

# Corporate Anti-Corruption Disclosure: An Examination of the Impact of Media Exposure and Country-Level Press Freedom

## Introduction

As noted by Cho et al. (2015), numerous studies over the past 30 years,<sup>1</sup> often based on arguments from legitimacy theory, document that companies tend to use social and environmental disclosure as a way of responding to social and political pressure. Patten (1991) explains this relation by arguing that where companies face greater exposures, they have an incentive to project an image of awareness and action (although that may not be supported with underlying performance – see, e.g., Patten, 2005, as well as the discussion in the conclusion section that follows). Within the broader range of legitimacy theory-based studies, a growing number of investigations explore the role that media coverage plays with respect to corporate environmental disclosure (e.g., Aerts and Cormier, 2009; Brown and Deegan, 1998; Dawkins and Fraas, 2011). The examinations consistently tend to support the argument that greater media exposure, particularly with respect to articles reflecting an unfavorable view toward the company or its industry, is positively associated with the extent of disclosure. An unexplored issue to date, however, is whether media exposure related to other specific types of social issues similarly induces more extensive disclosure within the targeted firms. Ashforth et al. (2008), Hess and Ford (2008), and others, claim that corporate corruption in the form of bribery, money laundering, and other illicit activities has evolved into a major social issue world-wide, and, accordingly, in this study we focus on the relation between media exposure regarding corporate corruption and companies' anti-corruption disclosures.

More important than merely extending legitimacy theory and media exposure arguments to a differing disclosure area, however, in this investigation we explore how country-level press freedom influences both corporate anti-corruption disclosure and the relation between media exposure and the provision of anti-corruption information. Several recent studies (e.g., Brunetti and Weder, 2003; Freille et al., 2007; Camaj, 2013) provide evidence that where press freedom is reduced, governmental corruption is higher, although none of these specifically examines impacts on corporate behavior. We argue that where press freedom is restricted and corruption is more common, the general level of social and political pressures related to the corporate corruption issues are likely reduced, and as such, we anticipate companies headquartered in such countries would see less need for disclosures related to anti-corruption efforts. Further, we assert that, in countries where press freedom is constrained, the media may be perceived as less of a threat to induce social or political exposures, and as such, we expect firms headquartered within those countries to see less need for legitimating disclosures even when they are the target of media articles.

For our investigation, we rely on Transparency International's ratings of the anti-corruption disclosures by the largest 105 multinational firms in the world (Kowalczyk-Hoyer, 2012) and Reporters Without Borders' 2011-2012 rankings of country-level press freedom.<sup>2</sup> We

---

<sup>1</sup> Cho et al. (2015, p. 20) cite, for example, Cowen et al. (1987), Patten (1991), Holder-Webb et al. (2009), and Cho et al. (2012), among others.

<sup>2</sup> Available at (<http://en.rsff.org/press-freedom-index-2011-2012,1043.html>). Subsequent to completion of our initial analysis (on 5 November 2014), TI released a follow-up to the 2012 report. However, because the 2012 report was the first rating of corporations' anti-corruption disclosures, we believe it serves as the best choice for our analysis. As a sensitivity test on the strength of our relations, we used the 2014 scores (allowing for a lagged impact). Results (non-tabulated) were consistent with those reported below using the 2012 scores.

also calculate media coverage measures capturing the existence and the extent of media exposure based on a search of the world's major media outlets using the Dow Jones Factiva database. Controlling for other firm-specific factors potentially impacting anti-corruption disclosure choices, we find that media exposure (using either the existence or the extensiveness metric) is positively associated with anti-corruption disclosure scores while country-level press freedom (based on where sample companies are headquartered) is also positively related to the disclosure. Further, we find that higher (lower) levels of press freedom increase (reduce) the impact of media exposure on the sample companies' anti-corruption disclosures. Consistent with Dobler et al.'s (2015) investigation of environmental disclosure, we also document that these relations are robust to inclusion of financial control variables (see, e.g., Clarkson et al., 2008). Finally, we identify other country-level factors that could potentially affect corporate anti-corruption disclosure and document that, although all of the measures are highly correlated with our press freedom metric, none explains as much variation in anti-corruption disclosure as does press freedom. Further, results for our primary variables continue to hold for models including each of the other country-level measures as an additional control.

Our findings extend current research by documenting the role that media exposure plays in specific corporate social responsibility (CSR) disclosure outside of the environmental domain, as well as providing evidence that country-level press freedom, a factor not previously examined, influences that impact. In addition to adding to the understanding of what drives CSR disclosure, however, our results also appear to call into question arguments, such as those by Transparency International (TI), that corporate reporting on anti-corruption issues can play an important role in reducing corruption practices (also see, e.g., Halter et al., 2009; Hess, 2009). TI argues that disclosure "is an indication of commitment, awareness, and action," and that firms with better reporting "are more likely to be part of the solution than the problem" (Kowalczyk-Hoyer, 2012, p. 4). Our findings instead suggest that disclosure is a function of differences in the social exposure firms face, and, given corporate environmental disclosure research indicating that disclosure and performance are not always positively associated (see, e.g., Aerts and Cormier, 2009; Cho and Patten, 2007; Cho et al., 2012), it is at least questionable whether companies' anti-corruption disclosures truly reflect commitment, awareness, and action. At a minimum, future investigations of the disclosure-performance relation with respect to corporate anti-corruption efforts would appear to be warranted. We begin with background on the issue of corporate corruption and CSR disclosure, followed by the methods, results, and conclusion.

## **Background and Hypothesis Development**

Hess and Ford (2008, p. 312) note that, in spite of considerable international efforts to curb corruption,<sup>3</sup> "corporations' payment of bribes continues as a common business practice." In support of this claim, KPMG Forensic's *Integrity Survey 2013* indicates that seven percent of their respondents with government and regulatory affairs functions reported they had observed improper payments or bribes to foreign officials while nine percent claimed first-hand knowledge of business with third parties potentially involved in money laundering (KPMG Forensics, 2013). Corporate corruption is not benign as, according to TI, it "inhibits free markets and undermines the stability vital to successful economies," while also enabling the flow of

---

<sup>3</sup> These include legislative enactments such as the U.S.'s Foreign Corrupt Practices Act and the Bribery Act of 2010 in the U.K., as well as broader initiatives including the United Nations Global Compact which in 2005 added a tenth principle on corporate corruption.

enormous amounts of illicit money (Kowalczyk-Hoyer, 2012, p. 4). As such, it has become a major issue of social exposure needing to be addressed by corporations across the world, and, related to our analysis, Wang and Rosenau (2001, p. 30) argue the increased ability of media to investigate and report on corruption has helped to foster the increased “salience of corruption on the global agenda.”<sup>4</sup>

A considerable body of research over the past quarter-century relies on legitimacy theory to explore how companies choose to respond to social and political exposures through the use of information disclosure. Suchman (1995, p. 574) defines legitimacy as “a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions.” Patten (1991; 1992) further argues that social legitimacy is monitored through the public policy process as opposed to the marketplace.<sup>5</sup> As such, where firms face social and political pressures, they have incentives to take actions to reduce that exposure and one of the ways they can do this is through disclosure. As summarized by Deegan (2014, pp. 257-258), companies facing threats to their legitimacy can use disclosure in an attempt to inform their “relevant publics” of changes in the companies’ performance relative to the social issue or to change their opinions of that performance either by changing outside expectations for what companies ought to be doing or by focusing on more positive aspects of performance relative to the issue at hand.<sup>6</sup> Related to this point, Deegan (2014) further notes that, from a stakeholder theory perspective, the relative power of different stakeholder groups can be expected to influence the degree of social pressure they bring to bear on companies with respect to social issues.<sup>7</sup>

Numerous studies support the legitimacy theory arguments by showing that differences in the levels of social and/or environmental disclosures appear to be related to differences in social and political exposure (see, e.g., Cho et al., 2015; Hackston and Milne, 1996; Patten et al., 2015), and that changes in those exposures appear to influence changes in the provision of CSR information (see, e.g., Heflin and Wallace, 2015; Patten, 2000; and Walden and Schwartz, 1997). Given the rise in societal concern with corruption, we anticipate that corporations may similarly use disclosure to highlight their anti-corruption efforts.

Within the body of legitimacy theory-based work, a growing number of studies adopt media agenda setting theory to explain how media coverage, presumably by increasing social exposures, influences corporate disclosure of CSR information.<sup>8</sup> Brown and Deegan (1998, p. 25) note that:

Media agenda setting theory posits a relationship between the relative emphasis given by the media to various topics and the degree of salience these topics have for the general public (Ader, 1995, p. 300). In terms of causality, increased media attention is believed to lead to increased community concern for a given issue. The media are not seen as

---

<sup>4</sup> As argued by Everett et al. (2007), the issue of accounting’s role in fighting (or engendering) corruption has also received considerable attention from what they refer to as both the orthodox and radical perspectives.

<sup>5</sup> Although social and political exposures can still be relevant to investors (see, e.g., Bowen et al., 1983; Blacconiere and Patten, 1994).

<sup>6</sup> Deegan (2014) credits Lindblom (1993) for laying out the potential legitimating uses of corporate CSR disclosure.

<sup>7</sup> Deegan (2014, pp. 251-252) asserts that legitimacy theory and stakeholder theory are overlapping as opposed to discrete theories, where the latter is more focused on how “corporate disclosure is a strategy for managing, or perhaps manipulating, the demands of particular groups.”

<sup>8</sup> Not all studies exploring media exposure’s impact on CSR disclosure rely on media agenda setting theory. See, for example, Bewley and Li (2000) and Rupley et al. (2012).

mirroring public priorities; rather, they are seen as shaping them.

In turn, according to Brown and Deegan (1998, p. 26), legitimacy theory predicts that companies will respond to the media-driven increased social concern with higher levels of social disclosure.<sup>9</sup>

Most of the published studies explicitly examining the impact of media exposure on CSR disclosure focus on its relation to the provision of environmental information. For example, Brown and Deegan (1998) explore environmental disclosure by Australian firms and measure media exposure as the number of published press articles citing environmental issues broken down across nine separate industry groups. They report a significant relation between the number of unfavorable articles and the extent of positive environmental disclosures. From a different perspective, Deegan et al. (2000) test for changes in environmental disclosure in response to five separate environmental disasters and document that in the four cases where the catastrophe received substantial media coverage, environmental disclosure increased significantly. Focusing on a sample of U.S. companies, Patten (2002a) investigates whether media coverage associated with the first-time release of Toxics Release Inventory pollution data to the public influenced subsequent changes in environmental disclosure. He documents that companies receiving specific media exposure (Alcoa and chemical companies within the sample) exhibited even larger increases in environmental disclosure than other sample companies. Both Bewley and Li (2000) and Aerts and Cormier (2009) more explicitly measure media exposure for individual companies by identifying the number of environmentally-themed press articles published about each of the companies in their respective samples, and both report significant positive relations between their media metric and the extent of environmental disclosure. Finally, Dawkins and Fraas (2011) focus more specifically on voluntary climate change disclosures and document a significant positive relation between the number of climate change-related articles including specific mention of firms and their subsequent climate change disclosure.

In contrast to the studies focusing on only environmental disclosure, Deegan et al. (2002), Branco and Rodrigues (2008), and Islam and Deegan (2010) all examine the impact of media exposure relative to a broader set of CSR disclosures. Deegan et al. (2002) investigate media coverage of CSR issues for the Australian firm BHP Ltd over the period from 1983 through 1997, and they report that, overall, higher numbers of CSR-related articles in a given year were positively associated with greater disclosure, but within general categories, only environmental and human resource disclosures showed a significant relation to their media measure.<sup>10</sup> However, in tests of the relation between unfavorable news coverage and positive CSR disclosures, Deegan et al. report statistically significant associations in total and across all general areas examined. Investigating a sample of Portuguese companies, Branco and Rodrigues (2008) measure media exposure as the number of CSR-themed articles published about sample companies and find a positive association with annual report CSR disclosure. Finally, Islam and Deegan (2010) focus on two high profile multinational clothing and sports retail firms – Nike, based in the U.S., and

---

<sup>9</sup> Brown and Deegan further note Zucker's (1978) argument that media influence increases where the public has less direct exposure to the issue, and as such, must rely on media sources for information. This would appear to be the case with respect to issues of corporate corruption.

<sup>10</sup> More specific items of disclosure within other general themes including, for example, energy conservation awards and company donations also showed significant positive association with media coverage.

Sweden's Hennes & Mauritz. Islam and Deegan's media exposure metric is based on the number of negative-toned articles published globally about CSR issues within the firms' primary industry. Examining the period from 1987 through 2005, the authors find a significant positive association between the extent of negative media coverage in one year and the level of total CSR disclosure in the next. Islam and Deegan further document that the majority of both general categories and specific items of disclosure also show significant relations to prior-year media exposure.

Overall, prior studies appear to consistently support the argument that greater media exposure leads to higher levels of CSR disclosure. Based on this prior evidence, we argue that, because corruption is also a salient social issue, greater media exposure with respect to corruption issues serves to increase the specific social and political exposures of targeted firms. Based on legitimacy theory, we in turn expect those companies facing media exposure to respond with higher levels of anti-corruption disclosure. Accordingly, we state our first hypothesis as:

*H<sub>1</sub>: Ceteris paribus, higher levels of media exposure will be positively associated with corporate anti-corruption disclosures.*

While the studies summarized above indicate that media exposure influences the provision of corporate CSR information, all of the investigations focus on companies headquartered in countries with relatively high press freedom.<sup>11</sup> Unfortunately, the freedom that the press has with respect to investigation and reporting varies considerably across the world (Brunetti and Weder, 2003; Freille et al., 2007) and this in turn likely leads to differences in the power that the media and the general public as outside stakeholder groups will have with respect to bringing pressures to bear on companies. Where press freedom is relatively strong, media can be expected to help reduce levels of corruption. Camaj (2013, pp. 22-23) notes that the "media have the potential to help the prosecutorial institutions by investigating and reporting instances of corruption." More specifically, Brunetti and Weber (2003, p. 1805) argue that press freedom "may be a particularly effective institution to fight collusive corruption where client and bureaucrat have a mutual interest in the corrupt act" (as would be the case in many types of corporate corruption). Further, Camaj notes Stapenhurst's (2000) assertion that media also indirectly aids in the battle against corruption by fostering a broader social climate and a heightened sense of accountability. However, where press freedom is restricted, the power of the media to investigate and report on instances of corruption, including corporate acts, is reduced, and Chowdhury (2004), Freille et al. (2007), Treisman (2007), and Camaj (2013) all present evidence supporting the claim that lower press freedom leads to greater corruption at the country level. Based on this evidence, we argue that where press freedom is reduced and corruption is more prevalent, corporations face lower levels of more general social exposure in relation to corruption issues than where press freedom is high. Following from legitimacy theory arguments, therefore, corporations headquartered in countries with lower press freedom will face less pressure to report on corruption efforts. As such we state our second hypothesis as:

*H<sub>2</sub>: Ceteris paribus, country-level press freedom will be positively related to corporate anti-corruption disclosure.*

---

<sup>11</sup> Reporters Without Borders' 2011-2012 rankings of country-level press freedom place Australia, Canada, the United States and Sweden all within the top-third of countries rated.

Finally, in addition to, or perhaps as a result of, the reduced social pressures where country-level press freedom is lower, we also expect media exposure to have less impact on corporate anti-corruption disclosure choice in those domains. Lindstedt and Naurin (2010, p. 316), based on the results of their investigation of citizen education, media reporting, and corruption through electoral democracy, argue that “making information available will not prevent corruption if the conditions for publicity and accountability are weak.” When press freedom is limited, these conditions are indeed more likely to be weak, and as such, we expect that corporate management of companies headquartered in such countries will perceive specific media exposure as less likely to influence social pressures on the companies, and as such, will be perceived as less of a legitimacy threat than is the case where press freedom is higher. Accordingly, we expect media exposure to have a reduced effect on anti-corruption disclosure in these settings. Our final hypothesis is formally stated as:

*H<sub>3</sub>: Ceteris paribus, media exposure will have less influence on corporate anti-corruption disclosure where country-level press freedom is lower.*

## Methods

### *Sample*

We base our sample on TI’s 2012 rating of transparency in corporate reporting (Kowalczyk-Hoyer, 2012). TI’s study focuses on the 105 largest publicly traded multinational corporations (based on market value), and in addition to providing assessments on the disclosure of country-by-country data and organizational transparency, provides ratings on the level of anti-corruption information provided by the firms up through 15 October 2011.<sup>12</sup> The sample companies range in size (based on market value in U.S. dollars) from \$50.25 billion to \$333.84 billion with a mean (median) of \$106.20 billion (\$83.36 billion). The sample includes companies headquartered in 23 different countries with the highest representation coming from the U.S. (39 companies). TI classifies the companies across nine different industry sectors,<sup>13</sup> the largest portion of which comes from the financials industry (24 companies).

### *Anti-Corruption Disclosure*

We use TI’s ratings of anti-corruption disclosure as our dependent variable. The 2012 report is an outgrowth of TI’s continuing program to foster transparency in corporate reporting, that includes, for example, prior reports on revenue transparency in the oil and gas industry (see, e.g., TI, 2008).<sup>14</sup> According to Kowalczyk-Hoyer (2012), TI reviewed all documents publicly available through the companies’ websites and assessed disclosure across a 13-item metric based on its own “Business Principles for Countering Bribery.” Using a content analysis approach, TI scored disclosures for each item as zero if no information for the item was included. Where

---

<sup>12</sup> The list of companies is available in Kowalczyk-Hoyer (2012, pp. 52-54).

<sup>13</sup> The sectors are basic materials, consumer goods & services, financials, health care, industrials, oil & gas, technology, telecommunication, and utilities.

<sup>14</sup> Both Aggarwal and Goodell (2013) and Healy and Serafeim (2016) rely on assessments of corporate disclosure by TI, although neither explicitly uses only the anti-corruption measures from the 2012 report.

companies made disclosures related to specific items, TI scored the disclosures as either 0.5 or 1 depending on the nature of the information provided. Appendix A presents the 13 disclosure areas as well as TI's process for scoring across each of the items. Final scores were stated as a percentage of the total possible points. Overall, the percentage scores ranged from zero (three companies) to 100 (three companies) with a mean (median) of 68 (77).

### *Media Exposure*

For the purposes of our study, we consider media exposure as a firm-specific source of increased social and political exposure. We identify 'media exposure' as the existence of press articles related to corruption that specifically mention one or more of our sample companies. To find these articles, we relied on the Dow Jones Factiva database and performed a search using a number of key words related to corruption<sup>15</sup> and each of our sample company names.<sup>16</sup> We limited the search to the one year period ending 15 October, 2011, the ending date for TI's assessment of corporate disclosures. Overall, we identified a total of 1,622 articles and each of these was read by a member of the research team. Our focus is on the role media pressure plays in corporate anti-corruption disclosure, and as such we limited our media exposure count to articles conveying a negative message with respect to the sample firms. This included, for example, where companies were cited as having been guilty or suspected of paying bribes, accepting kickbacks, or otherwise engaging in potentially corrupt activities. Savage et al. (2000) argue that it is adverse news reports (those reflecting negatively on a company's activities) that potentially lead to legitimacy threats for organizations, and Dearing and Roger (1996) present evidence that negative media attention impacts public salience more so than positive media coverage. Similarly, Rupley et al. (2012) document that only negative media exposure was associated with levels of voluntary environmental disclosure for their sample of U.S. firms.

Based on our assessment, we excluded 497 of the original articles leaving a total of 1,165. Overall, 58 of the sample companies were mentioned in negative news articles related to corruption issues, but the number varied substantially across companies. The mean (median) number of corruption articles (based only on those companies with non-zero coverage) was 20.1 (11.0), and covered a range from three to 124 separate articles per company. For our analysis, we use two separate media exposure metrics. First, we use a one/zero indicator variable to identify those sample companies with any published corruption-related articles over our period of assessment. Second, and capturing differences in the level of press attention, we created a four-level categorical variable and classified firms based on the number of articles published about them. However, because the number of articles was significantly associated with firm size (larger companies had higher article counts), we created our exposure categories based on size-adjusted article counts. We scored companies with no corruption articles as zero, those with articles, but whose adjusted article counts were at the median or lower as one, companies with adjusted article counts above the median but within three standard deviations of the mean as two, and companies with adjusted article counts more than three standard deviations from the overall

---

<sup>15</sup> The key words used included 'corruption', 'gifts', 'whistleblowing', 'donation', 'facilitation payment', 'bribe', 'political contribution', and 'money laundering'.

<sup>16</sup> The Factiva data base covers more than 8,000 global publications including major press sources such as *The New York Times*, *The Guardian*, *The Times*, *Far Eastern Economic Review*, *The Wall Street Journal*, *Shanghai Daily*, and many others. Factiva has also been used in other studies exploring media exposure issues (see, e.g., Brammer and Pavelin, 2008; Islam and Deegan, 2010).

mean as three. The first measure captures whether the existence of media exposure influences the extent of anti-corruption disclosure, whereas the second identifies whether differences in the disclosure are associated with the level of the media exposure.

### *Press Freedom*

In addition to firm-specific media exposure, we argue that differences in country-level press freedom lead to differences in managerial perceptions of social and political exposure at a broader level. As such, we anticipate that country-level press freedom will affect the degree of corporate anti-corruption disclosure. To assess press freedom, we rely on the Press Freedom Index 2011-2012 developed by the non-governmental organization Reporters Without Borders (RWB).<sup>17</sup> Based on an assessment of numerous factors associated with freedom of the press,<sup>18</sup> RWB provides a ranking of 179 different countries in terms of press freedom, where one represents the country with the highest press freedom and 179 the country with the lowest. The 2011-2012 index was based on an assessment period running from 1 December 2010 to 30 November 2011. We believe companies headquartered in countries with lower levels of press freedom will feel less pressure for anti-corruption disclosures, and we use the RWB ranking as our metric for the press freedom in each of our sample companies' home country (the country where the company is headquartered). The country press freedom rankings for our sample ranged from one to 174, with a mean ranking of 50.35. To aid in interpretation of results, we multiply the press freedom ranking by negative one. Accordingly, we expect the coefficient on this parameter to be positively signed. Because we also expect media exposure to create less pressure on companies based in countries with lower levels of press freedom, we also include an interaction term, *Media\*Press Freedom*,<sup>19</sup> to allow the impact of media exposure to vary across the press freedom rankings, and we expect this variable to be positively signed (media pressure influences disclosure more where press freedom is higher and less where it is lower).

### *Controlling for Other Factors*

Recognizing that other firm-specific factors could be expected to impact corporate choices with respect to anti-corruption disclosure, we introduce several control variables into our analysis.<sup>20</sup> Our first control, 'Industry Risk,' captures differences in corruption risk across

---

<sup>17</sup> RWB was founded in Montpellier (France) in 1985 by journalists Robert Ménard, Rémy Loury, Jacques Molénat and Émilien Jubineau. The organisation is registered in France as a non-profit organisation and has consultant status at the United Nations and UNESCO (<http://en.rsf.org/who-we-are-12-09-2012,32617.html>).

<sup>18</sup> According to information on the RWB website ([http://en.rsf.org/IMG/pdf/how\\_the\\_2011-2012\\_index\\_was\\_compiled.pdf](http://en.rsf.org/IMG/pdf/how_the_2011-2012_index_was_compiled.pdf)), the organization takes into consideration violations directly affecting journalists (including murders, imprisonment, physical attacks and threats) and the news media (censorship, confiscation of newspaper issues, searches and harassment), the level of self-censorship in each country and the ability of the media to investigate and criticize, the legal framework for the media (including penalties for press offences, the existence of a state monopoly for certain kinds of media and how the media are regulated) and the level of independence of the public media. It also reflects violations of the free flow of information on the Internet.

<sup>19</sup> The interaction variable is separately calculated using the appropriate media exposure metric in the respective models.

<sup>20</sup> We recognize that country-level factors could also be expected to impact companies' anti-corruption disclosure and we address this issue in the results section below.

industry groups. Healy and Serafeim (2016) note that companies from some industries are more likely to have interactions with governments relative to the sale of goods or services or other negotiations, and as such, face greater corruption risks. TI, in its annual ‘Bribe Payers Index’, assesses the threat of corruption across different industry groups and we rely on their 2011 report<sup>21</sup> to identify industries facing greater risks at the time we focus on in this study. More specifically, we use a one/zero classification variable and code firms in industries whose bribe payers’ rating score is below the sample mean (indicating a higher risk of corruption) as ‘Industry Risk’ firms. Overall, 37 of the 105 sample companies in this estimation are rated as being at higher risk of corruption.

Our second firm-level control variable, ‘Firm Size’, is based on findings in numerous studies of social and environmental disclosure that larger companies, presumably due to greater visibility, exhibit higher levels of disclosure (see, e.g., Brammer and Pavelin, 2006; Hackston and Milne, 1996; Patten, 1991; 2002b). We use market value data provided in the TI report (Kowalczyk-Hoyer, 2012) and take the natural log of the reported measure to control for concerns with heteroscedasticity.<sup>22</sup>

Finally, because differences in internal governance structures could be expected to influence companies’ anti-corruption disclosures, we include two firm-specific factors related to governance concerns. The first of these is the presence of a corporate social responsibility (CSR) committee at the board of directors (BOD) level. Michelin and Parbonetti (2012) argue that the presence of a CSR committee on the BOD may make the group more sensitive to CSR issues leading to increased transparency and higher levels of CSR disclosure. Although Michelin and Parbonetti find only weak support for this relation in their empirical analysis, Kent and Monem (2008) report a significant positive relation between existence of an environmental committee on the BOD and the extensiveness of triple bottom line reporting for a sample of Australian firms. Prior studies (e.g., Fernandez-Feijoo et al., 2012; Larkin et al., 2013; Michelin and Parbonetti, 2012) also indicate that diversity with respect to the make-up of the BOD appears to influence CSR awareness and disclosure. And while diversity can be defined in a variety of ways, gender is one of the most common (Larkin et al., 2013; Rao et al., 2012; van der Walt and Ingleby, 2003), and accordingly, we measure BOD diversity as the percentage of the BOD made up of women directors.<sup>23</sup> A considerable body of research in the social sciences suggests women may have higher standards of ethical behavior and be more concerned with the common good (Dollar et al., 2001; Esarey and Chirillo, 2013), and higher female membership on the BOD has been shown to influence charitable giving (Wang and Coffey, 1992), CSR sensitivity (Bear et al., 2010), and environmental reporting (Rao et al., 2012), among other issues. We hand-collected CSR Committee and BOD membership data from sample companies’ annual reports, proxy statements, and websites. We identified 32 of our sample companies as having a CSR Committee on the BOD, while, on average, women made up 17 percent of the membership, based on a range from zero to 43 percent.

---

<sup>21</sup> Available at (<http://bpi.transparency.org/bpi2011>).

<sup>22</sup> Kowalczyk-Hoyer (2012) indicates that TI relied on market value data calculated by Forbes as of 1 March 2010. As a sensitivity check, we re-estimated the models using the log of total assets as of 12/31/2011. Results, not presented here, were qualitatively unchanged from those using the market value measure.

<sup>23</sup> We also gathered data on the percentage of community influential members of the BOD (see Bear et al., 2010; Michelin and Parbonetti, 2013). This alternative measure of diversity was significantly correlated with our gender measure, and results using this alternative measure, not presented here, were consistent with those reported in the paper.



(lower) anti-corruption disclosure scores. Table 2 also shows that two control variables, Industry Risk and PercWomenBrd, are positively and significantly associated with the disclosure scores, although the former only at the  $p = .064$  level (two-tailed) for the parametric correlation measure.

----- Tables 1 and 2 about here -----

The results of our multiple regression analysis using the existence of media exposure variable are presented in Panel A of Table 3. Overall the model is highly significant (based on the model F-statistic) and explains over 47 percent of the variation in the anti-corruption disclosure scores (Adjusted  $R^2 = .473$ ). In support of Hypothesis 1, our media exposure variable is positively and significantly (at  $p = .004$ , one-tailed) related to disclosure. Further, and consistent with the bivariate findings, Press Freedom remains significantly (at  $p = .009$ , one-tailed) and positively associated with the disclosure scores. These results thus support Hypothesis 2. Finally, Panel A of Table 3 reveals that the Media\*Press Freedom interaction variable is also positively signed and statistically significant (at  $p = .001$ , one-tailed). This indicates that the existence of media exposure has more (less) impact on disclosure scores as country level press freedom increases (decreases), and this finding supports Hypothesis 3. With respect to the control variables included in the model, both Industry Risk and PercWomenBrd are, as expected, positively and significantly related to differences in anti-corruption disclosure scores. Firm Size and CSR Committee, while positively signed, are not significant at conventional levels. A possible explanation for the lack of a firm size effect is that the sample consists only of the very largest multinational firms in the world, and differences in size across the grouping are not substantial enough to bring about visibility exposure effects. We offer no explanation for the lack of a CSR Committee effect.

As presented in Panel B of Table 3, the results of the regression analysis using the extensiveness of media exposure variable are very consistent with those for the first model. Importantly, the media exposure metric is positively and significantly (at  $p = .006$ , one-tailed) related to differences in the anti-corruption disclosure scores, indicating that it is not just the existence, but also the level of media exposure that appears to lead to better provision of information on anti-corruption efforts. As before, the Press Freedom and the Media\*Press Freedom interaction variables are positively signed and statistically significant (both at  $p < .01$ , one-tailed). As such, all three hypotheses are again supported by our analysis.

----- Table 3 about here -----

### *Extended Model Results*

Table 4 presents the results of the regression analyses of anti-corruption disclosure where VDT-based financial variables are included as additional controls. As reflected in the table, we find that, while all three financial control variables are positively signed, only ROA is statistically significant at conventional levels. Importantly, and consistent with the findings of both Guidry and Patten (2012) and Dobler et al. (2015) relative to environmental disclosure, the inferences on our primary variables remain unchanged with the inclusion of the additional controls. The Media Exposure, Press Freedom, and Media Exposure\*Press Freedom variables all remain positively and significantly (at  $p < .01$ , one-tailed) related to anti-corruption disclosure.

----- Table 4 about here -----

### *Country-Level Factors*

In addition to company-specific factors influencing anti-corruption disclosures, it seems likely that differences in country-level attributes might similarly be expected to affect corporate attitudes toward corruption and disclosure. In order to examine this issue, we gathered metrics on five different country-level factors potentially relating to anti-corruption disclosure. The first three, perceptions of the degree of (1) irregular payments and bribes, (2) judicial independence, and (3) ethical behavior of firms, are all derived from the World Economic Forum's (WEF) 2011-2012 report on global competitiveness (WEF, 2011). Each of these measures is based on surveys of corporate executives from across the globe and for each, a higher score indicates a better country-level performance on that attribute. Similarly, higher scores on our fourth measure, perceptions of government corruption, indicate lower levels of perceived corruption at the government level. This metric is drawn from TI's *Corruption Perceptions Index 2011* (TI 2011). Finally, Simnett et al. (2009) report that CSR disclosure and assurance differ where countries exhibit a higher level of stakeholder as opposed to shareholder orientation (also see Kolk and Perego, 2010). Accordingly, we follow Dhaliwal et al. (2012) and calculate a measure of country-level stakeholder orientation where more positive numbers indicate a greater stakeholder emphasis.

As reported in Table 5, each of the five country-level factors is significantly correlated with our press freedom measure (based on Pearson product-moment correlations), creating potential multicollinearity issues with respect to statistical analysis. Accordingly, we separately regress the anti-corruption disclosure scores on each country-level metric (including press freedom) to assess the extent to which each explains variation in the disclosure (based on the model  $R^2$ ). As also reflected in Table 5, the press freedom measure explains more of the variation in anti-corruption disclosure ( $R^2 = 0.336$ ) than any of the other country-level attributes, lending additional support for our arguments.<sup>26</sup> Next, we re-estimated each of our multiple regression models including, separately, each of the country-level factors as an additional control, and in all cases the significance on our primary variables of interest – media exposure, press freedom, and the interaction of the two – remained statistically significant at  $p < .05$ , one-tailed.<sup>27</sup>

----- Table 5 about here -----

### *Sensitivity Tests*

In order to assure that our results are robust to alternative estimations, we conduct a number of additional sensitivity tests. First, Healy and Serafeim (2016) argue that companies

---

<sup>26</sup> Following Cahan et al. (1997), we also used principal components analysis to extract a common factor from the four country-level measures related to corruption (we exclude stakeholder orientation). The composite factor, as expected, was also highly correlated with our press freedom metric. Similar to the individual country-level factors, it explains less of the variation in anti-corruption disclosure ( $R^2 = 0.214$ ) than does press freedom.

<sup>27</sup> The results of the regressions including both press freedom and the various country-level factors must be interpreted with caution as for all of the additional variables except Stakeholder Orientation, variance inflation factors were in excess of 2.0.

listed on U.S. stock exchanges are expected to follow the guidelines of the Foreign Corrupt Practices Act and as such, might be expected to have higher quality anti-corruption disclosures. Accordingly, we include a one/zero indicator variable where one designates companies with listings on U.S. stock exchanges, and results indicate no qualitative differences for the relations between anti-corruption disclosure scores and our primary variables.<sup>28</sup> Because the U.K.'s Bribery Act became effective in 2011, we also run tests including an indicator variable coding both U.S. listed firms and U.K. firms and, again, results on our primary variables of interest continue to hold.

Second, we conduct tests considering alternative governance factors. In the first of these, we control for the potential impact of CEO duality. Rupley et al. (2012) note that where the CEO simultaneously serves as the chair of the BOD, monitoring of management is reduced leading to increased information asymmetry potentially impacting CSR disclosure quality. In separate tests including CEO duality as an additional governance factor and then in place of our board diversity measure we fail to find any significant relation between this governance trait and anti-corruption disclosures. Further, in all cases, the results on our primary variables of interest continue to hold. Next, we examined the potential impact of independent board membership. A higher level of independent directors is argued to increase transparency (Kesner and Johnson, 1990) as such members enhance the monitoring role of the board (Fama and Jensen, 1983) and decrease managerial discretion and opportunistic behaviour (Jensen and Meckling, 1976; Gibbins et al., 1990). Further, Rao et al. (2012) present evidence indicating higher independence on the BOD is associated with more extensive environmental reporting for a sample of Australian companies. However, we were unable to determine independent status of BOD members for 12 of our sample firms, and this set of sensitivity tests relied on the reduced sample of 93 companies. Using this alternative BOD measure, either in addition to, or as a replacement for board diversity, results on the relation between anti-corruption disclosure and our variables of interest remained consistent with those reported above.

Next, given that our sample is dominated by companies from the U.S., we estimated models using only the 66 observations from non-U.S. companies. In models using, alternatively, the existence of media exposure and the extensiveness of media exposure, results on our variables of interest remained statistically significant at  $p < .02$ , one-tailed.<sup>29</sup> Thus, the primary results do not appear to be driven by the U.S. companies in the sample.

Finally, we estimated models allowing the impacts of industry risk to vary across press freedom levels as well as models controlling for possible interactive effects between media exposure and industry risk. In no cases were the interaction terms statistically significant, and in each case, the primary findings continued to hold. Overall, we believe the results of the additional tests support the robustness of our primary findings.

## Conclusion

Corporate corruption has become a major social issue, and we attempt in this study to provide better understanding of differences in companies' anti-corruption disclosures. Using

---

<sup>28</sup> Similarly, when we code as one only those companies headquartered outside the U.S. but listed on U.S. stock exchanges results remain qualitatively unchanged.

<sup>29</sup> The results on our primary test variables also remained statistically significant (at  $p < .02$ , one-tailed) in reduced sample models including the VDT-based financial control variables. In these additional estimations, the ROA variable was no longer statistically significant at conventional levels.

TI's assessments of the anti-corruption disclosure of the 105 largest multinational firms in the world, we investigate in this study the role that media exposure on the issue plays with respect to the corporate reporting. We find that both the existence and the extensiveness of articles in the world press targeting specific firms appear to lead to more extensive anti-corruption reporting. We also document that reduced press freedom at the home-country level is associated with less extensive corporate anti-corruption disclosure, and further, that lower levels of press freedom reduce the impact of media exposure on the disclosure of anti-corruption efforts, although it is important to note that a relatively small portion of our sample comes from countries ranked among the worst in terms of press freedom.

Our study makes several important contributions to the body of social and environmental disclosure research. First, our investigation extends understanding of how legitimacy-related factors impact differences in CSR disclosure by documenting that company-level media exposure in the form of negative press coverage related to corruption issues appears to induce more extensive disclosure of anti-corruption information. And while this finding is consistent with prior studies focusing on environmental or broader CSR disclosure, ours is the first to show that the media exposure relations appear to hold with respect to other specific types of social disclosure. More importantly, no prior studies of the impact of media exposure on CSR disclosure examine whether the impacts vary with respect to the level of press freedom. We argue that management of companies headquartered in countries where press freedom is more restricted will be likely to see the press as less of a source of potential social and political pressure, and our results are consistent with such a claim. We concede, however, that corruption at the country level is a social issue specifically argued to be related to press freedom. Accordingly, whether lower levels of home country press freedom lead to reduced exposure related to environmental or other social issues is not clear and would appear to be an interesting extension to both our study and those prior works exploring other types of CSR disclosure.

Perhaps more importantly, our findings appear to have relevance related to the arguments of TI, Halter et al. (2009), and others regarding the role that company disclosure might play in reducing corruption. On one hand, if TI's beliefs that better anti-corruption disclosure can play a positive role in fostering better anti-corruption efforts at the company level, our results would appear to suggest that the media, by exposing concerns with companies, can aid in the anti-corruption fight by increasing the social pressure on companies. However, even if true, our results also indicate a potentially serious issue in that, in countries with reduced press freedom, media pressure does not appear to induce similar responses, and as such, alternative mechanisms for improving corporate anti-corruption disclosure (and ultimately, performance) may be necessary. International investors would appear to be a major stakeholder group that could potentially play a role in this regard. For example, Jung et al. (2015) note the growth in Anglo-American institutional investment in foreign companies and document that their presence appeared to have impacts on company decisions in the French context. Whether, and how, such external stakeholders create pressures for better disclosure on anti-corruption activities for countries where press freedom is more limited would be potentially enlightening.

Of course, it must be noted that our findings would appear to raise questions regarding the viability of the claims that better anti-corruption disclosure will actually lead to better company efforts at reducing corrupt activities. Both Everett et al. (2007) and Sikka and Lehman (2015) argue that current anti-corruption practices (including related accounting tools and controls) are not effective and remain an instrument of capitalists to create inequity and class struggles, and this would appear to be an issue deserving future research attention. Further, our

results are consistent with legitimacy theory arguments that higher levels of social and political pressure lead companies to use disclosure as a means of reducing their exposures. Other legitimacy theory-based research, although focusing on only environmental issues, presents evidence that disclosure and actual firm performance may not be positively related. For example, both Aerts and Cormier (2009) and Cho and Patten (2007) report that companies with worse environmental performance exhibited higher levels of voluntary environmental disclosure in their financial reports. Further, Cho et al. (2012) document that differences in environmental disclosure, while significantly associated with differences in social and political exposure, were not related to subsequent changes in environmental performance. As such, it seems plausible that company attention to anti-corruption disclosure may not carry over to better corruption performance. Future research into the relation between anti-corruption disclosure and actual corruption performance would thus also appear to be warranted.

Like all studies, ours is subject to certain limitations. Due to our data source, we examine only the largest, presumably most visible, multinational companies, and as such, the degree to which our findings generalize to other companies cannot be assessed. Further, we rely on the disclosure ratings provided by TI. Although the organization has extensive experience with respect to assessments of corruption issues, a review of the disclosure scheme (see Appendix A) reveals that the areas assessed by the organization are largely related to what Hopwood (2009) refers to as “programs and initiatives” as opposed to hard data on corruption activities. We cannot assess how our relations might differ using an alternative disclosure scheme. We also focus on only negative media exposure and its relation to disclosure. Whether positive news coverage influences disclosure choice, either directly or by mitigating impacts of negative exposure would make an interesting extension of our analysis. Similarly, investigating the degree to which changes in (as opposed to the levels of) media exposure influences the corporate reporting (and whether this varies across levels of press freedom) could likewise enrich understanding of corporate anti-corruption disclosure practices. Finally, we measure media exposure based only on the presence of articles without differentiation as to the source of the media exposure. We assume, given that all sample companies are large multi-national companies, that press coverage from any location can potentially increase firm-specific social pressures on the companies. Exploring how the source of media articles (either in terms of geographic location or type of media) influences corporate disclosure choice would also make for an interesting extension of our study.

## References

- Ader, C. (1995), "A longitudinal study of agenda setting for the issue of environmental pollution", *Journalism & Mass Communication Quarterly*, Vol. 72, No. 2, pp. 300-311.
- Aerts, W., & Cormier, D. (2009), "Media legitimacy and corporate environmental communication", *Accounting, Organizations and Society*, Vol. 34, No. 1, pp. 1-27.
- Aggarwal, R. & Goodell, J. W. (2013), "Governance transparency among the largest multinational corporations: influence of firm, industry and national factors", *Transnational Corporations*, Vol. 22, No. 1, pp. 1-29.
- Ashforth, B. E., Gioia, D. A., Robinson, S. L. & Trevino, L. K. (2008), "Re-viewing organizational corruption", *Academy of Management Review*, Vol. 33, No. 3, pp. 670-684.
- Bear, S., Rahman, N. & Post, C. (2010), "The impact of board diversity and gender composition on corporate social responsibility and firm reputation", *Journal of Business Ethics*, Vol. 97, pp. 207-221.
- Bewley, K. & Li, Y. (2000), "Disclosure of environmental information by Canadian manufacturing companies: a voluntary disclosure perspective", *Advances in Environmental Accounting and Management*, Vol. 1, pp. 201-226.
- Blacconiere, W. G. & Patten, D. M. (1994), "Environmental disclosures, regulatory costs, and changes in firm value", *Journal of Accounting and Economics*, Vol. 18, pp. 357-377
- Bowen, R., Castanias, R. & Daley, L. (1983), "Intra-industry effects of the accident at Three Mile Island", *Journal of Financial and Quantitative Analysis*, Vol. 18, No. 1, pp. 87-111.
- Brammer, S. & Pavelin, S. (2006), "Voluntary environmental disclosures by large UK companies", *Journal of Business, Finance, and Accounting*, Vol. 33, Nos.7-8, pp. 1168-1188.
- Brammer, S. & Pavelin, S. (2008), "Factors influencing the quality of corporate environmental disclosure", *Business Strategy and the Environment*, Vol. 17, No. 2, pp. 120-136.
- Branco, M. C. & Rodrigues, L. L. (2008), "Factors influencing social responsibility disclosure by Portuguese companies", *Journal of Business Ethics*, Vol. 83, No. 4, pp. 685-701.
- Brown, N. & Deegan, C. (1998), "The public disclosure of environmental performance information – A dual test of media agenda setting theory and legitimacy theory", *Accounting and Business Research*, Vol. 29, No. 1, pp. 21-41.
- Brunetti, A. & Weder, B. (2003), "A free press is bad news for corruption", *Journal of Public Economics*, Vol. 87, pp. 1801-1824.

- Cahan, S. F., Chavis, B. M. & Elmendorf, R. G. (1997). "Earnings management of chemical firms in response to political costs from environmental legislation", *Journal of Accounting, Auditing, and Finance*, Vol. 12, No. 1, pp. 37-65.
- Camaj, L. (2013), "The media's role in fighting corruption: media effects on governmental accountability", *The International Journal of Press/Politics*, Vol. 18, No. 1, pp. 21-42.
- Cho, C. H., Freedman, M. & Patten, D. M. (2012), "Corporate disclosure of environmental capital expenditures: a test of alternative theories", *Accounting, Auditing and Accountability Journal*, Vol. 25, No. 3, pp. 486-507.
- Cho, C. H., Michelon, G., Patten, D. M., & Roberts, R. W. (2015), "CSR disclosure: the more things change . . .?", *Accounting, Auditing and Accountability Journal*, Vol. 28, No. 1, pp. 14-35.
- Cho, C. H. & Patten, D. M. (2007), "The role of environmental disclosures as tools of legitimacy: a research note", *Accounting, Organizations and Society*, Vol. 32, Nos. 7/8, pp. 639-647.
- Chowdhury, S. K. (2004), "The effect of democracy and press freedom on corruption: an empirical test", *Economic Letters*, Vol. 85, No. 1, pp. 93-101.
- Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2008), "Revisiting the relation between environmental performance and environmental disclosure", *Accounting, Organizations and Society*, Vol. 33, Nos. 4/5, pp. 303-327.
- Cowen, S. S., Ferreri, L. B., & Parker, L. D. (1987), "The impact of corporate characteristics on social responsibility disclosure: a typology and frequency-based approach", *Accounting, Organizations and Society*, Vol. 12, No. 2, pp. 111-122.
- Dawkins, C. & Fraas, J. W. (2011), "Coming clean: the impact of environmental performance and visibility on corporate climate change disclosure", *Journal of Business Ethics*, Vol. 100, No. 2, pp. 303-322.
- Dearing, J. W. & Rogers, E. M. (1996), *Agenda Setting*, Thousand Oaks, CA: Sage Publications.
- Dhaliwal, D. S., Radhakrishnan, S., Tsang, A., & Yang, Y. G. (2012), "Nonfinancial disclosure and analyst forecast accuracy: international evidence on corporate social responsibility disclosure", *The Accounting Review*, Vol. 87, No.3, pp. 723-759.
- Deegan, C. (2014), "An overview of legitimacy theory as applied within the social and environmental accounting literature", in Bebbington, J. Unerman, J. & O'Dwyer, B. (Eds.), *Sustainability Accounting and Accountability*, 2<sup>nd</sup> Edition, Routledge, London, pp. 248-272.

- Deegan, C., Rankin, M. & Tobin, J. (2002), "An examination of the corporate social and environmental disclosures of BHP from 1983-1997: a test of legitimacy theory", *Accounting, Auditing & Accountability Journal*, Vol. 15, No. 3, pp. 312-343.
- Deegan, C., Rankin, M. & Voght. (2000), "Firms' disclosure reactions to major social incidents: Australian evidence", *Accounting Forum*, Vol. 24, No. 1, pp. 101-130.
- Dobler, M., Lajili, K., & Zeghal, D. (2015), "Corporate environmental sustainability disclosures and environmental risk: alternative tests of socio-political theories", *Journal of Accounting & Organizational Change*, Vol. 11, No. 2, pp. 301-332.
- Dollar, D., Fisman, R. & Gatti, R. (2001), "Are women really the 'fairer' sex? Corruption and women in government", *Journal of Economic Behavior & Organization*, Vol. 46, No. 4, pp. 423-429.
- Esarey, J. & Chirillo, G. (2013), "'Fairer sex' or purity myth? Corruption, gender, and institutional context", *Politics & Gender*, Vol. 9, No. 4, pp. 361-389.
- Everett, J. S., Neu, D., & Rahaman, A. (2007), "Accounting and the global fight against corruption", *Accounting, Organizations and Society*, Vol. 32, No. 6, pp. 513-542.
- Fama, E. F. & Jensen, M. C. (1983), "Separation of ownership and control", *Journal of Law and Economics*, Vol. 26, pp. 301-325.
- Fernandez-Feijoo, B., Romero, S. & Ruiz, S. (2012), "Does board gender composition affect corporate social responsibility reporting?", *International Journal of Business and Social Science*, Vol. 3, pp. 31-38.
- Freille, S., Hague, M. E. & Kneller, R. (2007), "A contribution to the empirics of press freedom and corruption", *European Journal of Political Economy*, Vol. 23, No. 4, pp. 838-862.
- Gibbins, M., Richardson, A. & Waterhouse, J. (1990), "The management of corporate financial disclosure: opportunism, ritualism, policies, and processes", *Journal of Accounting Research*, Vol. 28, 121-143.
- Guidry, R. G. & Patten, D. M. (2012), "Voluntary disclosure theory and financial control variables: an assessment of recent environmental disclosure research", *Accounting Forum*, Vol. 36, No. 2, pp. 81-90.
- Hackston, D. & Milne, M. J. (1996), "Some determinants of social and environmental disclosures in New Zealand companies", *Accounting, Auditing and Accountability Journal*, Vol. 9, No. 1, pp. 77-108.
- Halter, M., Arruda, M. & Halter, R. (2009), "Transparency to reduce corruption?", *Journal of Business Ethics*, Vol. 84, Supplement 3, pp. 373-385.

- Healy, P. & Serafeim, G. (2016), "An analysis of firms' self-reported anti-corruption efforts", *The Accounting Review*, Vol. 91, No. 2, pp. 489-511.
- Heflin, F. & Wallace, D. (2015), "The BP oil spill: shareholder wealth effects and environmental disclosures", available at SSRN: <http://dx.doi.org/10.2139/ssrn.1933531>.
- Hess, D. (2009), "Catalyzing corporate commitment to combating corruption", *Journal of Business Ethics*, Vol. 88, Supplement 4, pp. 781-790.
- Hess, D. & Ford, C. L. (2008), "Corporate corruption and reform undertakings: a new approach to an old problem", *Cornell International Law Journal*, Vol. 41, pp. 307-346.
- Holder-Webb, L., Cohen, J. R., Nath, L., & Wood, D. (2009), "The supply of corporate responsibility disclosures among U.S. firms", *Journal of Business Ethics*, Vol. 84, No. 4, pp. 497-527.
- Hopwood, A. G. (2009), "Accounting and the environment", *Accounting, Organizations and Society*, Vol. 34, Nos. 4-5, pp. 433-439.
- Islam, M. A., & Deegan, C. (2010), "Media pressures and corporate disclosure of social responsibility performance information: a study of two global clothing and sports retail companies", *Accounting and Business Research*, Vol. 40, No. 2, pp. 131-148.
- Jensen, M. C. & Meckling, W. H. (1976), "Theory of the firm: managerial behavior, agency costs and ownership structure", *Journal of Financial Economics*, Vol. 3, pp. 305-360.
- Jung, D. K., Aguilera, R. & Goyer, M. (2015), "Institutions and preferences in settings of causal complexity: foreign institutional investors and corporate restructuring practices in France", *The International Journal of Human Resource Management*, Vol. 26, No. 16, pp. 2062-2086.
- Kent, P. & Monem, R. (2008), "What drives TBL reporting: good governance or threat to legitimacy?", *Australian Accounting Review*, Vol. 18, pp. 297-309.
- Kesner, I. F. & Johnson, R. B. (1990), "An investigation of the relationship between board composition and stockholder suits", *Strategic Management Journal*, Vol. 11, No. 4, pp. 327-336.
- Kolk, A. & Perego, P. (2010), "Determinants of the adoption of sustainability assurance statements: an international investigation", *Business, Strategy and the Environment*, Vol. 19, No. 3, pp. 182-198.
- Kowalczyk-Hoyer, B. (2012), *Corporate Reporting: Assessing the World's Largest Companies*, Berlin: Transparency International, also available online at ([http://www.transparency.org/whatwedo/pub/transparency\\_in\\_corporate\\_reporting\\_assessing\\_the\\_worlds\\_largest\\_companies](http://www.transparency.org/whatwedo/pub/transparency_in_corporate_reporting_assessing_the_worlds_largest_companies)).

- KPMG Forensics (2013), *Integrity Survey 2013*, (<http://kpmg.com/CN/en/IssuesAndInsights/ArticlesPublications/Documents/Integrity-Survey-2013-O-201307.pdf>)
- Larkin, M. B., Bernardi, R. A., & Bosco, S. M. (2013), "Does female representation on boards of directors associate with increased transparency and ethical behaviour?", *Accounting and the Public Interest*, Vol. 13, pp. 132-150.
- Lindblom, C. (1993), "The implications of organizational legitimacy for corporate social performance and disclosure", presented at the Critical Perspectives on Accounting Conference, New York.
- Lindstedt, C. & Naurin, D. (2010), "Transparency is not enough: making transparency effective in reducing corruption", *International Political Science Review*, Vol. 31, No. 4, pp. 301-322.
- Magness, V. (2006), "Strategic posture, financial performance, and environmental disclosure: an empirical test of legitimacy theory", *Accounting, Auditing and Accountability Journal*, Vol. 19, No. 4, pp. 540-563.
- Michelon, G. & Parbonetti, A. (2012), "The effect of corporate governance on sustainability disclosure", *Journal of Management & Governance*, Vol. 16, pp. 477-509.
- Patten, D. M. (1991), "Exposure, legitimacy, and social disclosure", *Journal of Accounting and Public Policy*, Vol. 10, pp. 297-308.
- Patten, D. M. (1992), "Intra-industry environmental disclosures in response to the Alaskan oil spill: a note on legitimacy theory", *Accounting, Organizations and Society*, Vol. 17, No. 5, pp. 471-475.
- Patten, D. M. (2000), "Changing Superfund disclosure and its relation to the provision of other environmental information", *Advances in Environmental Accounting and Management*, Vol. 1, pp. 101-121.
- Patten, D. M. (2002a), "Media exposure, public policy pressure, and environmental disclosure: an examination of TRI data availability", *Accounting Forum*, Vol. 26, No. 2, pp. 152-171.
- Patten, D. M. (2002b), "The relation between environmental performance and environmental disclosure: A research note", *Accounting, Organizations, and Society*, Vol. 27, pp. 763-773.
- Patten, D. M. (2005), "The accuracy of financial report projections of future environmental capital expenditures: a research note", *Accounting, Organizations and Society*, Vol. 30, No. 5, pp. 457-468.

- Patten, D. M., Ren, Y. & Zhao, N. (2015), "Standalone corporate social reporting in China: an exploratory analysis of its relation to legitimation", *Social and Environmental Accountability Journal*, Vol. 35, No. 1, pp. 17-31.
- Rao, K. K., Tilt, C. A., & Lester, L. H. (2012), "Corporate governance and environmental reporting: an Australian study", *Corporate Governance*, Vol. 12, No. 2, pp. 143-163.
- Rupley, K. H., Brown, D. & Marshall, R. S. (2012), "Governance, media, and the quality of environmental disclosure", *Journal of Accounting and Public Policy*, Vol. 31, No. 6, pp. 610-640.
- Savage, A., Cataldo, A. J., & Rowlands, J. (2000), "A multi-case investigation of environmental legitimation in annual reports", *Advances in Environmental Accounting and Management*, Vol. 1, pp. 45-81.
- Sikka, P. & Lehman, G. (2015), "Supply-side corruption and limits to preventing corruption within governmental procurement and constructing ethical subjects", *Critical Perspectives on Accounting*, Vol. 28, No. 1, pp. 62-70.
- Simnett, R., Vanstraelen, A., & Chua, W. F. (2009), "Assurance on sustainability reports: an international comparison", *The Accounting Review*, Vol. 84, No. 3, pp. 937-967.
- Staplehurst, R. (2000), *The Media's Role in Curbing Corruption*, Washington, D.C.: The World Bank Institute.
- Suchman, M. C. (1995), "Managing legitimacy: strategic and institutional approaches", *Academy of Management Review*, Vol. 20, No. 3, pp. 571-610.
- Transparency International. (2011), *Corruption Perceptions Index 2011*, Berlin: Transparency International.
- Triesman, D. (2007), "What have we learned about the causes of corruption from ten years of cross-national research?" *Annual Review of Political Science*, Vol. 7, No. 1, pp. 211-244.
- van der Walt, N. & Ingley, C. (2003), "Board dynamics and the influence of professional background, gender and ethnic diversity of directors", *Corporate Governance: An International Review*, Vol. 11, No. 3, pp. 218-234.
- Walden, W. D. & Schwartz, B. N. (1997), "Environmental disclosures and public policy pressure", *Journal of Accounting and Public Policy*, Vol. 16, pp. 125-154.
- Wang, J. & Coffey, B. S. (1992), "Board composition and corporate philanthropy", *Journal of Business Ethics*, Vol. 11, No. 10, pp. 771-778.
- Wang, H. & Rosenau, J. N. (2001), "Transparency International and corruption as a global issue", *Global Governance*, Vol. 7, No. 1, pp. 25-49.

World Economic Forum. (2011), *The Global Competitiveness Report 2011-2012*, Geneva: World Economic Forum.

Zucker, H. G. (1978), "The variable nature of news media influence", in Rubin, B. D. (ed.) *Communication Yearbook No. 2*: New Jersey, pp. 225-245.

**Table 1 – Descriptive statistics (n = 105)**


---

Variables	Min.	Max.	Mean	Std.Dev.
Disclosure	0.00	100.00	67.64	24.68
Media Exposure (Categories)	0.00	3.00	0.85	0.87
Press Freedom	1.00	174.00	50.35	41.99
Firm Size (Mkt. Val. in US \$Billion)	50.25	333.84	106.20	57.35
Percent of Women on BOD	0.00	0.43	0.17	0.11

---

## Sample frequencies:

Media Exposure – Binary (companies with at least one corruption news article)	58 (55.2%)
Industry Risk (companies in high corruption risk industries)	37 (35.2%)
CSR Committee (companies with a CSR committee on the board)	32 (30.5%)

---

## Country Distribution (press freedom rankings in parentheses)

Australia ( 30)	4	Luxembourg ( 6)	1
Belgium ( 3)	1	Mexico (149)	1
Brazil ( 99)	3	Netherlands ( 20)	2
Canada ( 10)	2	Norway ( 1)	1
China/Hong Kong (174)	6	Russia (142)	1
France ( 38)	8	Saudi Arabia (158)	1
Germany ( 16)	7	South Korea ( 44)	1
India (131)	2	Spain ( 39)	2
Israel ( 92)	1	Switzerland ( 8)	4
Italy ( 61)	2	United Kingdom ( 28)	11
Japan ( 22)	5	United States ( 47)	39

---

**Table 2 – Correlations (n = 105)**

	Disclosure	Media Existence	Media Extent	Press Freedom	Industry Risk	Firm Size	CSR Committee	Percent Women on BOD
Disclosure	1.000	.076 (.443)	.088 (.370)	<b>.579</b> <b>(.000)</b>	.181 (.064)	-.003 (.977)	.089 (.367)	<b>.311</b> <b>(.001)</b>
Media Existence	.131 (.181)	1.000	<b>.877</b> <b>(.000)</b>	-.047 (.637)	.143 (.146)	<b>.259</b> <b>(.008)</b>	-.070 (.480)	.089 (.366)
Media Extent	.139 (.158)	<b>.922</b> <b>(.000)</b>	1.000	.007 (.944)	.129 (.189)	<b>.216</b> <b>(.027)</b>	-.122 (.216)	.039 (.693)
Press Freedom	<b>.271</b> <b>(.005)</b>	-.046 (.638)	-.008 (.935)	1.000	-.123 (.211)	<b>-.195</b> <b>(.046)</b>	.010 (.923)	<b>.251</b> <b>(.010)</b>
Industry Risk	<b>.263</b> <b>(.007)</b>	.143 (.146)	.133 (.175)	-.051 (.607)	1.000	.105 (.285)	.031 (.751)	-.181 (.064)
Firm Size	.027 (.788)	<b>.251</b> <b>(.010)</b>	<b>.238</b> <b>(.014)</b>	<b>-.244</b> <b>(.012)</b>	.102 (.301)	1.000	-.084 (.393)	.064 (.518)
CSR Committee	.085 (.391)	-.070 (.480)	-.121 (.219)	-.051 (.606)	.031 (.751)	-.042 (.673)	1.000	.140 (.155)
Percent Women on BOD	.276 (.004)	.101 (.303)	.072 (.468)	.125 (.203)	<b>-.197</b> <b>(.044)</b>	.106 (.284)	.102 (.302)	1.000

Parametric measures (Pearson product-moment correlations) are reported above the diagonal and non-parametric measures (Spearman's rho) are presented below the diagonal. Significance levels (two-tailed) are reported in parentheses beneath the correlation metrics.

**Table 3 – Regression results for analysis of the relation between media exposure, press freedom, and anti-corruption disclosure.**

The regression model is stated as:

$$\text{Disclosure}_i = a_1 + B_1\text{Media Exposure}_i^a + B_2\text{Press Freedom}_i + B_3\text{Media*Press Freedom}_i + B_4\text{Industry Risk}_i + B_5\text{Firm Size}_i + B_6\text{CSR Committee}_i + B_7\text{PercWomenBrd}_i$$

---

Panel A – Existence of media exposure (n = 105)

Adj. R<sup>2</sup> = 0.473                      F-statistic = 14.314      Significance of F-stat = .000

Variable	Predicted Relation	Parameter Estimate	<i>t</i> -statistic	Significance of <i>t</i> -statistic <sup>b</sup>
Constant	none	-26.569	-0.271	.787
Media Exposure	(+)	15.404	2.747	.004
Press Freedom	(+)	0.167	2.434	.009
Media*Press Freedom	(+)	0.283	3.276	.001
Industry Risk	(+)	14.054	3.695	.001
Firm Size	(+)	3.481	0.888	.189
CSR Committee	(+)	1.361	0.348	.364
PercWomenBrd	(+)	52.708	3.075	.002

---

Panel B – Level of media exposure (n = 105)

Adj. R<sup>2</sup> = 0.464                      F-statistic = 13.841      Significance of F-stat = .000

Variable	Predicted Relation	Parameter Estimate	<i>t</i> -statistic	Significance of <i>t</i> -statistic <sup>b</sup>
Constant	none	-43.192	-0.438	.662
Media Exposure	(+)	8.284	2.557	.006
Press Freedom	(+)	0.204	3.207	.001
Media*Press Freedom	(+)	0.162	2.984	.002
Industry Risk	(+)	14.110	3.686	.001
Firm Size	(+)	4.241	1.076	.143
CSR Committee	(+)	1.319	0.332	.370
PercWomenBrd	(+)	49.495	2.896	.003

---

<sup>a</sup> For results in Panel A, Media Exposure is a binary variable where one indicates the existence of negative-toned media articles mentioning company *i*. For results in Panel B, Media Exposure is a four-level categorical variable coded based on the number of negative-toned media articles mentioning company *i*.

<sup>b</sup> Significance levels are one-tailed for directional variables.

**Table 4 – Regression results for analysis of the relation between media exposure, press freedom, and anti-corruption disclosure, including financial control variables (n = 105)**

Variable	Media Exposure Existence	Media Exposure Level
Constant	-15.841 (-0.160)	-31.526 (-0.318)
Media Exposure	14.335 (2.593)***	7.760 (2.436)***
Press Freedom	0.175 (2.596)***	0.211 (3.384)***
Media*Press Freedom	0.270 (3.176)***	0.153 (2.868)***
Industry Risk	13.120 (3.255)***	13.198 (3.249)***
Firm Size	2.694 (0.688)	3.389 (0.863)
CSR Committee	2.097 (0.536)	2.045 (0.514)
PercWomenBrd	43.438 (2.522)***	40.098 (2.331)**
ROA	0.636 (2.456)***	0.644 (2.471)***
Leverage	8.057 (0.749)	8.766 (0.810)
Financing	1.166 (0.166)	0.947 (0.134)

“Media Exposure Existence” denotes model where Media Exposure is a binary variable where one indicates the existence of negative-toned media articles mentioning company *i*. “Media Exposure Level” denotes model where Media Exposure is a four-level categorical variable coded based on the number of negative-toned media articles mentioning company *i*.

Numbers in parentheses report *t*-statistics, \*\* denotes significance at .05, \*\*\* denotes significance at .01, both one-tailed.

**Table 5 – Country-level factors, press freedom, and anti-corruption disclosure.**

---

<b>Factor</b>	<b>Correlation with Press Freedom</b>	<b>Variation in Anti- Corruption Disclosure Explained<sup>a</sup></b>
Press Freedom <sup>b</sup>	-----	0.336***
Irregular Payments and Bribes <sup>c</sup>	.759***	0.121***
Judicial Independence <sup>c</sup>	.706***	0.178***
Ethical Behavior of Firms <sup>c</sup>	.791***	0.175***
Government Corruption <sup>d</sup>	.906***	0.265***
Stakeholder Orientation <sup>e</sup>	.333***	0.016***

---

<sup>a</sup> Based on R-squared from regression estimation of the model  $Disclosure_i = a + b_1 \text{Country-Level Factor}_i + e_i$ . All models (based on model F-statistic) are statistically significant (at  $p < .001$ , two-tailed).

<sup>b</sup> From RWB website (<http://en.rsf.org/press-freedom-index-2011-2012,1043.html>).

<sup>c</sup> From World Economic Forum (2011).

<sup>d</sup> From Transparency International (2011).

<sup>e</sup> Based on Dhaliwal et al. (2012).

\*\*\* denotes significance at  $p < .001$ , two-tailed.

## Appendix A – Transparency International’s content scheme for assessment of anti-corruption disclosures.

---

1. Does the company have a publicly stated commitment to anti-corruption?
  - 1.0 point – if there is an explicit statement of “zero tolerance to corruption” or equivalent
  - 0.5 point – if there is no general anti-corruption statement, but only reference to public sector/governmental corruption, if there is no explicit commitment, but only a reference to i.e.: the US law, if there is a weak statement
2. Does the company publicly commit to be in compliance with all relevant laws, including anti-corruption laws?
  - 1.0 point – if there is an explicit statement of such commitment for all jurisdictions in which a company operates
3. Does the company leadership demonstrate support for anti-corruption? E.g. is there a statement in a corporate citizenship report or in public pronouncements on integrity?
  - 1.0 point – if there is a relevant statement in a corporate document (i.e.: sustainability report) or on company’s webpage and it includes explicit reference to integrity/anti-corruption if there is a relevant statement in company’s code of conduct or equivalent

Note: no points awarded if there is only a letter attached to the Sustainability Report or another corporate document but it contains no reference to integrity/anti-corruption
4. Does the company’s code of conduct/ anti-corruption policy explicitly apply to all employees?
  - 1.0 point – if the policy explicitly mentions that it applies to all employees, regardless of their position in corporate hierarchy, there can be no exceptions for any country of operations
5. Does the company’s code of conduct/ anti-corruption policy explicitly apply to all agents and other intermediaries?
  - 1.0 point – if agents must comply with the policy
  - 0.5 point – if agents are encouraged to comply with the policy

6. Does the company's code of conduct/ anti-corruption policy explicitly apply to contractors, subcontractors and suppliers?
- 1.0 point – if contractors/suppliers must comply with the policy, if the company screens contractors/suppliers in line with such policies
- 0.5 point – if contractors/suppliers are encouraged to comply with the policy, if the company applies such policy among contractors/suppliers whenever possible
7. Does the company have an anti-corruption training programme for its employees in place?
- 1.0 point – if there is public information that such programme is in place
- 0.5 point – if extensive training programme is recommended (i.e.: by the programme reviewers) but there is information about the current status quo
8. Does the company have a policy defining appropriate/ inappropriate gifts, hospitality and travel expenses?
- 1.0 point – if a company's policy covers acceptance and offering of one or more gifts, hospitality and travel expenses – the definition can be anything between one sentence and vast detailed description with amounts quoted
- 0.5 point – if only acceptance of appropriate/inappropriate gifts is defined, but no offering of gifts is mentioned
9. Is there a policy that explicitly forbids facilitation payments?
- 1.0 point – if there is explicit prohibition and not only simple discouragement of such payments (recognising that exceptions may be made for life or health threatening situations)
- 0.5 point – if there is a weak indirect statement, i.e.: the expression “facilitation payments” is not mentioned but there is a description of a similar situation – still, there must be explicit prohibition
- Note: no points awarded if such payments are only discouraged or regulated
10. Does the company prohibit retaliation for reporting the violation of a policy?
- 1.0 point – if the policy publicly specifies that no employee will suffer demotion, penalty or other adverse consequence for reporting a violation of the policy (whistle-blowing)

0.5 point – if company’s whistle-blowing system and all related regulations (i.e.: non-retaliation) apply to senior management only (i.e.: some Chinese companies have codes addressed to company’s management only)

11. Does the company provide channels through which employees can report potential violations of policy or seek advice (e.g. whistleblowing) in confidence?

1.0 point – if there is public provision of such a channel in a form that assures full confidence

0.5 point – if some “independent third party” is in place but there is no explicit statement that the channel is confidential, or if the whole system applies to senior management only

12. Does the company carry out regular monitoring of its anti-corruption programme?

1.0 point – if there is public information on regular monitoring of the anti-corruption programme and not only on the overall audit of a sustainability report

0.5 point – if there is some information on such monitoring, but no information on its regularity, if there is information on monitoring of all sustainability issues and additionally some implicit information that anti-corruption issues should be included

13. Does the company have a policy prohibiting political contributions or if it does make such contributions, are they fully disclosed?

1.0 point – if a company either has a policy not to make political contributions or it publicly discloses all such contributions in all its countries of operations

0.5 point – if a company discloses all political contributions for its major country(-ies), i.e.: for its home country (it’s often the case of the US-based companies)

---

Source: *Transparency in Corporate Reporting 2012 Codebook* (available at [http://files.transparency.org/content/download/469/1934/file/2012\\_TransparencyInCorporateReporting\\_Codebook.pdf](http://files.transparency.org/content/download/469/1934/file/2012_TransparencyInCorporateReporting_Codebook.pdf))