commitments. In particular, I consider the links between voluntary activity by firms and global public law, and also briefly review the economic issues at the heart of debates over whether corporate social responsibility is viable. In Section 3, I discuss previous empirical work on the profitability of corporate social responsibility, as well as the effectiveness of information provision as a regulatory strategy to set the present study in context. Section 4 describes the *Fortune* rankings. Section 5 provides a discussion of the event study methodology applied in the paper. Section 6 presents the estimation and results, and Section 7 offers conclusions and suggestions for future research.

of disclosure and arguing that mandatory domestic disclosure laws would enhance the regulatory effects of such formal, voluntary reporting).

<sup>11.</sup> The relative performance depends on the extent to which the firms have internalized the criteria incorporated in *Fortune*'s ranking scheme. The content of the scheme is discussed in Section 4 below.

# 2 THE THEORY OF CORPORATE SOCIAL RESPONSIBILITY

#### 2.1 Corporate Social Responsibility as Global Public Law

One of the features of current corporate social responsibility activity by large transnational corporations is its focus on traditional subjects of public law regulation. Contemporary surveys of corporate social responsibility reporting indicate that most companies provide "sustainability" reports documenting their social, environmental and economic performance. 12

A significant component of firms' corporate social responsibility activity is linked to respect for individual rights. For example, broad commitments to human rights, as well as more specific attention to labor rights, are common features of the Codes of Conduct firms adopt to outline their voluntary commitments. Firms report on their performance in implementing basic "labor rights," such as equal opportunity and non-discrimination, as well as prohibitions on forced and child labor. Firms also frequently commit to providing reasonable working conditions for their employees, including workplace safety, and in many cases extending to more fundamental individual rights of collective bargaining and free association. Is

<sup>12.</sup> See KPMG 2005, supra note 2, at 9.

<sup>13.</sup> See Codes of Conduct: Expanded Review of Their Contents, supra note 3 at 10 (noting that 25% of Codes in their sample explicitly referenced "human rights"); see also id. (indicating that 60% of the firms sampled included commitments to labor rights); KPMG 2005, supra note 2, at 24 (stating that firms' corporate social responsibility reports also include references to human rights and labor rights, and noting that 51% of firms' reports contained general commitments to human rights and that roughly two thirds of firms' reports indicated commitment to equal opportunity and diversity as labor rights, while just under one third reported support for prohibitions on child or forced labor); KPMG 2008, supra note 2, at 29 (Figure 4.5 indicates use of UN Global Compact (40%), ILO Core Conventions (24%) and UN Universal Declaration of Human Rights (21%) in G250 reporting).

<sup>14.</sup> See KPMG 2005, supra note 2, at 24.

<sup>15.</sup> See Codes of Conduct: Expanded Review of Their Contents, supra note 3, at 10 (indicating that 75% of sample Codes contain commitments to working conditions); KPMG 2005, supra note 2, at 24 (finding that just under one third of corporate social responsibility reports indicated support for collective bargaining and free association).

The protection and promotion of individual rights is a core function of public law, and in most international agreements is recognized as a duty on states. The assumption of responsibility by transnational corporations in relation to individual rights represents one strand of their engagement as private actors promoting public law norms through voluntary activity.

Another prominent focus of voluntary activity by firms is in the realm of environmental stewardship. 16 A diverse array of objectives constitute firms' environmental commitments, but a common focal point is sustainable development goals, which include environmentally responsible products and production methods, responsiveness to community concerns, recycling, conservation, waste management practices, and conservation. 17 Environmental self-regulation by firms is distinguished by a greater degree of transparency than other types of voluntary activity. Firms are more likely to describe environmental corporate social responsibility goals in terms of measurable targets and to disclose information about progress to the public. 18 The recent attention transnational firms have paid to the issue of global warming illustrates this characteristic. In 2005, over 85% of the G250<sup>19</sup> addressed climate change in their corporate social responsibility reports and 67% measured and reported on their green house gas emissions.<sup>20</sup> The

<sup>16.</sup> See KPMG 2005, supra note 2, at 9, showing that prior to 2004 most corporate social responsibility reports focused exclusively on environmental, health and safety issues (73% of reports for the G250 had this focus in 2002).

<sup>17.</sup> See Codes of Conduct: Expanded Review of Their Contents, supra note 3, at 12 (noting that the dominant commitment in Codes in the OECD Survey related to the environment was to comply with national laws).

<sup>18.</sup> See id. (stating that 29% of Codes of Conduct touching on environmental concerns contain this commitment).

<sup>19.</sup> The G250 are the 250 largest industrial corporations in the world, as measured by revenue. Fortune compiles a list of the 500 largest companies annually; for lists for sample years 2004-2006, see Fortune 500, 2004 Full List, FORTUNE, Apr. 5, 2004, available at http://money.cnn.com/magazines/fortune/fortune500\_archive/full/2004; Fortune 500, 2005 Full List, FORTUNE, Apr. 18, 2005, available at http://money.cnn.com/magazines/fortune/fortune500\_archive/full/2005; Fortune 500, 2006 Full List, FORTUNE, Apr. 17, 2006, available at http://money.cnn.com/magazines/fortune/fortune500/2006/full\_list/index.html.

<sup>20.</sup> See KPMG 2005, supra note 2, at 27 (reporting on direct emissions). In the survey for 2008, 56% of the G250 surveyed were reporting on their carbon footprint. See KPMG 2008, supra note 2, at 56.

environmental corporate social responsibility activity transnational firms overlaps with public law in its concern for sustainable development, which inherently involves balancing the private and social costs and benefits of activity with anticipated environmental consequences. Practical commitments such as recycling and hazardous waste management address the externalities arising from firms' private activity. Characteristically, externalities give rise to market failure and are a focus of public regulatory intervention.<sup>21</sup> The focus on warming further illustrates  $_{
m the}$ coincidence environmental corporate volunteerism with public law, as global climate change presents a classic problem of commons management that is subject to collective action problems at the international level.

Consideration of one final category of activity helps to illustrate the overlap between current self-regulation by firms and public law. Recently, transnational firms have been increasingly focused on making commitments to protect the integrity of public decision-making as part of their corporate social responsibility activity. For example, issues of bribery and corruption have assumed an increasingly prominent profile in firms' corporate codes, reporting and governance mechanisms.<sup>22</sup> Commitments to disclosure and transparency related to firms' voluntary commitments, either directly or through the use of assurance services, are another aspect of firms' activity in this

<sup>21.</sup> Direct government regulation is the solution to externality problems in the Pigouvian tradition, while creation and enforcement of complete property rights can produce optimal outcomes in a purely Coasian analysis. In either case, some form of supporting public law intervention is required to establish the legal framework to address the environmental spillovers from firms' activity.

<sup>22.</sup> See Codes of Conduct: Expanded Review of Their Contents, supra note 3, at 8 (reporting that about 23% of the firms in their 2001 sample included Code commitments directed at combating bribery and corruption); see also EXPERTS IN RESPONSIBLE INV. SOLUTIONS, CORPORATE CODES OF BUSINESS ETHICS: AN INTERNATIONAL SURVEY OF BRIBERY AND ETHICAL STANDARDS IN COMPANIES 6 (2005) (identifying the use of whistle-blowing systems, anti-bribery policies, prohibitions on political donations, and the adoption and monitoring of ethics policies as corporate social responsibility practices adopted by companies on the FTSE All World Developed Index targeted at corruption and bribery).

area.<sup>23</sup> A major function of public law is to provide mechanisms to insure the integrity of public decision-making in order to constrain actors within the bounds of their legal authority and prevent the capture of public decision-making authority by special interests. The anti-bribery, corruption control, and transparency goals, adopted as part of transnational firms' corporate social responsibility activities, represent self-regulation efforts directed at achieving these public law goals.

Corporate social responsibility activity by transnational corporations not only overlaps with the subjects of public law, but also connects directly with the norms of public international law. The most obvious examples can be found in corporate social responsibility codes and reports that explicitly reference instruments drawn from public international law. A substantial proportion of the reports of large transnational corporations directly reference the UN Universal Declaration of Human Rights, International Labour Organization (ILO) Core Labor Conventions, OECD Guidelines for Multinational Enterprises (MNEs), or the UN Global Compact as benchmarks for their activities.24 The Universal Declaration and ILO Core Conventions are foundational sources of norms in the realm of The OECD Guidelines and Global public international law. Compact are not instruments of public international law, but incorporate principles drawn directly from public international law. For example, the UN Global Compact requires firms to adopt and support ten principles that are directly linked to UN supported instruments, including the Universal Declaration, ILO Core Labor Conventions, Rio Declaration, and UN Convention on Corruption.<sup>25</sup> Instruments of public international law can also be

<sup>23.</sup> See Codes of Conduct: Expanded Review of Their Contents, supra note 3, at 11-12; KPMG 2005, supra note 3, at 30.

<sup>24.</sup> See KPMG 2008, supra note 2, at 29 (indicating that of the G250 corporate social responsibility reports, 21% referred to the Universal Declaration, 24% referred to ILO Core Standards, 13% referred to OECD Guidelines and 40% referred to the Global Compact).

<sup>25.</sup> See Press Release, Secretary-General, Secretary-General Proposes Global Compact on Human Rights, Labour, Environment, in Address to World Economic Forum in Davos, U.N. Press Release SG/SM/6881 (Jan. 31, 1999), available at http://www.un.org/News/Press/docs/1999/19990201.sgsm6881.html; see also Overview of the UN Global Compact, UNITED NATIONS GLOBAL COMPACT, http://www.unglobalcompact.org/AboutTheGC/index.html (last visited Nov. 18,

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influential by providing reference points and guiding the direction of corporate social responsibility activity by firms. An illustrative example is the influence of the UN Framework Convention for Climate Change and the Kyoto Protocol on firms' voluntary climate change activity, which has a matching focus on measuring greenhouse gas emissions, and also targets to benchmark progress in achieving socially responsible goals.

The influence of norms from the realm of public international law is not confined to their direct application in firms' voluntary Another important connection arises through the activity. influence of third party standards that draw on, or connect to, norms of public international law. An illustrative example is the Global Reporting Initiative (GRI). The Global Reporting Initiative is a standardized framework for reporting on corporate social responsibility activities developed by an NGO-led coalition that also includes firms, academics, accounting firms, and business associations, among others.<sup>26</sup> The index is explicitly designed to complement the UN Global Compact and has a stated goal of providing a universal standard by which firms can measure their performance that will reflect the normative goals of the Global Compact.<sup>27</sup> Other third party standards, such as the AccountAbility framework for assessing corporate responsibility that was adopted in the Fortune magazine ratings,

<sup>2010) (</sup>on goals and strategy of the Global Compact); *The Ten Principles*, UNITED NATIONS GLOBAL COMPACT, http://www.unglobalcompact.org/AboutTheGC/TheTenPrinciples/index.html (last visited Nov. 18, 2010) (discussing the ten principles and indicating their relationship to key UN instruments).

<sup>26.</sup> See What is GRI?, GLOBAL REPORTING INITIATIVE, http://www.globalreporting.org/AboutGRI/WhatIsGRI/ (last visited Nov. 14, 2010). For discussion of the development and structure of the GRI, see Allen L. White, Why We Need Global Standards for Corporate Disclosure, 69 LAW & CONTEMP. PROBS. 167, 177-82 (2006). See also Case, supra note 10 at 397-401.

<sup>27.</sup> See Alliances, GLOBAL REPORTING INITIATIVE, http://www.globalreporting .org/AboutGRI/WhatIsGRI/Alliances/GRIAlliancesPage.htm (last visited Nov. 18 2010) (listing UN Global Compact as a UN instrument that has "synergies" with the GRI). For further discussion of the connection between the normative goals of the Global Compact and the reporting mechanism of the GRI, see THE GLOBAL COMPACT & GLOBAL REPORTING INITIATIVE, MAKING THE CONNECTION: THE GRI GUIDELINES AND THE UNGC COMMUNICATION ON PROGRESS (summarizing before mentioned notably page 3) availableconnection. on http://www.globalreporting.org/NR/rdonlyres/A72A4645-B6FA-40B5-A1EE-A64E6F0CFBB2/0/260607\_COP\_MTC.PDF.

draw on norms of public international law as criteria for constructing their own assessments of the quality of firms' corporate social responsibility.<sup>28</sup>

Voluntary commitments by firms under the broad rubric of "corporate social responsibility" target subjects that have traditionally been viewed as the foci of public law. commitments by firms are also both directly and indirectly linked to normative commitments drawn from public international law. Corporate social responsibility is a potentially important mechanism for the transmission of public law norms in the global sphere, particularly as norm setting in the realm of public international law often has relatively weak implementation or enforcement mechanisms. Corporate social responsibility commitments by transnational firms offer a complementary means by which the norms of public international law can be realized and implemented in a global setting. commitments may also self-regulate activities of transnational corporations with important public law dimensions that are commonly viewed as resistant to control through unilateral domestic legislation.<sup>29</sup>

The potential for corporate social responsibility activity by transnational firms to achieve this promise depends on whether these voluntary commitments are effective. The question of effectiveness relates to both the economic incentives for firms to engage in meaningful commitments and the issue of whether the market can provide a suitable mechanism for rewarding and enforcing the commitments firms make.

#### 2.2 The Economics of Corporate Social Responsibility

Whether or not corporate social responsibility is a profitable activity for corporations is hotly contested.<sup>30</sup> There are three

<sup>28.</sup> See infra Section 4 for discussion of Fortune's Rankings.

<sup>29.</sup> For example, the issue of labor rights and standards poses difficult competitive concerns in a global market.

<sup>30.</sup> See, e.g., ESTY & WINSTON, supra note 4, at 55-58 (making a general case for the potential profitability of adopting "green" business strategy). For the perspective of Milton Friedman, perhaps the most famous skeptic of corporate social responsibility as a profitable strategy for firms, see MILTON FRIEDMAN,

main channels through which corporate social responsibility has the potential to enhance the profitability of firms.

Corporate social responsibility largely overlaps with the phenomena of private provision of public goods by individuals. but intermediated through consumption and investment markets. The underlying preferences of consumers and investors are important to understanding whether or not corporate social responsibility will be profitable. If consumers and investors have tastes for the corporate social responsibility dimensions of goods or firms (e.g. as investments), then voluntary commitments can be a means of product differentiation that allows firms to earn supra-normal profits. A number of economists have put forward theories of individual preferences that would produce demand for such "bundled" public-private goods. Sen has identified a theory of preferences under which consumer and investor choices in the market would reflect prior "commitments" or "sympathies" directed at the provision of "public goods." 31 Akerlof and Kranton have developed an economic model of "identity" that would also support consumer/investor choice favoring corporate social responsibility aligned products.<sup>32</sup> However, an implication of their model is that identity driven CSR demand depends on the strength of private preferences combined with social influences that are only triggered when corporate social responsibility is an observable aspect of consumer/investor choice.<sup>33</sup> The identity model thus reveals an important potential limitation in firms' ability to capitalize on corporate social responsibility through product differentiation if that dimension of their products is not readily apparent. Empirical evidence offers some support for claims that consumers and investors may make choices that reflect willingness to pay for corporate social responsibility

CAPITALISM AND FREEDOM (Univ. of Chi. Press, 2002) (1962) (arguing that this is largely a way in which management diverts wealth from shareholders).

<sup>31.</sup> See Amartya K. Sen, Rational Fools: A Critique of the Behavioral Foundations of Economic Theory, 6 Phil. & Pub. Aff. 317, 327 (1977); see also Amartya K. Sen, Rationality and Freedom (Harvard Univ. Press 2002) [hereinafter Sen, Rationality and Freedom].

<sup>32.</sup> See George A. Akerlof & Rachel E. Kranton, Economics and Identity, 140 Q. J. Econ. 715, 716 (2000).

<sup>33.</sup> See id. This is an implication in relation to corporate social responsibility that flows from the structure of Akerlof and Kranton's model.

preferences.<sup>34</sup> However, it is not clear that this form of product differentiation will always be profitable.

Corporate social responsibility may also be profitable if it offers a means of preempting costly regulations or anticipating the regulatory environment in which the firm operates in a manner that minimizes future costs. This view of corporate social responsibility is reflected in the views of transnational corporations themselves. For example, John Browne, a former CEO of BP, a transnational corporate social responsibility "leader," described the development of the company's internal GHG emissions trading scheme as a way to get "a seat at the table and influence future rules." The approach of third parties also confirms the viewpoint that corporate social responsibility can be seen as a way to strategically position a company to regulatory requirements.<sup>36</sup> address future Academic commentators have identified this strategic, competitive aspect as a potential economic incentive for firms to engage in corporate social responsibility as a preemptive response to future

<sup>34.</sup> See, e.g., KPMG 2005, supra note 2, at 18 (stating that 74% of the G250 firms surveyed about corporate social responsibility indicated that "economic considerations" were behind their activity, and referenced specific factors such as "access to capital / shareholder value" (39%), "brand or reputation" (27%), and "market position" (21%)). Consumer surveys have also documented willingness to pay for consumer products aligned with corporate social responsibility commitments to labor and to boycott goods violating "fair" labor practices. See Kimberly Ann Elliott & Richard B. Freeman, White Hats or Don Quixotes? Human Rights Vigilantes in the Global Economy, in Emerging Labor Market INSTITUTIONS FOR THE TWENTY-FIRST CENTURY (Richard B. Freeman et al. eds., 2005); Orly Lobel, Sustainable Capitalism or Ethical Transnationalism: Offshore Production and Economic Development, 17 J. ASIAN ECON. 56, 58 (2006); Michael T. Rock, Public Disclosure of the Sweatshop Practices of American Multinational Garment/Shoe Makers/Retailers: Impacts on their Stock Prices, 7 COMPETITION & CHANGE 23, 24 (2003). Recent data indicates that approximately ten percent of U.S. capital market investment is subject to some form of ethical screen. This puts the value of the "ethical investment" market at some \$2.3 trillion dollars. See Telis Demos, Beyond the Bottom Line: Our Second Ranking of Global 500 Companies, Fortune, Oct. 23, 2006, available at http://money.cnn.com/magazines/fortune/fortune\_archive/2006/10/30/8391850/in dex.htm.

<sup>35.</sup> See Esty & Winston, supra note 4, at 120.

<sup>36.</sup> The Dow Jones Sustainability index is based on the idea that recognition of long-term sustainability challenges will enhance shareholder value in the long run by enhancing the competitive position of firms. *See* BUSINESS AND HUMAN RIGHTS: A COMPILATION OF DOCUMENTS 528 (Radu Mares ed., 2004).

regulation.<sup>37</sup> However, this aspect of corporate social responsibility may lead to uncertain impacts on profitability. Much depends on whether firms perceive risks accurately and whether investors and corporations perceive future risks similarly. If firms prepare for the "wrong" environment, then there is a risk that profitability will be hurt by pre-commitment through corporate social responsibility. Furthermore, if investors do not share the corporation's view of its future operating environment, corporate social responsibility may dilute the value of the company.

Finally, corporate social responsibility may enhance profitability through increased employee productivity or reduced One possible link between corporate social responsibility and profitability may come from activity that provides direct benefits to employees. These "gifts" in excess of a competitive wage may produce a reciprocal benefit for the firm in the form of enhanced productivity. The overall efficiency of production can be enhanced despite deviation from a strictly competitive, cost-minimizing approach to labor compensation.<sup>38</sup> Another approach to corporate social responsibility as a profitable strategy through its impact on labor costs can arise where the activity is tied to "moral" preferences held by prospective employees.<sup>39</sup> The adoption of corporate social responsibility commitments can serve as a way to screen employees and allow firms to pay reduced wages or gain loyalty and productivity

<sup>37.</sup> See Esty & Winston, supra note 4, at 118-20.

<sup>38.</sup> See generally George A. Akerlof, Labor Contracts as a Partial Gift Exchange, 97 Q. J. Econ. 543 (1983). For empirical support, see Lobel, supra note 34 (discussing labor productivity results for Costco and Walmart). See also Ernst Fehr, George Kirchsteiger & Arno Reidl, Does Fairness Prevent Markets from Clearing? An Experimental Investigation, 108 Q. J. Econ. 437 (1993) (describing experimental results confirming that above market compensation can be efficient).

<sup>39.</sup> This strand of corporate social responsibility profitability analysis essentially draws on the "moral" or "social welfare" enhancing preference held by individuals as manifested through employment markets. See, e.g., SEN, RATIONALITY AND FREEDOM, supra note 31; Akerlof & Kranton, supra note 32; Gary Charness & Matthew Rabin, Understanding Social Preferences with Simple Tests, 117 Q. J. Econ. 817 (2002).

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thereby enhancing profitability.<sup>40</sup> While there are plausible efficiency arguments on the labor market side for corporate social responsibility, the economic sustainability of this rationale is again unclear as a theoretical matter.

Skeptics of corporate social responsibility point to a number of potential problems. If it represents a move away from a strictly shareholder value model of management, corporate social responsibility may make the decisions of managers more complex and less transparent. This can lead to management following its own preferences and incurring "wasteful" expenditures that reduce the value of the firm. Managerial decisions may become more arbitrary and undermine profitability. Even if there is a role for "responsible" firms, alignment with corporate social responsibility preferences as a stakeholder welfare maximization model may lead to a reduction in the return on equity in these firms. If corporate social responsibility leads to this result, then the co-existence of these firms and "ordinary" firms will be

<sup>40.</sup> For a formal model of labor market screening based on the corporate social responsibility preferences of employees, see Kjell Arne Brekke & Karine Nyborg, Attracting Responsible Employees: Green Production as Labor Market Screening, 30 RESOURSE & ENERGY ECON. 509 (2008); ROBERT H. FRANK, WHAT PRICE THE MORAL HIGH GROUND (2003) (providing empirical support for a compensating wage differential of non-profit company employees in the form of the socially responsible focus of the companies); see also KPMG 2005, supra note 2, at 18 (finding that 47% of G250 firms cited "employee motivation" as a driver for corporate social responsibility and linking this to a 'war for talent'); KPMG 2008, supra note 2 at 18 (in 2008 "Employee Motivation" cited as a driver by 52% of G250); ESTY & WINSTON, supra note 4, at 137 (providing anecdotal evidence that corporate social responsibility is related to the ability to attract employees with "green" sensibilities).

<sup>41.</sup> See e.g. Milton Friedman, The Social Responsibility of Business is to Increase its Profits, N.Y. TIMES MAGAZINE, Sept. 13, 1970; see also Frank H. Easterbrook & Daniel R. Fischel, The Economic Structure of Corporate Law 38 (1991) (support for general view that shareholder primacy model is the workable and efficient approach to corporate management).

<sup>42.</sup> See Michael C. Jensen, Value Maximization, Stakeholder Theory and the Corporate Objective Function, 14 J. APPLIED CORP. FIN. 8, 9 (2001).

<sup>43.</sup> This result could arise both if corporate social responsibility is costly/not profitable for the managerial reasons above and if investors are willing to sacrifice some financial return on their investments for non-financial rewards in the form of "moral" satisfaction.

problematic, since firms focusing on corporate social responsibility may become a takeover target.<sup>44</sup>

The profitability and economic sustainability of corporate social responsibility activity by firms is not clearly established by theory. However, the potential for corporate social responsibility to operate as a significant channel for global governance depends on its economic viability. Whether or not markets perceive corporate social responsibility as enhancing the value of firms is an important empirical question.<sup>45</sup>

Aside from the issue of whether corporate social responsibility is profitable in and of itself, it is questionable whether the global marketplace will provide a suitable forum for trade in CSR quality differentiated goods and investments. The classic work of Akerlof established the risk that trade in products ostensibly differentiated by unobservable quality can lead to problems of moral hazard and adverse selection that can destroy the incentives to produce high quality products. In the corporate social responsibility context, claims that firms' commitments are empty marketing exercises reflect the view that firms have incentives to cheat on their promises and deliver little in the way of meaningful change in their activity. Unless the commitments of firms can be made credible, there is little

<sup>44.</sup> See Jean Tirole, Corporate Governance, 69 ECONOMETRICA 1, 3 (2001).

<sup>45.</sup> Another important question relates to the scope of viable corporate social responsibility relative to "true" public law regulation. While effective corporate social responsibility commitments may overlap to a degree with the objects and purposes of public law, the fit is unlikely to be perfect. For a more detailed exploration of the relationship between corporate social responsibility and public law, see Cherie Metcalf, Corporate Codes of Conduct, International Trade and the Private Diffusion of Public Law Norms: Limits and Possibilities (2010) (unpublished manuscript) (on file with author). The focus of the present inquiry is limited to the effectiveness of commitments actually adopted by firms as part of their corporate social responsibility activity.

<sup>46.</sup> See George Akerlof, The Market for "Lemons": Quality Uncertainty and the Market Mechanism, 84 Q. J. ECON. 488 (1970); see also Jason Scott Johnston, Signaling Social Responsibility: On the Law and Economics of Market Incentives for Corporate Environmental Performance 71-73 (Univ. of Pa., Inst. for Law and Econ., Research Paper No. 05-16, 2005) (discussing this problem of corporate social responsibility as a "credence good" in relation to environmental commitments by firms).

<sup>47.</sup> This is not an uncommon view amongst critics of corporate "self-regulation." See, e.g., Dubinsky, supra note 5, at 161; Keller, supra note 5 at 13.

incentive to expend any resources engaging in corporate social responsibility activity, even for firms that may genuinely intend to adhere to their commitments. The complexity of international markets and the supply and distribution networks of transnational corporations make observation and monitoring of firms' performance difficult. However, without some means to enhance the credibility and comparability of firms' corporate social responsibility commitments, the potential for CSR to operate as a channel for global governance will be severely limited.

One important potential means by which the quality of firms' corporate social responsibility commitments can be assured is through third party assessment and rankings. 48 The emergence of private, common standards as a means of structuring corporate social responsibility reporting, such as the GRI, is directed at achieving this goal. The use of privately constructed screens or mechanisms to compare the corporate responsibility profiles of firms is another element of this strategy to render it potentially effective in the global market.<sup>49</sup> The Fortune Sustainability rankings are an example of the application of a private, third party standard to assess firms' corporate social responsibility activity, combined with widespread availability of the comparative results. At this point in time, it is not clear whether efforts to provide independent benchmarking of firms' corporate social responsibility activity through rankings like Fortune's will address the potential "lemons" problem. However, the empirical results from this study will help shed light on whether this mechanism can help render corporate social responsibility commitments credible and worthwhile for firms to undertake.

<sup>48.</sup> Other means of addressing the "lemons" problem associated with corporate social responsibility include use of disclosure combined with readily observable corporate social responsibility commitments, use of assurance services for corporate social responsibility reports, monitoring of activity, and incorporation of governance mechanisms to facilitate accountability for corporate social responsibility quality. For discussion of these possibilities, see Metcalf, supra note 45 (focusing on the use of third party assessment and rankings).

<sup>49.</sup> This type of comparative screening and ranking is implicit in privately generated screens such as the Dow Jones Sustainability Index and Domini 400.

# 3 CORPORATE SOCIAL RESPONSIBILITY & THE MARKET: RELATED RESEARCH

There are three central empirical questions at the heart of the present inquiry. Is corporate social responsibility activity profitable for firms? Can third party rankings provide a means of making commitments credible? Will capital market responses provide a disciplining force on companies in relation to their corporate social responsibility commitments that can take the place of traditional enforcement actions?

The profitability of corporate social responsibility as a general matter is deeply contested, and empirical investigation has not eliminated this uncertainty. A number of researchers have provided relevant empirical studies. For example, Becchetti, Giacomo and Pinnacchio examine the long-run profitability of social responsibility in their study compares firms in the Domini 400 Social Index portfolio against a matching sample of non-CSR firms.<sup>50</sup> In that study, the authors find that socially responsible firms have higher sales per employee accompanied by lower returns on equity, although with reduced volatility compared with the non-CSR portfolio.<sup>51</sup> Becchetti et al. interpret their results as weakly supporting the conclusion that corporate social responsibility represents a move away from the "shareholder primacy" model toward a "stakeholder welfare" model.<sup>52</sup> This suggests that, in terms of pure profitability, "responsible" firms may fare worse than their irresponsible counterparts.

The results match those in another recent study of the profitability of corporate social responsibility activity by Brammer, Brooks and Pavelin.<sup>53</sup> In this study, the authors

<sup>50.</sup> See generally Leonardo Becchetti, Stefania Di Giacomo & Damiano Pinnacchio, Presentation at the XIII Tor Vergata Financial Conference: The Impact of Social Responsibility on Productivity and Efficiency of US Listed Companies (2004), available at http://art.torvergata.it/bitstream/2108/80/1/210.pdf.

<sup>51.</sup> *Id.* at 14 (sales per employee and level of investment returns), 16 (reduced volatility of returns).

<sup>52.</sup> Id. at 16-17.

<sup>53.</sup> Compare Becchetti, Di Giacomo & Pinnacchio, supra note 51, with Stephen Brammer, Chris Brooks & Stephen Pavelin, Corporate Social

examine the long-run stock returns of UK firms and relate these returns to firm social performance using data from the EIRIS investment service screen. The composite social responsibility score is negatively correlated with stock performance.<sup>54</sup> The EIRIS data on firms' social responsibility characteristics is proprietary, so it is difficult to know exactly how these measurements relate to broader investor perceptions of social responsibility. In addition, incomplete data forced Brammer *et al.* to consider only a subset of socially responsible behavior, which may undermine the generality of their conclusions about the profitability of corporate social responsibility.<sup>55</sup>

Becchetti and Ciciretti in a follow-up study to their earlier work, found that the lower long-run mean returns of socially responsible investments are compensated for in terms of relative risk; the risk-adjusted rates of returns to CSR and non-CSR stocks are not significantly different.<sup>56</sup> This work again uses the firms included in the Domini 400 Social Index as the socially responsible investment portfolio and constructs a matching sample to assess the impact of corporate social responsibility on returns.<sup>57</sup> As both the Becchetti et al. study and Becchetti and Ciciretti's work focus on the use of the Domini 400 Social index, the results may be specific to the vision of social responsibility inherent in that index. An additional potential difficulty lies with the construction of the matching sample. Particularly given the long-run comparison, there is a risk that the impact of social responsibility may be confounded with other effects that are not captured in the criteria used to match the firms.

Performance and Stock Returns: UK Evidence from Disaggregate Measures (June 2005) (unpublished manuscript) (on file with author).

<sup>54.</sup> See Becchetti, Di Giacomo & Pinnacchio, supra note 51, at 11-13 (discussing results).

<sup>55.</sup> See Brammer, Brooks & Pavelin, supra note 53, at 7 (using measures for community performance, environmental performance and employee performance from the EIRIS service).

<sup>56.</sup> See generally Leonardo Becchetti & Rocco Ciciretti, Corporate Social Responsibility and Stock Market Performance 14 (Ctr. for Econ. and Int'l Studies, Working Paper No. 79, 2006), available at http://ssrn.com/abstract=897499.

<sup>57.</sup> See id. at 5.

In an earlier study, Posnikoff investigated the profitability of South African apartheid-related divestment as a socially responsible investment decision by firms.<sup>58</sup> Posnikoff used an event study methodology to assess the market response to announcements of divestment by individual companies. Contrary to her expectations, she found that divestment produced statistically significant positive excess returns.<sup>59</sup> She attributed this response to investor tastes for ethical investment, or as a reflection of consumer preferences embodied in boycotts of companies with South African connections. 60 In subsequent follow-up studies, this conclusion was questioned by Meznar, Nigh, and Kwok, who concluded from their estimates that whether firms earned positive abnormal returns upon announcing divestment depended on the timing.<sup>61</sup> Early movers were not rewarded and instead experienced negative abnormal Later on, however, and particularly once the U.S. imposed economic sanctions, divestment announcements did generate positive returns. 62 The work on South African divestment suggests that there may be a case for profitable "ethical" strategies, but it appears highly contingent. It is also unclear how readily one can generalize from the particular context of apartheid.

The prior research provides somewhat mixed evidence on the question of whether corporate social responsibility is a profitable activity for firms. The present study will complement prior work by broadening the focus on social responsibility to consider an additional social responsibility ranking method beyond the EIRIS and Domini investment screens. In addition, the use of an event study analysis, made possible by the announcement of annual rankings in *Fortune*, will allow for a more targeted focus on the market response to social responsibility. However, unlike

<sup>58.</sup> See Judith F. Posnikoff, Divestment from South Africa: They Did Well by Doing Good, 15 Contemp. Econ. Pol'y 76 (1997).

 $<sup>59. \</sup> Id.$  at 79.82 (finding positive excess returns under alternative estimation strategies).

<sup>60.</sup> See id.

<sup>61.</sup> See Martin B. Meznar, Douglas Nigh & Chuck C.Y. Kwok, Announcements of Withdrawal from South Africa Revisited: Making Sense of Contradictory Event Study Findings, 41 Acad. of Mgmt. J. 715, 729 (1998).

<sup>62.</sup> See id. (providing this explanation of their results).

Posnikoff's divestment example, the *Fortune* rankings address corporate social responsibility more comprehensively and in relation to "ordinary" business practice. The *Fortune* rankings apply to the companies in the G100, so there is a cross-sectional comparison of corporate social responsibility performance inherent in the rankings that avoids the difficulty of constructing a matched sample.

A number of recent papers address the question of whether third party rankings are viewed by the market as providing independent information.<sup>63</sup> In one such study, Del Guercio and Tkac use an event study methodology to assess the impact of the "Morningstar" mutual fund rankings on fund flows.64 authors conclude that changes in the star ranking produce a statistically significant effect that can be separated from changes in the underlying performance measures. 65 Del Guerco and Tkacs' results also indicate that investors punish firms suffering a downgrade by imposing negative excess returns in reaction to the rating announcement. In another study, Cheng, Collins and Huang also use an event study methodology to address the impact of the transparency and disclosure rankings by Standard and Poor. 66 These authors' results also provide support for the claim that third party rankings can be viewed as providing new information to the market. Cheng et al. find that investors responded to the Standard and Poor rankings when the rankings revealed discrepancies with disclosure in annual reports, bidding

<sup>63.</sup> It is implicit in both Becchetti, Di Giacomo & Pinnacchio, *supra* note 51 and Becchetti & Cicciretti, *supra* note 56 that inclusion in the Domini 400 will convey meaningful information about a firm's social responsibility profile.

<sup>64.</sup> See Diane Del Guercio & Paula A. Tkac, Star Power: The Effect of Morningstar Ratings on Mutual Fund Flow (Fed. Reserve Bank of Atlanta, Working Paper No. 2001-15, 2001).

<sup>65.</sup> Funds are rated on a simple five-star scale. The results are available freely on the internet. See id at 29-30.

<sup>66.</sup> See C.S. Agnes Cheng, Denton Collins & Henry Huang, Investors' Interpretation of the October 15, 2002 Standard & Poor Transparency & Disclosure Rankings 14 (Jan. 2006) (unpublished manuscript) (on file with author) (the study examines the effect of the ranking of transparency and disclosure practices of firms, compiled by the investment firm Standard and Poor); see also Sandeep A. Patel and George S. Dallas, Transparency and Disclosure: Overview of Methodology and Study Results, (Oct. 16, 2002).

down share values.<sup>67</sup> Linciano uses an event study methodology to address the impact of rating actions by the investment services of Fitch, Moody's and Standard & Poor on a sample of Italian firms.<sup>68</sup> She finds that rating downgrades and credit watches produce significant negative effects on stock prices, a result that mirrors recent findings by other researchers targeting U.S. stocks.<sup>69</sup>

A small group of papers have focused on evaluating the significance of rankings in Fortune magazine itself. Filbeck and Preece use both an event study methodology and a long-run approach to assess the information provided by Fortune's Best 100 Companies to Work for in America annual survey over the period from 1987-1999.<sup>70</sup> The authors find that inclusion in the ranking generates a significant positive abnormal return over the announcement period and higher long-run performance in comparison with a matched sample of non-award winning firms.<sup>71</sup> Fortune's rankings of America's Most Admired Companies have also been the subject of study by academic researchers. For instance, Antunovich and Laster examine the long-run returns over the sample period from 1983-1996, sorting the firms by decile. The authors find that the most admired firms earn positive abnormal returns, while those in the bottom decile experience negative excess returns. 72 In another study, Chung et al. assess these Fortune rankings over the period from 1990-1998, considering only the top 10 and bottom 10 firms in the ranking, adjusting the returns for risk. They find little evidence that the

<sup>67.</sup> See Cheng, Collins & Huang, supra note 66, at 14.

<sup>68.</sup> See generally Nadia Linciano, The Reaction of Stock Prices to Rating Changes 1 (July 31, 2004) (unpublished manuscript) (on file with author).

<sup>69.</sup> See id. at 2-3. But see Maria Vassalou & Yuhang Xing, Equity Returns Following Changes in Default Risk: New Insights into the Informational Content of Credit Ratings (EFA 2003 Annual Conference, Paper No. 326, 2003) (suggesting that the independent informational content of ratings changes is poor, since fundamentals can predict changes in the stock prices as well).

<sup>70.</sup> See generally Greg Filbeck & Dianna Preece, Fortune's Best 100 Companies to Work for in America: Do They Work for Shareholders?, 30 J. Bus. Fin. & Acct. 771, 777-79 (2003).

<sup>71.</sup> See id at 784.

<sup>72.</sup> Peter Antunovich & David Laster, *Do Investors Mistake a Good Company for a Good Investment?* 1 (Fed. Reserve Bank of N.Y., Staff Report No. 60, 1998).

Fortune rankings produce any significant effect.<sup>73</sup> Finally, Filbeck, Gorman and Preece also address the *Most Admired Companies* rankings, calculating and comparing annual returns for the top 50-ranked firms, bottom 50-ranked firms and the market. These authors find that the most admired firms outperformed the market by a statistically significant margin over the period from 1982-1994.<sup>74</sup>

While prior research clearly establishes the potential for independent rankings to convey information to the market, this research has not directly targeted the rankings applicable to corporate social responsibility investments. The independent content of third party corporate social responsibility rankings is an empirical question of critical importance to the debate over whether it can be made effective as a global governance Prior research indicates potential for rankings mechanism. associated with *Fortune* to convey independent information to the market; this study will build on this prior work in the context of corporate social responsibility rankings. While the results from prior Fortune surveys could be interpreted as targeting specific aspects of corporate social responsibility in a domestic context, the present inquiry focuses on a much broader definition of corporate social responsibility, and is more international in scope.

The question of whether capital markets can operate to enforce "regulation by information" has been addressed in numerous studies. One strand of research closely related to the environmental stewardship prong of corporate social responsibility examines whether capital markets respond to information about environmentally harmful behavior by firms. The evidence is mixed. In one study, Hamilton examined the initial release of information under the Toxic Release Inventory (TRI) in the U.S., using an event study methodology, and found a statistically significant negative abnormal return for reporting

<sup>73.</sup> This manuscript is discussed in Brammer, Brooks & Pavelin, supra note 53, at 4.

<sup>74.</sup> Greg Filbeck, Raymond Gormon & Dianna Preece, Fortune's Most Admired Firms: An Investor's Perspective, 18 STUDIES ECON. & FIN. 74, 79-80 (1997).

firms.<sup>75</sup> In another study, Konar and Cohen found that firms suffering the largest losses through stock effects generated by the TRI subsequently reduced their emissions more than other firms.<sup>76</sup> However, a study of a Canadian equivalent to the TRI by Lanoie, Laplante and Roy found generally insignificant effects on firm value generated by capital market responses.<sup>77</sup> These studies are focused on the impact of information released in conjunction with regulatory programs, so their implications for the more "market-driven" type of information represented by third party corporate social responsibility rankings is unclear.

In a study of the stock market response to environmental news in developing countries, Dasgupta, Laplante and Maningi find significant effects in response to both favorable news (e.g., awards) and negative events (e.g., citizen complaints and governmental enforcement actions). This study provides some support for the claim that, at least in relation to environmental claims, information that is not generated through regulatory channels can have disciplinary effects through stock price incentives. Gupta and Goldar provide evidence of the most direct relevance to the present study. The authors conducted an event study to determine the impact of environmental performance rankings of firms in India's pulp and paper, auto and chlor-alkali manufacturing industries. The rankings, composed by a UNEP-assisted Indian NGO, compared each firm to an ideal "best practice," ranked the firms and provided scores of one (worst)

<sup>75.</sup> See generally James T. Hamilton, Pollution as News: Media and Stock Market Reactions to the Toxics Release Inventory Data, 28 J. Envil. Econ. & Mgmt. 98 (1995).

<sup>76.</sup> See generally Shameek Konar & Mark A. Cohen, Information as Regulation: The Effect of Community Right to Know Laws on Toxic Emissions, 32 J. Envil. Econ. & Mgmt. 109 (1997).

<sup>77.</sup> See Paul Lanoie, Benoit Laplante & Maite Roy, Can Capital Markets Create Incentives for Pollution Control?, 26 ECOLOGICAL ECON. 31, 38 (1998) (but also finding significant abnormal returns for cases where firms were repeatedly placed on the list of firms out of compliance or of concern).

<sup>78.</sup> See Susmita Dasgupta, Benoit Laplante & Nlandu Mamingi, Pollution and Capital Markets in Developing Countries, 42 J. ENVIL. ECON. & MGMT. 310, 312 (2001).

<sup>79.</sup> See Shreekant Gupta & Bishwanath Goldar, Do Stock Markets Penalize Environment-Unfriendly Behaviour? Evidence from India, 52 ECOLOGICAL ECON. 81 (2005).

through five (best) "leaves." While the authors' results are somewhat mixed, they do find a statistically significant negative effect for pulp and paper firms, which all rated poorly relative to the ideal benchmark, and a stronger negative effect for the worst performers. The study provides some evidence that third party rankings can provide information significant enough to markets to generate disciplinary incentive effects through stock price responses.

Evidence on the potential for "market discipline" outside of the environmental side of corporate social responsibility is less well developed. In one study, Epstein and Schnietz use an event study approach to examine the stock effects for industries identified as "abusive" during the 1999 Seattle World Trade Organization (WTO) protests.<sup>82</sup> The authors find that firms among the Fortune 500, in sectors characterized as having "abusive" environmental or labor practices, suffered significant negative excess returns in relation to the protests.<sup>83</sup> However, disaggregating the categories led to only environmental concerns triggering significant responses.<sup>84</sup> In another study, Rock uses an event study analysis to examine responses to news stories about the use of sweatshop labor by U.S. multinationals.<sup>85</sup> He finds significant negative abnormal returns generated by the "bad news" sweatshop stories.86 Both the studies above provide evidence that capital markets may create incentive effects that can provide an alternative to regulatory enforcement in relation the corporate social responsibility commitments transnational corporations. However, the focus of the studies is The present study will provide additional guite narrow. information about how capital markets react to a more systematic evaluation of corporate social responsibility performance,

<sup>80.</sup> *Id.* at 82-85 (for description of the environmental performance rankings).

<sup>81.</sup> Id. at 91.

<sup>82.</sup> See Marc J. Epstein & Karen E. Schnietz, Measuring the Cost of Environmental and Labor Protests to Globalization: An Event Study of the Failed 1999 Seattle WTO Talks, 16 INT'L TRADE J. 129, 129-30 (2002).

<sup>83.</sup> Id. at 152-53.

<sup>84.</sup> Id. at 153-55.

<sup>85.</sup> See generally Rock, supra note 34.

<sup>86.</sup> See id. at 29.

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revealed through third party rankings, rather than news stories or specific protests.

#### 4 FORTUNE'S SUSTAINABILITY RANKINGS

The entry of *Fortune* Magazine into the business of corporate social responsibility ranking is an illustration of how central it has become to the world's largest companies. *Fortune* is a leading popular business publication and is regarded as having the potential to influence investors through its business rankings.<sup>87</sup>

Fortune has produced annual rankings of corporate social responsibility performance since 2005. The results of the rankings are published widely. In addition to news releases and early availability of the results on the magazine's website, the results are published in hard-copy editions of the magazine with additional articles and commentary. The rankings are directed at assessing the performance of the world's largest enterprises. The ranking methodology changed substantially in 2007, as it introduced a new component to measure the operational success of the ranked firms' sustainability commitments. With this break in methodology, combined with the extreme turbulence in markets in recent years, I have restricted the current study to the initial releases of the rankings in 2005 and 2006. 90

<sup>87.</sup> See, e.g., Filbeck & Preece, supra note 70 at 790 (relative influence of Fortune and its rankings).

<sup>88.</sup> The 2005 rankings were published in the October 3, 2005 international edition of Fortune, see Simon Zadek, Responsibility Isn't a Blame Game, FORTUNE INTERNATIONAL (ASIA), Oct. 3, 2005. The 2006 rankings were published in the October 30, 2006 issue, see Simon Zadek, Separating Smart from Great, FORTUNE, Oct. 30, 2006. Fortune has continued to publish its Sustainability Rankings each year, with results available in its November issue, as well as being available online. See, e.g., Most Accountable Companies for 2008, FORTUNE, Nov. 24, 2008, available at http://money.cnn.com/magazines/fortune/global500/2008/accountability/index.html.

<sup>89.</sup> See AccountAbility & CSRNETWORK, Accountability Rating 2007 6 (2007) available at http://www.accountabilityrating.com/past\_results.asp.

<sup>90.</sup> I investigated whether it would be possible to extend the sample to include the later rankings, in order to see if the addition of the new component enhanced the market impact of the rankings. However, by 2007 the events associated with the global financial crisis were beginning to have a significant impact on the sample firms, eliminating all but 25 firms when considering potential confounding news. I felt that use of the event study methodology in

Even with this restricted sample, the selection criteria have changed somewhat. The 2005 rankings were calculated for the full sample of firms within the Fortune Global 100.91 The 2006 rankings were calculated for a sample that included the Global 50, plus the ten largest companies in five sectors: automotive; electronics and telecommunications; computer, financials; petroleum refining; and utility/energy. In addition, the 2006 sample included the top ten firms from the 2005 rankings. 92 The 2006 results, which Fortune referred to as the G50+ results, extend to 64 companies. The Fortune rankings build on and essentially continue corporate social responsibility rankings produced by the consultancies AccountAbility and csrnetwork.<sup>93</sup> The 2004 rankings produced by AccountAbility were initially published without the tie to Fortune.94 The 2004 rankings targeted the Fortune Global 100, and they have been treated as methodologically comparable to Fortune's rankings; they were

these unusual circumstances would be unlikely to reliably separate out the relatively small impact from the rankings.

<sup>91</sup>. The "Global 100" are Fortune's estimated largest 100 companies in the world measured by annual revenue.

<sup>92.</sup> See generally Accountability & CSRNETWORK, Accountability Rating 2006: Benchmarking Methodology (2006), available at http://english.cbcsd.org.cn/dynamic/bringup/download/ar2006.pdf [hereinafter Methodology]. The inclusion of the top ten from 2005 is noted only in the summary of the results. See Accountability & CSRNETWORK, Accountability Rating 2006: Summary Report of Results 3 (2006), available at http://www.accountabilityrating.com/past\_results.asp. Since the 2005 top ten were strong performers, the requirement to include them in 2006 was largely redundant, which likely explains its absence from the documentation of methodology.

<sup>93.</sup> AccountAbility is a self-described "leading international organization" with a mission to "promote sustainable development" through the development of accountability tools and standards, including the AA1000 series in particular. See About Us, ACCOUNTABILITY, http://www.accountability.org/about-us/index.html (last visited Sept. 11, 2010). The OECD Expanded Review indicates that a small proportion of companies adhere to the AA1000 standard explicitly. Csrnetwork is a "leading" U.K. corporate social responsibility consultancy firm. See About Us, CSRNETWORK, http://www.csrnetwork.com/aboutus.asp (last visited Sept.11, 2010).

<sup>94.</sup> See Accountability & CSRNETWORK, Accountability Rating 2004 16 (2004) available at http://www.accountabilityrating.com/past\_results.asp.

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published alongside the 2005 rankings in *Fortune*'s first annual corporate social responsibility review.<sup>95</sup>

The rankings for 2004-2006 are established by application of the corporate social responsibility assessment tool developed by AccountAbility, in conjunction with csrnetwork. This standard incorporates aspects of the UN Global Compact, as well as the GRI, in constructing the standard.<sup>96</sup> In order to rate a company, evaluation is carried out across six "domains": stakeholder engagement (individuals with ability to influence or be affected by business of the company); governance (consideration of stakeholder issues by senior executives, governance structures related to transparency and accountability); strategy (seek to achieve social and environmental targets alongside financial, embedded non-financial strategy); performance management standards and incentives target social (processes. environmental goals); assurance (independent assurance of social and environmental management and reporting); and public disclosure (report thoroughly on social and environmental performance).<sup>97</sup> For each of the domains, a score is established by considering the information available in each company's published annual and sustainability reports. 98 The stakeholder engagement and strategy domains are considered most important.<sup>99</sup> A company can earn a maximum possible score of

<sup>95.</sup> AccountAbility identifies the rankings for 2004-2006 as a comparable, consistent set of measures, although acknowledging some minor changes in the methodology. See METHODOLOGY, supra note 92, at 3 (comparability, use of 2004-2006 rankings to identify trends over time), 5 (acknowledging changes in methodology). For the purposes of the present study, it is the perceptions of the market to the rankings that is being assessed, so the presentation of the results as comparable to the published rankings is key.

<sup>96.</sup> See id. at 2. It should be noted, however, that the precise way in which these initiatives are reflected in calculating the scores is not publicized.

<sup>97.</sup> See id. at 2-3.

<sup>98.</sup> The reports of the global operations were primary data for the Global rankings, although information on subsidiary companies that impact global operations were also considered. Only reports published in English were assessed. Only data contained in the published reports was considered, with the exception of data on company websites that was explicitly referenced in the published report. See METHODOLOGY, supra note 92, at 3.

<sup>99.</sup> The stakeholder engagement and strategy domains have maximum scores of 20 each, and the other domains have maximum scores of 15. See METHODOLOGY, supra note 92, at 2.

100. The *Fortune* rankings publish the scores each company earns, as well as ranking the companies. 100 Although the rankings are targeting corporate social responsibility, the approach stresses the business, rather than simply appealing to morals. The rankings are intended to reflect corporate social responsibility as a profitable business strategy. 101

The Fortune rankings provide a good case study to assess the potential for third party standards and rankings to support corporate social responsibility activity as a form of global public law. The standard itself draws on instruments from the realm of international public law to weigh and rank the performance of large transnational corporations. In addition, the application of this standard to information already in the public domain allows for a clean test of whether the standard and ranking per se is seen to convey new information by the market. The focus on corporate social responsibility as a smart business strategy allows a test of whether markets agree with the case for profitability embedded in the standard. The rankings present a crosssectional assessment of large companies that are focused on corporate social responsibility and which span a range of performance. The annual rankings allow for assessment at a point in time, which can minimize confounding influences. However, the series of rankings introduces the dynamic element of relative performance over time. This creates an additional opportunity to test whether markets may "punish" companies that slip in their performance, or reward "good" performers. One potential limitation is that the rankings focus on the way in which corporate social responsibility is integrated into the

<sup>100.</sup> This is also the publication format for the 2004 rankings. It is not completely clear how the ranks are established, as a number of companies had identical scores. The GRI, which the Accountability methodology references, incorporates some qualitative criteria that may be reflected in the ultimate rankings. Alternatively, identical composite scores that are more heavily weighted toward the critical stakeholder engagement and strategy categories may rank higher. For the purposes of this study, I will assume that the ranks can be treated as reflecting additional information.

<sup>101.</sup> See Demos, supra note 34 at 1 (reporting on corporate social responsibility performance, expressing opinion that investment screened for corporate social responsibility reflects the view that "socially responsible companies will outperform companies that don't engage a wide array of stakeholders... in an ongoing conversation about what can be done better.").

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business of the companies, rather than comparing the direct results of companies' activity. 102 Like other standards, the *Fortune* rankings reflect a particular version of corporate social responsibility and it is the market response to this specification that will be revealed through empirical analysis.

#### 5 EVENT STUDY METHODOLOGY

The announcement of unexpected information relevant to corporate performance provides the paradigmatic opportunity to use what is known as an "event study" analysis. Application of event study methodology is based on the assumption that stock markets rapidly process and absorb information (the efficient markets hypothesis), combined with the assumption that in equilibrium the value of a stock reflects the present discounted value of the investment. <sup>103</sup> These twin assumptions allow the impact of an event that reveals new information about a company to be determined by looking to the response in the stock price immediately following the announcement of the event. According to the efficient markets hypothesis, the financial implications for the company will be rapidly processed by investors and manifested in adjustments to the company's stock price. <sup>104</sup> Event study analysis has been applied in a large number of published

<sup>102.</sup> This aspect of the standard is illustrated by the fact that BP scores highly, as corporate social responsibility concerns are deeply embedded into their strategy and operations. As a major oil company, their contribution to GHG, for example, would be enormous. If practical effects of operations were the metric, BP would be unlikely to top the rankings. The approach under the standard seems justifiable, since otherwise attention to corporate social responsibility would be practically impossible for many industries. One cannot simply eliminate certain industries from promoting social responsibility, so it seems likely that a more nuanced approach will reflect the dimensions of corporate social responsibility that consumers and investors are likely to care about.

<sup>103.</sup> For the seminal paper developing the event study methodology drawing on these assumptions, see Eugene F. Fama, Lawrence Fisher, Michael C. Jensen & Richard Roll, The Adjustment of Stock Prices to New Information, 10 INT'L ECON. REV. 1 (1969) (investigating the empirical impact of stock splits). See also Eugene F. Fama, Efficient Capital Markets II, 46 J. FIN. 1575 (1991) [hereinafter Efficient Capital Markets].

<sup>104.</sup> See Efficient Capital Markets, supra note 103, at 1602.

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papers.<sup>105</sup> Event studies have been particularly useful tools within the realm of corporate law, given the close connection between the focus on securities prices in event studies and the shareholder primacy model of corporate law.<sup>106</sup>

The structure of an event study is quite straightforward. <sup>107</sup> The first step is the identification of the unanticipated event of interest. The announcement date must be identified; if the time at which the information becomes available cannot be pinned down fairly precisely, the event study methodology cannot be used. <sup>108</sup> The usual practice is to specify an "event window" during which to assess the impact of the information on the stock price. This is because both the exact time at which investors will have access to information is imprecise, and because markets may not react instantly and completely to information (semi-strong efficient markets). The window is usually specified as narrowly as possible, since the power of statistical results will diminish, conditional on sample size, as the window is expanded. <sup>109</sup>

105. For a review of some papers dealing with the efficient markets hypothesis, see id. at 1599-1602. For a general review, see A. Craig MacKinlay, Event Studies in Economics and Finance, 35 J. Econ. LITERATURE 13 (1997).

106. See generally Sanjai Bhagat & Roberta Romano, Event Studies and the Law: Part I: Technique and Corporate Litigation, 4 Am. L. & Econ. Rev. 141 (2002) [hereinafter Event Studies and the Law: Part I]; Sanjai Bhagat & Roberta Romano, Event Studies and the Law: Part II: Empirical Studies of Corporate Law, 4 Am. L. & Econ. Rev. 380 (2002) (discussing the event study methodology and reviewing literature applying the method to assess the wealth effects of corporate litigation and the impact of corporate law more generally).

107. For descriptions of the event study methodology, see generally MacKinlay, supra note 105; Event Studies and the Law: Part I, supra note 106 (tailoring to a legal audience); John Binder, The Event Study Methodology Since 1969, 11 Rev. of Quantitative Fin. & Acct. 111 (1998); Stephen Brown & Jerold Warner, Using Daily Stock Returns: The Case of Event Studies, 14 J. of Fin. Econ. 3 (1985) [hereinafter Using Daily Stock Returns] (tailoring to a technical audience); Gupta & Goldar, supra note 79; Rock, supra note 34 (explaining applications of the methodology).

108. But note that event study methodology has been used to study the impact of regulatory changes, which can involve less precision in identifying the event time. For a discussion of the application of the methodology under these conditions, see generally Douglas J. Lamdin, Implementing and Interpreting Event Studies of Regulatory Changes, 53 J. Econ. & Bus. 171 (2001).

109. For quantifications of the impact on power of the length of the event window for various sample sizes, *see* MacKinlay, *supra* note 105, at 29-34. For a

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The impact of the event for an individual firm is assessed by comparing the actual return on the firm's security over the event window with the expected return. More formally, one calculates the abnormal return for firm i in time period t:

$$AR_{it} = R_{it} - E(R_{it} \mid X_{it})$$

where  $X_{it}$  is the conditioning information used to determine the expected return on the firm's security. The most common approach to estimating the expected return is to employ the "market return" model. The market return model assumes that the expected return on any given security is a stable linear function of the market return, which can be formally modeled as follows:

$$R_{it} = \alpha_i + \beta_i R_{mt} + e_{it}$$

where  $R_{mt}$  is the market return at time t and where  $e_{it}$  is a random disturbance with  $Var(e_{it}) = \sigma_{e_i}^2$ . 110 As is common in many studies, I will use the market model to calculate expected returns. 111

summary of the key results, see Event Studies and the Law: Part I, supra note 106, at 88-92.

110. There are additional models for calculating the expected return, including the factor loading approach, a more complex version of the market model, which can offer marginal gains in precision at a cost of imposing additional data requirements. See MacKinlay, supra note 105, at 18-19. Additional possibilities include models that impose restrictions from economic theory in the structure of the estimating equation for expected returns. The main additional alternatives are the Capital Asset Pricing Model (CAPM) and the arbitrage pricing model. However, there is little to be gained relative to the market model by using these approaches, and the assumptions underlying the CAPM model have been called into question. Id. at 19.

111. Note that some authors have criticized the market model. See, e.g., J. Andrew Coutts, Terence C. Mills & Jennifer Roberts, The Market Model and The Event Study Method: A Synthesis of the Econometric Criticisms, 3 INT'L REV. OF FIN. ANALYSIS 149 (1994) (identifying ways in which the market model fails to conform to underlying assumptions, including non-normality and dependence in residuals, as well as instability in the estimated coefficient). These problems render Ordinary Least Squares (OLS) estimates inefficient and make it difficult to establish the power of statistical tests based on the estimates, which are

In order to calculate the abnormal return for firm i during period t, the market return model is estimated. Ordinary Least Squares is both a consistent estimation procedure and efficient under the maintained assumptions above. Once the parameters of the market return model have been estimated, they can be used to predict the expected return for the security of company i at time t. The difference between the predicted and actual return following the event will yield the "abnormal return,"  $AR_{it}$ , that reveals the impact of the event on the value of the firm:

$$AR_{it} = R_{it} - \hat{\alpha}_i - \hat{\beta}_i R_{mt}$$

The abnormal return is just the forecast error of the market model, calculated on an out of sample basis. If the sample period for estimation of the market model itself is long enough, under the null excess returns will be normally distributed, with

$$E(AR_{it}) = 0 \text{ and } \sigma_{AR_{it}}^2 = \sigma_{e_i}^2.$$

In order to assess the significance of the event, abnormal returns are generally aggregated. For individual firms, abnormal returns are aggregated over the period of the event window,  $T_{\it I}$  to  $T_{\it 2}$  to determine cumulative abnormal returns attributable to the event:

$$CAR_{i}(T_{1}, T_{2}) = \sum_{t=T_{1}}^{T_{2}} AR_{it}$$

The variance of cumulative abnormal returns for firm i over the event window is as follows:

nevertheless valid asymptotically. But see John Cable & Kevin Holland, Robust vs. OLS Estimation of the Market Model: Implications for Event Studies, 69 Econ. Letters 385, 388 (2000) (finding that normality of the errors is not generally a problem when returns are averaged over a portfolio of a size common in event studies (60 companies)).

112. See MacKinlay, supra note 105, at 20.

$$\sigma_i^2(T_1, T_2) = (T_2 - T_1 + 1)\sigma_{e_i}^2$$

The firm-specific hypothesis that cumulative abnormal returns are zero can be tested with a simple Z-statistic, distributed normally with the variance defined above. However, results for a single firm are unlikely to be very meaningful, especially given the low power of tests for such a small sample.

The general approach is to aggregate cumulative abnormal returns both over time (the event window) and across a number of firms that experience a similar event, or across a number of similar events for the same firm (e.g. across events). Tests are then conducted using the cumulative average abnormal return:

$$CAAR(T_1, T_2) = \frac{1}{N} \sum_{i=1}^{N} CAR(T_1, T_2)$$

The variance of *CAAR* will be given as follows:

$$\operatorname{var}(CAAR(T_1, T_2)) = \frac{1}{N^2} \sum_{i=1}^{N} \sigma_i^2(T_1, T_2)$$

Under the null that the cumulative average abnormal returns are zero, a z-test can be used to test the statistical significance of the CAAR for the event window, averaged across firms/events.  $^{113}$ 

<sup>113.</sup> The distributional results are asymptotic, so a large enough sample of events and estimation period for the market return model are required to avoid inaccuracy from imposing the asymptotic distribution. See MacKinlay, supra note 105, at 24. A further problem with statistical inference for cumulative average abnormal returns measures can arise from failure of the assumptions of independent, identical distributions for the abnormal returns of the firms in the sample. "Clustering" of the events in calendar time and of sample firms within industry groups can lead to violation of these assumptions by creating cross-sectional dependence. See Stephen J. Brown & Jerold B. Warner, Measuring

#### 6 ESTIMATION AND RESULTS

#### 6.1 Estimation Data

A number of refinements to the sample of ranked firms included in *Fortune*'s analysis were required in order to carry out the estimation. I obtained daily common stock prices from the CRSP database for the firms included in the 2004, 2005 and 2006 corporate social responsibility rankings associated with *Fortune* magazine and AccountAbility. Only firms trading on the NYSE or NASDAQ could be included in the sample. This required dropping some firms since a number of the firms included in the *Fortune* rankings are traded on other exchanges, or are not public companies. In order to have a sufficiently long period to estimate the market returns model, a period of 200 calendar days prior to the event date was chosen. This

Security Price Performance, 8 J. FIN. ECON. 205, 233 (1980); Using Daily Stock Returns, supra note 107, at 28; Binder, supra note 107, at 120; MacKinlay, supra note 105, at 28. However, so long as securities are chosen from a sufficient number of different industries and the market model is used, assuming independence is unlikely to be problematic. See Binder, supra note 107, at 116; Using Daily Stock Returns, supra note 107, at 15, 22.

114. CRSP is the Center for Research on Securities Prices database, associated with the Booth Business School at the University of Chicago. For a history of this database, see About CRSP, History, Chi. Booth, Ctr. for Research in Sec. Prices, http://www.crsp.com/crsp/about/history.html (last visited Nov. 19, 2010). The data can be accessed through allied third party data services, for a list, see The CRSP Third Party Alliance Program, Chi. Booth, Ctr. for Research in Sec. Prices, http://www.crsp.com/crsp/alliances.html (last visited Nov. 19, 2010). The stock prices that I use from the CRSP database were adjusted for dividends.

115. For example, some state-owned energy companies, such as the Mexican Pemex, were included in the *Fortune* rankings. Although the *Fortune* rankings do not disclose whether the companies are publicly held, privately held, or state owned, this information is generally readily available through company sites or media sources. The CRSP database naturally does not include data on securities prices for companies that are not publicly traded.

116. This resulted in estimation periods for the market model of 138, 139 and 135 trading days for 2006, 2005 and 2004, respectively. Choosing a sufficiently long period for estimation of the market model, in comparison with the event window, reduces bias in hypothesis tests about cumulative average abnormal returns that can arise from time dependence in the residuals from the market model and cumulative abnormal returns of firms. See Binder, supra note 107, at

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eliminated a number of additional firms, as prices for the common stock were not available on a continuous basis throughout the pre-event period. 117 Finally, some firms were excluded because of possible confounding news within the event windows for assessing the impact of the *Fortune* rankings. 118 The final sample included 52 firms in 2004, 52 firms in 2005 and 37 firms in 2006. 119 The firms, although transnational in their operations, were headquartered in three major regions: Asia, North America and Europe. The firms represented a diverse array of sectors, including automotive manufacturing; computers and electronics; petroleum refining and chemicals; energy and utilities; financial, trading and merchandise; and consumer products. Summary data for the sample firms is given in Table 1.

116 (citing Michael Salinger, Standard Errors in Event Studies, 27 J. OF FIN. & QUANTITATIVE ANALYSIS 39 (1992).

<sup>117.</sup> Merger was generally the culprit.

<sup>118.</sup> If other events that might be expected to influence a company's stock price occur at the same time as Fortune's rankings are released, the impact of those events will overlap with any effect of the rankings, so that it is not possible to identify the influence of the rankings. I chose to search media databases for any stories related to the included companies, eliminating from the sample any firms with possible confounding news. I searched the Financial Times database in Westlaw, which includes articles from the Financial Times U.K. and U.S. editions, as well as online articles from the Financial Times website. I also performed secondary searches in the The NEWSINT-PRO database containing full text documents from WestnewsPRO International News. I excluded companies if articles mentioning the company in the headlines or lead paragraphs, appeared to reveal or be based on new information. The confounding events included strike settlement, announcements related to the initiation and settlement of lawsuits, bond downgrades and earnings announcements.

<sup>119.</sup> The timing of the 2006 Fortune Rankings was unfortunate from the perspective of using an event study analysis, since a number of companies, including BP, Shell, GM and others, reported their third quarter earnings during this period.

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Table 1: Summary Data: Sample CSR Ranked Firms

Year	2004	2005	2006
Number of Firms	52	52	37
North America	25	27	15
Europe	21	20	15
Asia	6	5	7
CSR Scores			
Average CSR Score	23	31	33
Average CSR Leader's Score	39	48	52
Average CSR Laggard's	6	11	14
Minimum Score	1	2	4
Maximum Score	67	71	72

Note: Corporate social responsibility "Leaders" and "Laggards" are respectively defined as firms within the top third and bottom third of the sample ranked firms.

In order to implement the analysis, the event date must be identified and event windows must be specified. The *Fortune* rankings are announced through press releases and uploaded to the Internet prior to hard-copy publication in the magazine. I have assumed that the appropriate event date is the initial release of the information through the media and electronic distribution of the results. These dates were obtained from press releases and web-based material on the rankings. The 2004 AcountAbility rankings were announced in a press release and timed for release to coincide with the UN Global Compact Leaders Summit in New York. For both the *Fortune* and AccountAbility rankings, information should have been widely available to the public on the release date. The initial publication of information about the ranking and scores of the companies thus provides a relatively crisp indication of the appropriate

<sup>120.</sup> See Press Release, AccountAbility, New Global Rating Challenges Top 100 Companies' Accountability (June 23, 2004), available at http://www.csrwire.com/press\_releases/14269-New-Global-Rating-Challenges-Top-100-Companies-Accountability.

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event dates.  $^{121}$  Nevertheless, it is possible that some information was available early,  $^{122}$  and there is uncertainty about the precise time that the information was available on the event date.  $^{123}$ 

The theory does not offer a strong methodological basis for the selection of the event window, beyond general concerns with loss of power and an increased possibility of confounding events as the window is lengthened. The speed at which markets are presumed to adjust is critical to the appropriate length of the event window. While some scholars recommend windows limited to one, or perhaps two days, 124 others have applied event windows well over a week in length. 125 Recent research by Antweiler and Frank indicates that very short event windows may not be appropriate, and that results can be very sensitive to the choice of event window. 126 In this study, I have considered event windows of various lengths as a robustness check on the findings. Letting day 0 be the event day and denoting days prior to the event with a - sign, the event windows I consider are: [0], [0,2], [0,4], [-1,0], [-1,1], [-1,3]. Roughly, these correspond to considering one, three and five day alternatives for the event window, beginning on the event day itself and one day prior to the event date.  $^{127}$ 

A final point to note is that estimation requires the selection of a measure of market returns. There are several possible choices; the analysis reported here is based on use of the value-

<sup>121.</sup> The relevant dates are June 23, 2004; September 22, 2005; and October 23, 2006.

<sup>122.</sup> For example, in a copy of the 2004 rankings press release on file with the author, the release indicates that it is embargoed until June 23, 2004. This suggests that some members of the media may have had prior access to the data, and that some of the information may have leaked out ahead of the official stories. *See* Press Release, AccountAbility, New Global Rating Challenges Top 100 Companies' Accountability (June 23, 2004) (on file with author).

<sup>123.</sup> If the information was not available early enough in the day, it may not have been possible for investors to respond through trading on the event day.

<sup>124.</sup> See Using Daily Stock Returns, supra note 107, at 15.

<sup>125.</sup> See, e.g., Gupta & Goldar, supra note 79, at 88 (using a ten-day window as their preferred choice).

<sup>126.</sup> Werner Antweiler & Murray Z. Frank, Do U.S. Stock Markets Typically Overreact to Corporate News Stories 3 (Aug. 2006) (unpublished manuscript) (on file with authors).

<sup>127.</sup> The "one" day window for the [-1,0] window is, of course, two days. I will generally refer to these windows collectively as the "immediate" event windows.

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weighted NYSE/NASDAQ composite return available in the CRSP database. However, estimation using the alternatives of the equal-weighted composite and the Standard & Poor 500 returns produced generally similar results.<sup>128</sup>

#### 6.2 Results

The first empirical questions of interest are whether the *Fortune* corporate social responsibility rankings were seen by the market as providing significant independent information, and whether markets viewed the corporate social responsibility investments of firms favorably. In order to address these issues, I first look to the cumulative abnormal returns, averaged over the full sample of ranked firms. The results from estimation of the *CAAR* for each year/event window combination are presented in Table 2.

The results from Table 2 provide only weak support for claims that *Fortune*'s third party corporate social responsibility rankings are perceived by the market as conveying new information relevant to the value of firms. The strongest support for the independent significance of the *Fortune*/AccountAbility rankings is found in the immediate and the five-day windows for 2004. The immediate reaction to the release of the rankings is a weakly significant negative response. If the day prior to the release date is included, the rankings can be associated with a statistically significant drop of 0.47% on average in the share prices of the sample firms. However, there is no significant immediate response if we focus only on measuring the impact from the actual release date of the rankings.

<sup>128.</sup> I discuss the results with the alternate measures when the results vary. The market returns were adjusted for dividends to correspond to the adjusted share prices used for the event study firms.

<sup>129.</sup> This is supported by the similar result obtained using the S&P 500 as an alternate market measure: [-1,0] window  $CAAR = -0.0047^*$  (Z-stat = 1.64). Note that the alternative of the equal weighted NYSE did not produce significant results.

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Table 2: Cumulative Average Abnormal Returns for CSR Rankings

Cort Italis			
Year	[0]	[0,2]	[0,4]
2006	-0.0026	-0.0029	0.0007
	(-1.41)	(-0.90)	(0.17)
2005	-0.0022	-0.0013	0.0012
	(-1.41)	(-0.48)	(0.33)
2004	-0.0008	0.0040	0.0088**
	(-0.46)	(1.23)	(2.14)
Year	[-1,0]	[-1,1]	[-1,3]
2006	0.0020	0.0022	0.0022
	(0.77)	(0.67)	(0.53)
2005	0.0034	-0.0006	0.0019
	(1.55)	(-0.22)	(0.56)
2004	-0.0047*	0.0003	0.0057
	(-1.81)	(0.11)	(1.39)

Note: The Z-statistics for the null of no significant *CAAR* for each year-event window are included in parenthesis. Significant Z-statistics are identified as follows: \* = significant at 10%; \*\* = significant at 5%; \*\*\* = significant at 1% or higher level of significance for a two tailed test.

The significant positive five-day CAAR for 2004 provides some evidence that the market perceived the rankings as "good" news, enhancing the profitability of the ranked firms. Additional support for this interpretation can be found in the consistent results obtained using the S&P 500 as the alternate market measure. These alternate estimates produce significant positive CAAR in 2004 in the five-day window whether beginning on the

event day or one day prior, as well as in the three-day window from the event date. <sup>130</sup> The use of the longer window might be justified if stock returns tend to initially "over-react" to news and drift toward equilibrium over a longer period than the typical event window of one or two days. <sup>131</sup> The magnitude of the significant effects associated with the rankings in 2004 is not large, but does compare favorably with estimates from some other studies of information as regulation. For example, Hamilton identified statistically significant negative effects from the first release of the Toxic Release Inventory (TRI) data in the order of 0.28% to 0.37%. <sup>132</sup>

Set against this optimistic interpretation of the results, one must consider the more general pattern of inconsistent and insignificant results for the other years. There are no significant abnormal returns generated by the release of the rankings in 2006, although this general conclusion is not always robust across alternate market measures. <sup>133</sup> In addition, the signs of the estimated abnormal returns in 2006 are not consistent across the alternative specifications of the event window. The shorter

<sup>130.</sup> The 2004 significant estimates for the S&P alternate market measure are as follows: [0,2] window  $CAAR = 0.0091^{***}(Z\text{-stat}=2.82);$  [0,4] window  $CAAR = 0.0126^{***}(Z\text{-stat}=3.02);$  [-1,3] window  $CAAR = 0.0095^{**}(Z\text{-stat}=2.28).$  Note that the alternative of the equal weighted NYSE did not produce significant results.

<sup>131.</sup> See Antweiler & Frank, supra note 126, at 3.

<sup>132.</sup> Hamilton, *supra* note 75, at 108-109. These figures are for Hamilton's estimates of cumulative average abnormal returns for a one-day window. He found larger, significant negative effects over a five-day window, ranging from -0.93% to -1.2%. *See id.* at 108. *See also* Madhu Khanna, Wilma Rose H. Quimio & Dora Bojilova, *Toxics Release Information: A Policy Tool for Environmental Protection*, 36 J. ENVTL. ECON. & MGMT. 243, 252 (1998) (finding statistically significant effects ranging from -0.31% to -0.71% over a two-day window and from -0.56% to -0.57% over a five-day window for chemical industry firms covered by the TRI over the period from 1990 to 1994). *See also* Konar & Cohen, *supra* note 76 at 115-116 (finding that firms mentioned in the media in relation to the first release of the TRI data experienced significant negative returns of -0.29% (one-day) to -0.74% (five-day)).

<sup>133.</sup> A significant negative CAAR is generated for 2006 for the [0] window using the S&P 500 market measure (CAAR = -0.0038\*\*(Z-stat=2.02)). Looking to the event windows beginning one day prior to the release of the rankings, the significant results produce *positive* abnormal returns when the equal weighted NYSE index is used as the market measure: [-1,0] window CAAR = 0.0084\*\*\*(Z-stat=3.14); [-1,1] window CAAR = 0.0090\*\*\*(Z-stat=2.73); [-1,3] window CAAR = 0.0089\*\*(Z-stat=2.09).

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windows beginning from the release date of the rankings indicate a negative market response. In contrast, those beginning one-day prior yield positive abnormal return estimates. A similar pattern is evident in the 2005 results. The signs on the CAAR for the immediate windows are inconsistent and the estimates insignificant. While the signs on the estimates are consistent for the other event windows, the results are not significant and the absolute size of the CAAR is very small, with a maximum impact of 0.19% over a five-day window. Given the general insignificance of the results and lack of robustness across event windows and market measures, the results provide little support for the idea that the market regarded the rankings as important information relevant to the value of the firms in the sample.

A number of factors may contribute to the lack of significant reaction in the markets. The 2006 sample is relatively small, at only 37 firms. This may have contributed to a loss of power and made it difficult to reliably detect the small impact of the rankings on the stock return estimates. <sup>136</sup> There is a fairly high proportion of European firms in the sample. More stringent European regulatory requirements for reporting corporate social responsibility activity may have helped diminish the impact of the information conveyed by the relative rankings of the firms in the *Fortune* rankings. <sup>137</sup> A more general possibility is that there

<sup>134.</sup> The insignificance of the results is not always consistent for the immediate windows. For the [0] window, a significant negative CAAR is generated for 2005 when using the S&P 500 as the market measure (CAAR = -0.0039\*\* (Z-stat = 2.54)), whereas for the [-1,0] window a significant positive CAAR is generated when using the equal weighted NYSE measure (CAAR = -0.0073\*\*\* (Z-stat = 3.27)). In both these cases, the other two alternate market measures do not generate significant results.

<sup>135.</sup> A slightly larger maximum impact is obtained when using the equal weighted return as the market measure (0.4% maximum effect over five days), but the estimate remains statistically indistinguishable from the alternative of no impact attributable to the rankings. The magnitude of the estimated CAAR using the alternative of the S&P 500 essentially mirrors the value weighted market measure estimates of Table 2.

<sup>136.</sup> Recall that in 2006 there are only 37 firms in the sample, compared with 52 for 2005 and 52 firms in 2004. See supra Table 1.

<sup>137.</sup> For a concise summary of relevant corporate law related to corporate social responsibility reporting, see KPMG 2005, supra note 2, at 31. The relative share of European firms is 41% in 2006 compared with 38% in 2005 and 40% in 2004. See supra Table 1.

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is not enough change in the rankings from one year to another for subsequent annual releases to provide significant new information to markets. This explanation is consistent with finding the strongest results associated with 2004 (the initial release of the rankings by AccountAbility). While corporate social responsibility performance may be important to firms and investors on an ongoing basis, the event study methodology may fail to disclose this effect in relation to annual corporate social responsibility rankings.

Another possibility is that the results for the CAARs of all ranked firms do not really provide a satisfactory way of addressing the question of whether corporate social responsibility investment is viewed as enhancing firm value. The range of performances across firms in Fortune's rankings may prevent a clear analysis by averaging CAARs over all the firms. If markets perceive corporate social responsibility as enhancing firm value, one might expect that higher-ranking firms would be rewarded with positive CAARs, while laggards would be punished with smaller CAARs or even negative CAARs. In order to investigate this hypothesis and tease out the implications of the Fortune rankings for the role of market discipline in enforcing corporate social responsibility commitments, I conducted a split-sample estimation for "leaders" and "laggards." As one reduces the size of the sample, the power of estimates is reduced. Consequently, there is an uncertain balance to be struck between identifying these sub-groups narrowly and still including enough firms for robust estimation. As an admittedly somewhat arbitrary compromise, I have classified the top third of sample firms as "leaders" and the bottom third of firms as "laggards." Results for the various event windows and years are shown in Table 3.

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Table 3: Cumulative Average Abnormal Returns for CSR Leaders and Laggards

Year	Relative Rank	[0]	[0,2]	[0,4]
2006	Top Third	-0.0005	-0.0012	-0.0020
2000	10p IIIIu	(-0.15)	(-0.21)	(-0.27)
		(-0.15)	(-0.21)	(-0.27)
	D-44 Ml-:1	0.0010	0.0006	0.0001
	Bottom Third	-0.0019	0.0036	0.0091
		(-0.56)	(0.60)	(1.19)
200	m m1 · 1	0.0004	0.0000	0.001=
2005	Top Third	-0.0034	-0.0022	0.0017
		(-1.41)	(-0.49)	(0.28)
	Bottom Third	-0.0007	0.0021	0.0044
		(-0.23)	(0.40)	(0.66)
2004	Top Third	-0.0044	-0.0034	-0.0024
		(-1.47)	(-0.65)	(-0.36)
	Bottom Third	0.0006	0.0029	0.0003
		(0.17)	(0.50)	(0.05)
37	D 1 et D 1	[ 1 0]	[11]	[10]
Year	Relative Rank	[-1,0]	[-1,1]	[-1,3]
2006	Top Third	0.0088*	0.0062	0.0070
		(1.90)	(1.1)	(0.96)
	Bottom Third	0.0003	0.0037	0.0079
		(0.06)	(0.62)	(1.03)
2005	Top Third	0.0034	-0.0008	0.0020
		(0.90)	(-0.17)	(0.34)
	Bottom Third	.0026	.0027	.0038
		(0.86)	(0.52)	(0.56)

Year	Relative Rank	[-1,0]	[-1,1]	[-1,3]
2004	Top Third	-0.0102**	-0.0080	-0.0048
		(-2.39)	(-1.52)	(-0.71)
	Bottom Third	-0.0022	0.0019	-0.0016
		(-0.46)	(0.32)	(-0.21)

Note: The Z-statistics for the null of no significant *CAAR* for each year-event window are included in parenthesis. Significant Z-statistics are identified as follows: \*= significant at 10%; \*\* = significant at 5%; \*\*\* = significant at 1% or higher level of significance for a two-tailed test.

The results do not provide strong empirical support for the idea that sustainability rankings can operate as a form of market regulation that might encourage firms to undertake corporate social responsibility commitments and help enforce them. Again, the predominant pattern is the absence of statistically significant results for either leaders or laggards in response to their rankings. There are some exceptions. For example, in 2006, there is a positive significant response to the ranking of the "leader" firms, if the immediate window includes the day prior to release of the rankings, but not otherwise. 138 The absolute size of this effect is fairly large, reflecting an unanticipated increase in average share value of 0.88%. The level of corporate social responsibility performance in 2006 was higher than in any previous year for the leaders, so such a response would tend to reinforce incentives for companies to invest in the corporate social responsibility commitments reflected in the rankings. additional support for this theory might be garnered by looking to results for 2005, using the equal weighted NYSE as the market measure. In 2005, using this alternate market measure, and looking at the event window including a day prior to the rankings announcement. corporate social responsibility "leaders" experience statistically and economically significant positive

<sup>138.</sup> A similar result is obtained when using the equal weighted NYSE as the alternate market measure: [-1,0] window Top 1/3 CAAR = 0.0144\*\*\* (Z-stat = 3.09).

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abnormal returns. The increase in share value peaks at 1.28% for the five-day window. 139

However, looking at the results more broadly, the evidentiary support for such an interpretation is fragile. If we focus on the abnormal returns for 2006, beginning from the ranking release date, the sign of the estimated response is negative for leader firms and the results are insignificant. Similarly, in 2005, if we look at responses from the release date, the sign of returns is again negative and any deviations in returns cannot confidently be attributed to the impact of the rankings. <sup>140</sup> In addition, the sign on the estimated abnormal returns for the "laggards" is often positive and similar in magnitude to effects estimated for the "leaders", although the "laggard's" results are also not generally significant for 2005 or 2006. <sup>141</sup>

Results for 2004 also fail to provide strong evidence supporting either the viability of corporate social responsibility investments, or a quasi-regulatory impact for the *Fortune* rankings. The results for leaders in 2004 achieve the highest degree of statistical significance and are relatively large. The initial reaction, including one day prior to the rankings, was a drop of 1.02% in the average share value of leader firms. The existence of a negative response for leader firms in 2004, and its statistical significance is one of the few relatively robust results. To the extent that the market responded, it indicated

<sup>139.</sup> The results for leaders in 2005 for these windows using the equal weighted NYSE market measure are as follows: [-1,0] CAAR = 0.0072\* (Z-stat = 1.91); [-1,1] CAAR = 0.0122\*\* (Z-stat = 2.14); [-1,3] CAAR = 0.0128\* (Z-stat = 1.73).

<sup>140.</sup> One significant result is generated when the S&P 500 is used as the market measure. This market measure generates a significant abnormal return from the rankings on their release date, but the sign is negative, not positive: [0] window CAAR for S&P = -0.0048\* (Z-stat = 1.80).

<sup>141.</sup> There is a significant positive return for the "laggard" firms generated when the equal weighted NYSE measure is used for the market return, and the window includes a day prior to rankings release: [-1,4] window CAAR = .0134\* (Z-stat = 1.74). This significant positive return exceeds the comparable estimate for the corporate social responsibility "leaders".

<sup>142.</sup> A significant negative response is generated when using the equal weighted NYSE market return for: the [0,2] window (CAAR = -0.0115\*\*(Z-stat=2.15)); the [-1,0] window (CAAR = -0.0071\*(Z-stat=1.63); [-1,4] window (CAAR = -0.0114\*(Z-stat=1.65)). A significant negative response is generated

that the relatively larger investments of leaders in corporate social responsibility did not enhance their market value. A potential explanation for the 2004 results may rest with the fact that the average score of the leaders was lower in 2004 than in subsequent years. Perhaps even the top third of firms in 2004 were viewed by the market as coming up short in their corporate social responsibility commitments.

The difficulty with this story is revealed by the performance of laggards. While corporate social responsibility laggards did experience some negative *CAAR*s in relation to the release of the 2004 rankings, these results were not large, not consistent, and statistically insignificant. This is in sharp contrast to the consistently negative, larger, and often significant losses the corporate social responsibility rankings in 2004 produced for the leaders.

At the very least, the indifference of the market to the very negative rankings of the laggards suggests that there is no uniform market incentive for firms to engage in the type of public law-oriented corporate social responsibility reflected in the *Fortune* rankings. The risks and rewards are specific to the firms and industries involved. Walmart, as a laggard in the 2004-2006 sample, may not be "disciplined" by the market if improvements in its ranking would require it to abandon its business model based on highly competitive labor conditions, and instead involve labor as a stakeholder and promote collective bargaining. 144

when using the S&P 500 measure for the [-1,0] window (CAAR = -0.0099\*\* (Z-stat = 2.28)).

<sup>143.</sup> Recall that the average leader's score in 2004 was only 39 out of a possible 100 points, compared with average leader scores of 48 and 52 in 2005 and 2006, respectively. *See supra* Table 1.

<sup>144.</sup> In fact, Walmart has moved from its "laggard" position at the bottom of the ranking in more recent surveys. It now ranks 64th in 2008 with a score of 44 on the AccountAbility scale, in contrast with its initial 2004 ranking at 86th with a score of 6. See Full G100 Ranking, Accountability Rating 2008, ACCOUNTABILITY, http://www.accountabilityrating.com/ latest\_overview.asp (last visited Sept. 16, 2010). The company has invested particularly in environmental sustainability initiatives over this period, and has announced its own sustainability index initiative. See also Press Release, Walmart, Walmart Announces Sustainable Product Index (July 16, 2009), available at http://walmartstores.com/pressroom/news/9277.aspx. The Walmart example illustrates that corporate social responsibility can influence the business decisions of large firms, even if third party rankings are not effective

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Alternatively, perennial corporate social responsibility leaders, such as BP, may be viewed as engaging in necessary strategic positioning; poor CSR commitments by these firms may leave economically important opportunities to influence their business environment unrealized. 145 The lack of a consistent positive market response to corporate social responsibility investments undermines claims that broad-based corporate social responsibility rankings such as Fortune's can operate as an enforcement mechanism tending to promote the widespread adoption of corporate social responsibility policies implementing public law norms. Assessing the split sample results as a whole, there is little evidence that the market responds favorably to the more intensive corporate social responsibility investments of Fortune's leaders and the poor performance of laggards appears to go unpunished.

While the evidence supporting a "regulatory" role for corporate social responsibility rankings appears weak, this may partly be a function of the empirical methodology. It may be that the focus on the top third and bottom third of firms does not match the way that the market views the corporate social responsibility performance of the firms. The approach may be too arbitrary: simply using aggregate CAARs"leader"/"laggard" groupings might be insufficient to precisely identify the independent impact of the relative rankings. addition, the simple aggregate CAARs do not allow us to control for some factors that may be relevant to the impact of the rankings. For example, many of the top performers are European Assessing the market response to the rankings may require controlling for the home jurisdiction of the companies, both because there may be a "home bias" in investor responses and because European corporate law imposes more stringent reporting requirements for corporate social responsibility

disciplinary devices. The type of corporate social responsibility engaged in would then be what the company deems in its long run interests. By constructing its own index, Walmart obtains some room to tailor the vision of sustainability to reflect its own business interests and strengths, rather than having to adjust in response to externally imposed norms.

145. This would be one way to interpret the significant negative response in 2004 for the leader firms; investors and consumers may have felt that the level of commitment was too weak, despite the firms being relative leaders.

activity. Another requirements may mean that the Fortune rankings, which draw on published data, provide less in the way of comparative information about the quality of European firms corporate social responsibility activity. Another possibility is that there are sector-specific influences that are important to understanding the results for the cut sample. The small size of the leader/laggard samples also means that single firms may dominate the analysis more easily. While a number of other event studies have used stratification of the sample as a way to unpack the market response to the quality of performance, an alternative approach will provide a further check on the robustness of conclusions from the analysis above.

In order to obtain a finer assessment of the market response to relative performance of the ranked firms, as well as the market response to a firm's own changes in its corporate social responsibility rank, I ran a pooled cross-sectional analysis of the individual *CAR*s for each firm over the 2005 and 2006 years covering the *Fortune* rankings. <sup>148</sup> The estimating equation takes the following general form:

$$AR_{it} = \alpha + \beta X_{it} + e_{it}$$

where  $\alpha$  is a constant and  $X_{it}$  is a vector of firm-specific characteristics at time t. In the specifications, I included a time trend, as well as dummies for the industrial classification of the firm, the home jurisdiction of the firm, the percentile corporate social responsibility rank of the firm and the change in the firm's percentile rank from the previous ranking. I estimated the cross-

<sup>146.</sup> See KPMG 2005, supra note 2, at 40.

<sup>147.</sup> See, e.g., Gupta & Goldar, supra note 79 at 88-92 (constructing CAARs for subsamples of their firms based on the number of "leaves" received in the environmental ranking).

<sup>148.</sup> The time dimension was restricted this way in order to use the 2004 rankings to provide data on the dynamic performance of the firms. Note that because the sample of firms changed somewhat with each ranking, some firms did not have rankings in 2004 or 2005 to provide the basis for measuring the change in rank. These firms were dropped from the pooled estimation. The pooled sample consisted of results for 78 firms. The choice to restrict the sample period to 2005-2006 also restricts the estimation to direct rankings published through *Fortune*.

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sectional regression over the CARs generated from the set of event windows previously considered. The results for the coefficient estimates on rank and change in rank are reported in Table 4.  $^{149}$ 

Table 4: Cross Sectional Results: CSR Rank and Changes in Relative Rank

Changes in iterative italik			
Variable	[0]	[0,2]	[0,4]
Rank	0.0076*	-0.0036	-0.0094
	(0.084)	(0.706)	(0.394)
Delta Rank	0.0036	0.0142	0.0077
	(0.535)	(0.271)	(0.601)
Variable	[-1,0]	[-1,1]	[-1,3]
Rank	0.0150**	0.0095	0.0016
	(0.041)	(0.203)	(0.888)
Delta Rank	-0.0067	-0.0066	-0.0044
	(0.486)	(0.696)	(0.774)

Note: The p-values for the coefficient estimates are given in brackets. Significant coefficient estimates are identified as follows: \*=significant at 10%; \*\*=significant at 5%; \*\*\* =significant at 1% or higher level of significance for a one tailed test.

The results from the pooled cross-sectional analysis offer some additional support for claims that corporate social

<sup>149.</sup> I have used rank as the appropriate measure in this analysis, on the assumption that this is a more precise measure of the firms' corporate social responsibility performance than the individual corporate social responsibility scores. However, estimation using the corporate social responsibility scores did not generate substantially different results, although significance of the estimates was reduced. Regressions with additional dummies to identify "outliers" with extremely positive or negative relative changes in their rankings also were not generally significant. The results in Table 4 are based on using the CAR for each firm generated with the value weighted NYSE market return. The results for the alternative market measures are generally similar. Again, I discuss these alternative results when they vary.

responsibility is profitable and that market responses generated by third party rankings may provide incentives for firms to adhere to their commitments. The coefficient on percentile rank is positive and significant for the immediate event windows. 150 These results support a fairly immediate positive relationship between corporate social responsibility performance abnormal returns. This positive relationship indicates that once we look to the finer cross-sectional data, adding basic controls, markets view more significant investments in corporate social responsibility as enhancing the value of the company, while below average performance is associated with lower returns. The crosssection results thus offer some assurance that corporate social responsibility rankings such as those produced by Fortune can produce market effects that will provide incentives to reward good performers and discipline poorly ranked companies. The results support a limited optimism that third party rankings such as Fortune's can operate as one means of promoting effective corporate social responsibility commitments and reinforcing the embedded norms in a transnational setting.

Even this optimism must be tempered, however, since the results for the change in relative rank appear to indicate that there is little dynamic disciplinary effect. The coefficient estimates are positive, but insignificant, for the three-day and five-day windows beginning on the event day itself. In contrast, insignificant, negative coefficients for changes in own-rank are observed for the pre-announcement event windows. <sup>151</sup> These

<sup>150.</sup> The coefficients on the rank coefficient are similar in magnitude and significance when the alternative market measures of the equal weighted NYSE and S&P 500 are used. The coefficient for the [0] window is marginally insignificant when the equal weighted return is used (p<0.139). All other estimates for the immediate window remain significant, at a slightly lower level than the coefficients in Table 4 for the equal weighted market return and a slightly higher level for the S&P 500 alternate market measure. The coefficients on the change in rank variable in the immediate windows are similarly signed and insignificant for the alternative market measures. The estimates on rank and change in rank for all other windows also remain insignificant across the alternate market measures.

<sup>151.</sup> Alternative specifications using dummies for firms experiencing large positive and negative changes in relative rank produced qualitatively similar results. Even for firms experiencing strong relative gains or losses in corporate social responsibility positioning, there was no corresponding response in the abnormal stock return.

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results fail to provide any statistically reliable evidence that the market responds to a company's change in relative performance over time. Based on the sample data, there does not appear to be any conclusive evidence that markets will "discipline" firms that fall behind in their relative corporate social responsibility performance over time, nor do markets appear to reward CSR "improvers." The lack of market discipline along this dynamic dimension may indicate more limited potential for market pressures associated with corporate social responsibility to impose truly robust enforcement of firms' commitments.

#### 7 CONCLUSIONS

Corporate Social Responsibility is a trend that shows signs of becoming increasingly integrated into the business of transnational corporations. The overlap between the corporate social responsibility activity of these firms and the goals and norms of public law raise questions about how effective it can be as a transmission mechanism for global public law norms. The absence of a global public regulatory authority to enforce the public law commitments at the heart of the current corporate social responsibility movement makes the issue of its effectiveness as self-regulation more salient.

One means by which corporate social responsibility commitments may theoretically be made effective is through the largely private activity of third parties who engage in comparative ranking and publication of the corporate social responsibility performance of transnational firms. The rankings published by *Fortune* are an example of this private standard-setting and bench-marking activity. While the theoretical possibility is readily established, the question that remains open is whether such standards generate meaningful impacts in practice. The objective of this paper is to begin to provide empirical evidence bearing on the practical potential of rankings such as *Fortune*'s to contribute to meaningful corporate social responsibility commitments by transnational firms.

The results of the study are somewhat equivocal. The results offer partial support for claims that rankings such as *Fortune*'s are treated as independent events revealing information significant to the value of firms. The results also offer qualified

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support for the proposition that corporate social responsibility activity is viewed by markets as enhancing the value of transnational firms, and that there is a positive relationship between relative rank and abnormal returns that would tend to reward good CSR performers and punish low-ranking firms. There is thus some indication that market response will provide incentives that will encourage firms to adhere to corporate social responsibility commitments, so that independent rankings such as Fortune's can act as an alternative to traditional enforcement. There is some potential for third party rankings to "regulate" through provision of information, and some indication that market discipline will "enforce" corporate social responsibility commitments. However, the results are not robust across event windows, years or model specifications addressing the relative ranking effect. This leaves residual doubt about whether the Fortune rankings in particular, and perhaps corporate social responsibility rankings more generally, will have the positive effects that could constitute corporate social responsibility as global public law norms.

One potential gap in the present study is the inability to break down the cross-sectional results by conditioning on the type of corporate social responsibility activity undertaken by the firm. It may be that the market only views some forms of this activity as profitable. This information, while not reflected in the rankings themselves, would be readily available to investors through the same published reports that are used to calculate *Fortune*'s rankings. Constructing measures of the specific corporate social responsibility focus of firms may offer a way to assess whether relative rank operates only in conjunction with the type of activity to influence the market response of investors.

As noted in the discussion of *Fortune*'s rankings, each screen for corporate social responsibility involves a particular vision of corporate social responsibility by those constructing the ranking tool. Rejection of robust results for one screen does not imply that all such screens will be ineffective in the role of quasi-public enforcement devices. Comparative work that examined the cross-sectional returns of firms conditioned on features of their corporate social responsibility activity and performance under alternative corporate social responsibility screens might help

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establish the parameters of most critical importance to markets. In addition, the case study here is limited to a relatively early period in the rankings and it does not include responses to rankings from very recent years. It is possible that, as with South African divestment, interest in corporate social responsibility performance and rankings has varied over time. <sup>152</sup>

Legal academics have begun to turn their attention to the potential for large multinational corporations to play a role in establishing and implementing norms transnationally. 153 This process is increasingly viewed as one complementary to the traditional mechanisms of public law in the international realm. 154 This new approach is reflected in the emergence of fused private-public initiatives such as the Global Compact and GRI. In order to take full advantage of the potential synergy, public law actors in the international realm will need to give attention to the priorities of markets to help harness their power enforce the public law commitments made through transnational corporate social responsibility activity. While the empirical results of this paper provide some support for the theory that markets can incentivize and help enforce corporate social responsibility commitments through third party rankings and disclosures, the results are not particularly robust. Further empirical work examining the impact of alternative ranking schemes could help to answer the question of whether this relatively weak role for third party "informational regulation" is more general or just reflects disinterest in Fortune's rankings, perhaps because the relevant audience has already come to similar conclusions about the ranked firms. 155

<sup>152.</sup> The increased scores of the G100 in more recent versions of the AccountAbillity/Fortune rankings may reflect an increased belief that corporate social responsibility performance is of increasing concern to consumers and investors. However, changes in the ranking methodology make it difficult to be sure that the increased scores are really reflective of an improved level of performance.

<sup>153.</sup> See generally Backer, supra note 1; Affolder, supra note 1.

<sup>154.</sup> This is the premise behind the adoption of the UN Global Compact.

<sup>155.</sup> This would suggest that much of the influence of corporate responsibility is felt on the investor side, particularly through the channel of professional or institutional investors accessing firm information directly and making systematic comparisons on their own. The relative impact of using popular media would be greater for individual investors and consumers, particularly if

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A further cautionary note emerges from this case study. Amongst the "leader" firms in 2004-2006, we find companies that have been at the center of recent crises. Firms that were revealed as particularly vulnerable in the financial crisis, including Citigroup, HSBC and General Motors formed part of the "leader" group in 2006. Perhaps the most ironic aspect of the rankings is the standout performance of BP, ranked second in 2006, first in 2005 and first in 2004. A major aspect of the company's sustainability platform was anchored in its claims of environmental responsibility. In light of the recent Gulf Coast spill, it is clear that reputational interest and market pressure alone will not always produce sustainable practice. generally, it is not clear that markets will strike the same balance between goals of sustainability and profitability that public regulatory authorities would choose in the public interest.

The results of the present study provide some qualified support for the idea that privately provided corporate social responsibility rankings can have a "regulatory" character. To the extent that these private sector standard-setting and benchmarking activities are effective, questions loom regarding their ability to reflect choices congruent with the public values underlying the private commitments. Market-based informational regulation is likely to prove an incomplete substitute for traditional regulatory authority. However, in the transnational context, it may have a potential role as a complementary channel for the diffusion of public law norms. The results from this study of Fortune's sustainability rankings provide some support for this role, but suggest caution about both its potential strength and scope.

there is greater diffusion of results from popular media like *Fortune* through other media channels, such as individual or NGO newsgroups, web-sites, blogs, etc. to individuals who would not otherwise research corporate behavior directly and systematically. The lack of a robust, significant impact for the *Fortune* rankings suggests that this latter influence is not particularly strong.