

OBEGEF – Observatório de Economia e Gestão de Fraude

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In search of disclosure  
effects of the Siemens  
AG's corruption scandal



Renata Blanc; Manuel Castelo Branco; Charles  
H. Cho; Joanne Sopt



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Observatório de Economia  
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>> **FICHA TÉCNICA****IN SEARCH OF DISCLOSURE EFFECTS OF THE SIEMENS AG'S  
CORRUPTION SCANDAL**

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OBEGEF – Observatório de Economia e Gestão de Fraude

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>> **RESUMO**

Neste estudo, analisam-se as alterações ao nível das práticas de divulgação de informação sobre compliance e luta contra a corrupção da Siemens AG uma grande empresa multinacional alemã ao longo de um período de 11 anos durante o qual dois acontecimentos importantes relacionados com corrupção ocorreram: (1) o aparecimento do 10.º princípio do Pacto Global da Organização das Nações Unidas, que pode constituir um choque exógeno e assim potencialmente criar ajustamentos positivos ao nível da reputação de uma empresas; e (2) a ocorrência de um grande escândalo de corrupção na Siemens em 2006, que teve um impacto externo negativo. Através de análise de conteúdo dos relatórios e contas anuais e dos relatórios de sustentabilidade relativos ao período 2000-2011 e com base no enquadramento teórico fornecido pelas teorias da legitimidade e media agenda setting, os resultados do estudo sugerem que a Siemens alterou as suas práticas de divulgação de informação sobre compliance e corrupção para gerir a sua legitimidade na sequência do escândalo de corrupção de 2006 e em anos posteriores. As estratégias adoptadas pela Siemens podem ser descritas como sendo simultaneamente simbólicas e substantivas (ver Dowling e Pfeffer, 1975; Ashforth e Gibbs, 1990; Rodrigue, Magnan e Cho, no prelo). As implicações deste estudo parecem ser relevantes para várias partes interessadas fundamentais na medida em que podem, no mínimo, fornecer argumentos adicionais para a necessidade de melhor regulação no sentido de assegurar a divulgação de informação empresarial relevante, fiável e consistente sobre assuntos sociais importantes, como o da corrupção um sério assunto económico, social, político e moral (Argandoña, 2007).

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**Palavras-chave:** responsabilidade social das empresas; corrupção; divulgação; gestão de legitimidade; Siemens; substantiva; simbólica; Pacto Global das Nações Unidas.

## &gt;&gt; ABSTRACT

*In this study, we examine the changes in disclosure practices at Siemens AG, a large German multinational corporation, on compliance and the fight against corruption over a period of 11 years during which two significant corruption-related events occurred: (1) the issuance of the 10th principle on the fight against corruption, which can constitute an exogenous shock and thus potentially create positive adjustments to a company's reputation; and (2) the occurrence of a major corruption scandal at Siemens in 2006, which had a negative external impact. Through a content analysis of the company's annual reports and sustainability reports from 2000 to 2011 and under the lens of legitimacy theory and media agenda setting theory, our findings suggest that Siemens changed its compliance and corruption disclosure practices to manage its legitimacy in the wake of the 2006 corruption scandal and in subsequent years. The strategies adopted by Siemens may be described as both symbolic and substantive (see Dowling and Pfeffer, 1975; Ashforth and Gibbs, 1990; Rodrigue, Magnan and Cho, forthcoming). The implications emanating from this study seem therefore relevant for several key societal stakeholders in that they could at least provide additional arguments for the need of better regulations to ensure the disclosure of relevant, reliable and consistent corporate information about important social issues such as corruption—a serious economic, social, political and moral issue (Argandoña, 2007).*

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**Keywords:** corporate social responsibility; corruption; disclosure; legitimacy management; Siemens; substantive; symbolic; United Nations Global Compact.

## >> 1. INTRODUCTION

This study examines the changes in corporate disclosure practices of a specific and under-researched area of corporate social responsibility (CSR), that of countering corruption. Traditionally, CSR research has been focusing on issues such as environmental protection, health and safety at work, and local community and consumer relations. It was only in June 2004 that the fight against corruption was added as the 10th principle of the United Nations Global Compact (UNGC, 2009), and only in 2002 was this issue considered by the Global Reporting Initiative in its Sustainability Reporting Guidelines (GRI, 2002)<sup>1</sup>. This suggests that combating corruption in all its forms has only recently become an integral part of CSR policies.

Although several studies investigating the effects of specific events on corporate social disclosure (CSD) practices have been conducted, there is a lack of literature related to the social aspects of such disclosures (Frost et al., 2005; Coetzee and van Staden, 2011, p.3). Much of prior social disclosure research examined whether and how environmental disclosure reacted to environment-related events (Patten, 1992; Jantadej and Kent, 1999; Deegan, Rankin and Voght, 2000; Savage, Rowlands and Cataldo, 2000; Cho, 2009), while few studied other events (Islam and Mathews, 2009; Coetzee and van Staden, 2011). To the best of our knowledge, while some non-academic papers that rely mostly on companies' practices with little emphasis on the factors explaining why this type of disclosure is produced have been published (Gordon and Wynhoven, 2003; Novethic, 2006; KPMG, 2008; TI, 2009; TI, 2012), no academic study has specifically examined the disclosure of compliance and corruption related matters, nor the impact of specific events on these types of disclosures. Despite the lack of academic publications concerning these themes, several institutions believe that the degree of reporting on corruption can be a strong indicator of the quality and comprehensiveness of a company's efforts in addressing bribery and corruption (TI, 2009; UNGC, 2009). This paper makes an attempt to address this gap in the literature.

In this study, we examine the changes in disclosure practices at Siemens AG (hereafter "Siemens")—a large German multinational corporation, on compliance and the fight against corruption over a period of 11 years during which two significant corruption-related events occurred: (1) the issuance of the 10th principle on the fight against corruption, which can constitute an exo-

<sup>1</sup> The United Nations Global Compact and the Global Reporting Initiative are known to be two of the most important CSR global movements.

genous shock and thus potentially create positive adjustments to a company's reputation; and (2) the occurrence of a major corruption scandal at Siemens in 2006, which had a negative external impact. This particular scandal led to several other incidents of an identical nature as well as a number of investigations that have yet to be finalized. Contrary to most CSD studies, which analyze events occurring at a specific moment, the threatening event in the present study had a continuous impact over time.

We conducted a content analysis of the company's annual reports and sustainability reports from 2000 to 2011 to specifically examine the changes in extensiveness and breadth of Siemens' corruption and compliance disclosure. Using legitimacy theory and media agenda setting theory, we find that Siemens changed its compliance and corruption disclosure practices to manage its legitimacy in the wake of the 2006 corruption scandal and in subsequent years. The strategies adopted by Siemens may be described both symbolic and substantive (see Dowling and Pfeffer, 1975; Ashforth and Gibbs, 1990; Rodrigue et al., forthcoming).

In the following section, we present the theoretical lens of the analysis. Section 3 provides some background information about the Siemens case and lays out the research methods. The analysis and the results are presented in section 4. We discuss our findings, limitations and implications, and conclude in the final section.

## >> 2. THEORETICAL FRAMEWORK

### 2.1. Legitimacy theory

Proponents of legitimacy theory argue that firms exist as a part of a broader system, which determines whether the firms are legitimate or not and thus grants the license to operate within that system (Deegan, 2002). Legitimacy can be viewed as a social contract between the firm and society. The central issue is that society may revoke this contract if the company is perceived as falling short of its expectations (Dowling and Pfeffer, 1975; Deegan and Rankin, 1996). Evidence of such a rupture can be illustrated with consumers reducing or eliminating the supply of labor and financial capital to firms, or constituents lobbying the government for increased taxes, fines or laws to encourage the reduction of those actions which do not conform to the community's expectations ((Dowling and Pfeffer, 1975; Deegan and Rankin, 1996). When an actual or potential disparity exists between the two value systems—that of society and of the company, a threat emerges and questions the entity's legitimacy (Dowling and Pfeffer, 1975; Deegan and Rankin, 1996).

According to this theory, social disclosure is a tool utilized by companies to legitimize their behaviours vis-à-vis their stakeholder groups. The majority of studies that use legitimacy theory as a theoretical framework suggest that it provides an explanatory basis for changes in disclosure (Patten, 1992; Deegan and Rankin, 1996; Buhr, 1998; O'Donovan, 2002; Branco and Rodrigues, 2008; Patriotta, Gond and Schultz, 2011). Some, however, suggest that legitimacy theory cannot systematically explain social disclosures (Guthrie and Parker, 2006).

### 2.2 Media agenda setting theory

We use media agenda setting theory to complement legitimacy theory. Legitimacy theory posits that the extent of social disclosure is a function of public policy pressures faced by the company (Patten, 1992; Cho, Roberts and Patten, 2010), so one can expect a positive relationship between pressure and disclosure. Before companies employ deliberate legitimacy strategies, management must first have access to the nature and scope of the comments expressed by the public opinion which exists in the media (Cormier, Magnan and Van Velthoven, 2005).



According to media agenda setting theory, the media drives, shapes and creates the public's agenda (McCombs and Shaw, 1972). This is primarily due to increased media attention, which helps trigger public awareness, and magnifies the issues under its attention so that they become a top concern (McCombs and Shaw, 1972; Brown and Deegan, 1998). Several authors have used media agenda setting theory in conjunction with legitimacy theory (see for example Patten, 1992; Brown and Deegan, 1998; Deegan, Rankin and Voght, 2000; Branco and Rodrigues, 2008; Aerts and Cormier, 2009; Eljido-Ten, 2011) with some providing evidence that increased environmental disclosure can be a result of higher media exposure (as in Brown and Deegan, 1998; Deegan, Rankin and Voght, 2000; Cormier, Magnan and Van Velthoven, 2005; Aerts and Cormier, 2009) and that disclosure is used as a means to reduce public policy pressure (Brown and Deegan, 1998; Patten, 2002).

### **2.3 Reactions to legitimacy gaps**

Companies use strategies to influence societal perception when legitimacy gaps are created. The specific strategy highly depends on whether the company is trying to gain, maintain or repair legitimacy (O'Donovan, 2002). The primary difference between legitimacy gaining and repairing strategies is that the latter are reactive, whereas the former are usually ex ante and proactive (O'Donovan, 2002). In addition, external perceptions of legitimacy may arise in the advent of threats to legitimacy due to specific events (Patten, 1991; Deegan and Rankin, 1996; Deegan, Rankin and Voght, 2000) such as changes in the community's expectations (Lindholm, 1993), changes in the composition and/or values of the public (O'Donovan, 2002) or the occurrence of incidents (Deegan, Rankin and Voght, 2000).

Based on the work of Dowling and Pfeffer (1975), Ashforth and Gibbs (1990, p. 178-181) presented a comprehensive list of possible substantive and symbolic reactions to threats of legitimacy. Symbolic strategies occur when the company does not make real changes but tries to portray itself as legitimate so as to meet society's expectations. Examples of such strategies are:

- espousing social acceptable goals while pursuing less acceptable ones;
- denying or suppressing information about activities that may undermine legitimacy (see also Suchman, 1995);

- redefining means and ends by, for instance, identifying with symbols, values or institutions that are highly legitimate (Dowling and Pfeffer, 1975);
- offering accounts or explanations, including excuses and justifications, as a way to minimize responsibility and reduce negative consequences for the company (see also Suchman, 1995);
- offering apologies and thus showing remorse about unacceptable behavior;
- performing ceremonial conformity by adopting practices with high visibility without actually making structural and procedural changes in the organization.

Savage, Rowlands and Cataldo (2000) added the following three strategies based on their empirical work:

- admitting guilt and assuming responsibility for the facts that caused a negative impact on the company's legitimacy;
- creating misinterpretations or distortions by giving false impressions or accounts, or by providing misleading information whether intentional or not;
- evading, trivializing or skirting around the issue by, for instance, offering partial explanations, trivializing or not directly addressing the issue.

According to Suchman (1995), legitimacy repairing strategies may first consist of constructing a wall that allows the audience to separate past events from ongoing activities by using the equivalent to what the above authors referred to as symbolic legitimacy management. In the second stage, the focus may turn to engaging in strategic restructures. Other examples of substantive strategies are evidenced by Dowling and Pfeffer (1975) and Ashforth and Gibbs (1990, p. 178-181) and comprise:

- role performing and meeting its constituents' expectations;
- engaging in coercive isomorphism (DiMaggio and Powell, 1983) through conformity to values, norms and expectations of its constituents;
- altering resource dependencies;
- altering socially institutionalized practices so that they conform to companies practices.

According to Zyglidopoulos (2001), accidents and discrete one-time undesirable or unfortunate events that happen unexpectedly in the life of

corporations and cause damage to any number or kind of stakeholders may particularly damage a company's reputation for the following reasons: (1) stakeholders react emotionally to accidents, or evaluate them as events which provide relevant info about the company's business and their stakes in it and (2) accidents trigger investigations and thus increased social concern and public attention (ibid.). Furthermore, factors such as the severity of the accident and the extent of damages are expected to play an important role in the level of impact on the company's reputation (Zyglidopoulos, 2001). We argue that events with investigations can be particularly harmful as they may reveal even more embarrassing facts. Since these are adverse to a company's reputation, we can expect increased disclosure volumes in the presence of such events when compared to less harmful events or positive ones such as the adherence to the 10th principle on anti-corruption.

## >> 3. BACKGROUND AND RESEARCH METHODS

### 3.1 Background

The first event under scrutiny is the issuance of the United Nations Global Compact (UNGC) 10th Principle on the fight against corruption. The UNGC is “an international voluntary network-based initiative consisting of participants from companies, NGOs, governments, academic institutions and other stakeholder groups” (Runhaar and Lafferty, 2009, p. 481). Until 2004 the UNGC was focused on nine principles concerning Human Rights, Labor and Environment. In June 2004, a 10th Principle on anti-corruption was issued stating that “businesses should work against all forms of corruption, including extortion and bribery” (UNGC, 2009). A company associating itself with an institution is considered a symbolic legitimacy management strategy (Ashforth and Gibbs, 1990; Savage, Rowlands and Cataldo, 2000). As such, Siemens AG, which has been a member of the UNGC since November 2003 (data obtained from the UNGC website on July 23, 2011), could have used this event as an instrument to enhance its legitimacy.

The second event had a considerable negative impact on Siemens' reputation. In November 2006, Munich public prosecutors conducted searches at the company and employees' private homes in search of evidence concerning suspicions of public corruption including embezzlement, bribery, money laundering and tax evasion. As a result, the company incurred a fine of 201€ million in October 2007. According to the court's decision, a former manager of the communications group colluded with others and bribed foreign public officials for the purpose of obtaining contracts on behalf of the company in Russia, Nigeria and Libya, which totaled 77 cases during the period from 2001 to 2004 (Siemens, 2008, p. 275). Investigations from the Munich public prosecutor continued throughout 2006 and involved several companies from the Siemens group in several geographical areas—Germany, Greece, Switzerland, Liechtenstein and Italy. Some of the cases which led to these investigations dated back to 2004 and 2005. In 2007 new corruption allegations appeared, involving Siemens companies in China, Hungary, Indonesia, Nigeria, Norway and the United States. In December 2008, legal proceedings against the company's Supervisory and Managing Board from the Munich legal prosecutor in Germany and the United States were terminated with the imposition of an additional fine of 395€ million.

Several other anti-corruption investigations continued or started after 2009 in Russia, Austria, Brazil, Greece and Afghanistan, among other countries. Most of these legal proceedings were related to events that occurred before 2006 but were only uncovered after the 2006 scandal or as a result of its investigation. Hence, the post-event period considered in this study is not exempt from corruption-related situations.

To achieve a full comprehension of the problem, we analyzed the annual reports, stand-alone sustainability reports and corporate press releases issued by Siemens based on the following timeline:

- 2000 to 2003: pre-event period (Period 1);
- 2004 to 2005: year when the UNGC issued its 10th principle on anti-corruption and the subsequent year (Period 2);
- 2006 to 2008: time period from when the first corruption scandal emerged to its last settlement (Period 3); and
- 2009 to 2011: post-event period during which the company kept undergoing corruption investigations (Period 4).

Analyzing pre- and post-event periods is a widely used procedure (Patten, 1991), which allows for an analysis of the increase in disclosure over time, and more specifically disclosure in reaction to specific events (see for instance Deegan, Rankin and Voght, 2000; Branco, Eugénio and Ribeiro, 2008; Cho, 2009).

### **3.2 Content analysis**

We use content analysis—a method commonly applied in CSR reporting research (Gray, Kouhy and Lavers, 1995; Coetzee and van Staden, 2011) to examine the annual reports and stand-alone sustainability reports available on Siemens' website. We measured disclosure extensiveness with the number of sentences<sup>2</sup> (following Hackston and Milne, 1996; Buhr, 1998; Deegan, Rankin and Voght, 2000; Deegan, Rankin and Tobin, 2002; Branco, Eugénio and Ribeiro, 2008) related to compliance and corruption while breadth was measured through disclosure indexes (see for example Gul and Leung, 2004; Haniffa and Cooke, 2005; Branco and Rodrigues, 2008; Prado-Lorenzo, Gal-

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<sup>2</sup> While the number of words or the number or percentages of pages Gray, R., Kouhy, R. & Lavers, S. 1995. Constructing a research database of social and environmental reporting by UK companies. *Accounting, Auditing & Accountability Journal*, 8, pp. 70-101. are also both widely used in CSD research, Hackston and Milne (1996) suggest that sentence counts are preferable because they convey a better meaning and may generate fewer errors Milne, M. J. & Adler, R. W. 1998. Exploring the reliability of social and environmental disclosures content analysis. *Ibid.*12, pp. 237-256

lego-Alvarez and Garcia-Sanchez, 2009). Disclosure scores were computed by assigning a score of “1” if a particular category was disclosed and “0” otherwise. Consistent with Branco and Rodrigues (2008) and Cho and Patten (2007), we made the assumption that each item of disclosure was equally relevant and added the disclosure scores rather than weighting them.

Given that previous compliance and corruption disclosure item scoring grids were not found in prior literature, we developed our own specific disclosure index based on and adapted from established related sources. The starting point was the “Reporting Elements for the 10th Principle” (UNGC, 2009) to which we included additional elements and sub-elements from the following sources: (1) the Novethic (2006) study, (2) the TI (2009) and (2012) studies and (3) the GRI’s key performance indicators (GRI, 2006). Table 1 presents the resulting Compliance and Corruption Disclosure Index that we used to analyze the content of Siemens’ annual reports and stand-alone sustainability reports from 2000 to 2011.

### **3.3 Media attention**

Media attention (or exposure) is traditionally measured by counting the number of media press releases or reports in specific newspapers (Branco and Rodrigues, 2008) or in media databases (Brown and Deegan, 1998; Coetzee and van Staden, 2001) through a keyword search. However, recent research on media influence suggests that several new players are challenging the traditional power and control of the media. Internet developments such as Web 2.0 have resulted in consumers, particularly the younger ‘net or digital natives’ becoming increasingly unwilling or unaccustomed to paying for news and preferring to read only part of the news agenda (Kerrigan and Graham, 2010, p. 303) or from multiple media sources (Bird, 2009; Kerrigan and Graham, 2010). Internet companies like Google or Yahoo have made this possible by offering free news from all over the world to a large audience (Berte and De Bens, 2008). New web developments have led to a fragmentation of the news audience along with a significant decrease in the reach of newspapers and to an increase in the usage of social networking and blogging services as sources of information (Berte and De Bens, 2008).

Given the large geographical widespread effect of the Siemens corruption scandal and recent media trends, we considered the number of Google entries as a relevant proxy for media attention. The number of entries in Google’s search engine using the keywords “Siemens corruption” was our measure for media attention.

**Table 1 - Compliance and Corruption Disclosure Index**

CATEGORY	ELEMENT	SUB-ELEMENT (where relevant)
COMMITMENT AND POLICY	Commitment compliance / anti-corruption	
RISK MANAGEMENT	Carrying out risk assessment Policies/rules for high-risk areas Risks according to stakeholders	
IMPLEMENTATION	Internal organization	Corporate structure Programmes, processes, Code of Conduct, rules,...
	Employees	Communication on the commitment to all employees Existing training Incentive related scheme Other processes employee oriented amnesty programs inquiries, conferences) Existence of communication/reporting channels and follow-up mechanisms Consequences of non-compliance
	Suppliers and Business Partners	Communication on the commitment towards S and BP Existing training Actions/intruments to encourage business partners to implement commitments Existence of communication/reporting channels and follow-up mechanisms Consequences of non-compliance
MONITORING	Management review and monitoring Practices on dealing with incidents Public legal cases External review of programs Existing control system	
KEY PERFORMANCE INDICATORS	Employee related	Training Incentive System Other instruments used for compliance (amnesty requests, surveys, etc.) Consequences of non-compliance
	Suppliers and Business Partners	Intruments to encourage business partners to implement commitments Consequences of non-compliance
	Structure, inputs and outputs	Corporate structure Communication - questions, inquiries Communication - reported incidents Compliance cases Other compliance KPI's (surveys, internal control related, etc.)
PARTICIPATION IN ANTI-CORRUPTION INITIATIVES	External Promoted by the company	

## >> 4. ANALYSIS AND RESULTS

### 4.1 Impact of events on disclosure extensiveness

#### *Periods 1 and 2 – 2000 to 2005*

As shown in Table 2, the content analysis of the company's annual and sustainability reports indicates that the lowest amount of disclosures was recorded in the 2000-2003 pre-event period. Results also suggest that the issuance of the UNGC's 10th principle on anti-corruption had only a marginal effect on disclosure. According to legitimacy theory we would have expected an increase in the volume of disclosure under the assumption that the company could make use of this event to enhance its legitimacy. Contrary to our expectations, however, we only note a slight increase of disclosure in the annual report with regards general compliance and no increase in disclosure specifically on corruption that year and the following. Interestingly, and in contrast to all periods within the scope of our analysis, the company did not have its stand-alone sustainability report available online in 2004. This finding in itself could provide evidence of another disclosure strategy—avoidance (see Cho, 2009).

					UNGC 10 <sup>th</sup> principle	
Volume of Disclosure per Source/Year	2000	2001	2002	2003	2004	2005
Nr. of Sentences on Compliance SR	0	6	11	18	-	0
Nr. of Sentences on Corruption SR	0	4	1	1	-	0
Nr. of Sentences on Compliance AR	0	0	5	0	9	11
Nr. of Sentences on Corruption AR	0	0	0	0	0	0

#### *Period 3 – 2006 to 2008*

As expected, results document a significant change in Siemens' disclosure patterns in 2006. The volume of compliance and corruption disclosure included in both annual and sustainability reports exhibits a highly significant increase with the advent of the 2006 corruption scandal. These results seem to provide some evidence on the company's intent and strategy to repair its legitimacy in the wake of a threatening event such as a worldwide corruption scandal. Our findings are consistent with past studies that show a significant



increase in disclosure after the occurrence of an incident (Branco, Eugénio and Ribeiro, 2008; Cho, 2009; Islam and Mathews, 2009; Eweje and Wu, 2010; Coetzee and van Staden, 2011; Patriotta, Gond and Schultz, 2011). Results also indicate that the increase in disclosure volume was even more significant for the years following the scandal burst (i.e., 2007 and 2008)—this is consistent with Deegan and Rankin (1996), who report a significant increase in positive disclosure after the successful prosecution of 20 companies prosecuted by the New South Wales and Victorian Environmental Protection Industries, and Deegan, Rankin and Voght (2000), who show a higher increase in disclosure in the year following specific environmental incidents concerning a small sample of Australian firms.

Other insights related to disclosure patterns in Siemens' both annual and sustainability reports are worth noting during this third time period:

- annual report disclosures for the year of the corruption scandal (i.e., 2006) are far more extensive than those included in the stand-alone sustainability report;
- peaks and general increases in disclosure extensiveness occurred at different moments in both annual reports and sustainability reports. More concretely, peaks and increases in disclosure volume in sustainability reports exhibit a one-year lag when compared to annual reports;
- peaks in disclosure extensiveness during the 3-year time period occurred in the 2007 annual report—which is the year when the company had its first condemnation, and in the 2008 sustainability report when the 2006 corruption case ended following the settlement.

These results thus suggest that from 2006 to 2008 Siemens disclosed information earlier in its annual report compared to its sustainability report. Furthermore, peaks in disclosure extensiveness in the 2007 annual report, but not in the 2008 sustainability report, indicate that the company was more concerned in disclosing information about the first confirmation of guilt in its annual report rather while it would provide information about the process and termination of the corruption scandal case in its sustainability report. The lagging results for the sustainability report may indicate a more reactive strategy while a more proactive disclosure strategy may have been used for the annual report. Our results contrast with the findings of Frost et al. (2005) who performed a (non-academic) study on CSD trends in Australian firms and concluded that issues related both to non-compliance and specifically to corruption and bribery had a higher presence in sustainability reports than they were in annual reports.

*Table 3 – Disclosure extensiveness and changes, 2000-2008*

	Pre-event Period				UNGC 10th Principle		Corruption scandal	First fine	Final Settlement
	00	01	02	03	04	05	06	07	08
<b>Volume of Disclosure per Source/Year</b>									
Nr. of Sentences on Compliance SR	0	6	11	18	-	0	8	187	281
Nr. of Sentences on Corruption SR	0	4	1	1	-	0	0	47	69
Nr. of Sentences on Compliance AR	0	0	5	0	9	11	43	144	103
Nr. of Sentences on Corruption AR	0	0	0	0	0	0	49	159	57
<b>% Change in volume of Disclosure/Year</b>									
Nr. of Sentences on Compliance SR	-	100	83	64	-	-	-	2238	50
Nr. of Sentences on Corruption SR	-	100	-75	0	-	-	-	100	47
Nr. of Sentences on Compliance AR	-	-	100		100	22	291	235	-28
Nr. of Sentences on Corruption AR	-	-	-	-	-	-	-	224	-64

#### *Period 4 – 2009-2011*

Prior studies have shown evidence of significant decreases in disclosure in post-event periods (see for example Cho, 2009). According to de Villiers and van Staden (2006), reductions in disclosure may happen for instance when societal suspicions or concerns reduce or disappear; when the strategy turns from (re)gaining to maintaining legitimacy; when it is perceived that reducing disclosure will reduce the importance of the issue; when disclosure is perceived as useless (O'Dwyer, 2002); or when managers perceive a theme to be sensitive (Solomon and Lewis, 2002).

Table 4 shows an inconsistent evolution of disclosure in the post-event period (2009-2011). As expected, the extensiveness of sustainability report disclosure on compliance and corruption overall decreased significantly in the year following the 2008 settlement (except for 2011) except for compliance items in the 2009 annual report and corruption items in the 2010 and 2011 annual report and the 2011 sustainability report. While we acknowledge that the 2006 event has likely raised other corruption-related events from 2009 to 2011, we conjecture that increases in disclosure are associated with possible new corruption-related situations, especially in 2011 when specific corruption-related disclosure substantially increased. We conduct further analyses below (see section 3.3) to explore the potential influence of the media.

*Table 4 - Disclosure on compliance and corruption, 2000-2011*

	Pre-event Period				UNGC 10th Principle		Corruption scandal	First fine	Final Settlement	Post-event Period		
	00	01	02	03	04	05				06	07	08
<b>Volume of Disclosure per Source/Year</b>												
Nr. of Sentences on Compliance SR	0	6	11	18	-	0	8	187	281	132	42	39
Nr. of Sentences on Corruption SR	0	4	1	1	-	0	0	47	69	43	36	118
Nr. of Sentences on Compliance AR	0	0	5	0	9	11	43	144	103	122	54	61
Nr. of Sentences on Corruption AR	0	0	0	0	0	0	49	159	57	54	89	145
<b>% Change in volume of Disclosure/Year</b>												
Nr. of Sentences on Compliance SR	-	100	83	64	-	-	-	2238	50	-53	-68	-7
Nr. of Sentences on Corruption SR	-	100	-75	0	-	-	-	100	47	-38	-16	228
Nr. of Sentences on Compliance AR	-	-	100		100	22	291	235	-28	18	-56	13
Nr. of Sentences on Corruption AR	-	-	-	-	-	-	-	224	-64	-5	65	63

## 4.2 Impact of events on disclosure breadth

According to Suchman (1995), legitimacy repairing strategies may at first consist in constructing a wall that allows the audience to separate past events from ongoing activities. Dowling and Pfeffer (1975) and Ashforth and Gibbs (1990) label them symbolic strategies because the company tries to portray itself as legitimate without making any real changes. Omitting important information that would otherwise undermine legitimacy is an example of this type of strategy (see for example Cho, 2009). In line with this argument, Lindbolm (1993) and Gray, Kouhy and Lavers (1995) claim that one possible reaction from an organization when faced with a legitimacy threatening event is to invest in changing itself and educating and informing the relevant publics about the actual changes in actual behavior in order to meet its constituents' expectations. As Suchman (1995) notes, although being a sign of change and instability, this type of strategy may at the same time be effective in containing the damage.

Given that moral legitimacy is gained through the respect of constituents for the company's socially accepted techniques and procedures (Suchman, 1995), we would expect changes in the breadth of disclosed issues after the 2006 threat faced by Siemens. Table 5 and Table 6 provide details on the evolution of Siemens' disclosure breadth over time.

	Pre-event Period				UNGC 10 <sup>th</sup> principle		Corruption scandal	First fine	Final settlement	Post-event Period		
	00	01	02	03	04	05	06	07	08	09	10	11
<b>Theme/Disclosure Index/ Year</b>												
Compliance Index (SR)	0	3	4	5	-	2	3	26	31	25	23	23
Corruption Index SR	0	2	0	1	-	0	0	16	20	7	12	9
Compliance Index (AR)	1	1	8	2	8	9	15	18	23	25	20	18
Corruption Index AR	0	0	0	0	0	0	4	14	14	10	6	7

Table 5 results indicate a relatively low level of disclosure breadth in both the annual and sustainability report concerning compliance and the absence of disclosure with regards to corruption in the year of the scandal. However, we observe significant increases in disclosure breadth that occurred subsequent to the 2006 corruption scandal. While the issuance of the UNGC 10th principle does not appear to have a significant impact on the breadth of disclosure items, we report a significant increase in both reports the years following the corruption scandal. The breadth of corruption and compliance disclosure increased after 2006, achieved its peak in 2008 during the year of

Source	Index Categories/Year	Max	Disclosure Index on:																							
			Compliance											Corruption												
			0	1	2	3	4	5	6	7	8	9	10	11	0	1	2	3	4	5	6	7	8	9	10	11
Sustainability Report	Commitment and Policy	1	0	1	1	1	-	0	1	1	1	1	1	1	0	0	0	1	-	0	0	1	1	1	1	1
	Risk Exposure	3	0	0	0	0	-	0	0	3	3	2	2	2	0	0	0	0	-	0	0	1	2	0	1	0
	Implementation	13	0	2	3	4	-	2	2	12	12	11	11	10	0	2	0	0	-	0	0	7	10	4	6	6
	Monitoring	5	0	0	0	0	-	0	0	5	5	5	5	5	0	0	0	0	-	0	0	4	5	2	2	2
	Key performance Indicators	12	0	0	0	0	-	0	0	5	10	6	4	5	0	0	0	0	-	0	0	3	2	0	2	0
	<b>Total Index for SR</b>	34	0	3	4	5	-	2	3	26	31	25	23	23	0	2	0	1	-	0	0	16	20	7	12	9
Annual Report	Commitment and Policy	1	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	
	Risk Exposure	3	1	1	1	1	1	1	1	1	1	1	2	2	0	0	0	0	0	0	1	2	2	1	2	
	Implementation	13	0	0	5	0	5	6	9	10	11	13	10	9	0	0	0	0	0	0	0	8	7	5	3	3
	Monitoring	5	0	0	1	0	1	1	4	5	4	4	5	4	0	0	0	0	0	0	3	4	4	2	1	1
	Key performance Indicators	12	0	0	0	0	0	0	0	1	6	6	2	2	0	0	0	0	0	0	0	0	0	0	0	0
	<b>Total Index for AR</b>	34	1	1	8	2	8	9	15	18	23	25	20	18	0	0	0	0	0	0	4	14	14	10	6	7

Note: shadowed cells represent the first year of disclosure for each category.

the final settlement, and decreased thereafter with the exception of compliance disclosure, which actually increased in the 2009 annual report.

As to the different disclosure categories, Siemens appears to have been primarily disclosing its global risk management and its commitment to generic compliance and communicating that commitment to employees and suppliers before the 2006 corruption scandal (see Appendix 1 for more details). Table 6 results show that it is only after the corruption scandal that the company openly disclosed its clear and specific commitment to the fight against corruption to its constituents. It also started to provide a broader range of information with regards to its internal formal structure; its exact practices of engaging employees and suppliers in implementing compliance rules with techniques such as training or incentive schemes; and its compliance monitoring activities and key performance indicators.

In a subsequent phase, Suchman (1995) argues that companies may engage in more substantive strategies (see also Ashforth and Gibbs, 1990; Dowling and Pfeffer, 1975; Savage, Rowlands and Cataldo, 2000) such as incurring strategic restructures—this occurs when the company actually promotes real changes in an attempt to regain legitimacy. However, identifying with symbols, values and institutions remain examples of symbolic legitimacy management (Dowling and Pfeffer, 1975; Ashforth and Gibbs, 1990). Further, Suchman (1995) also presents strategies to gain pragmatic legitimacy through empowering constituents and showing commitment towards their needs and goals by inviting them to be part of the organizational structure or adopting their standards of performance.

After 2006, Siemens had created a number of new compliance and anti-corruption programs and initiatives<sup>3</sup> and disclosed to its stakeholders more information on the actions it had taken. For example, the company disclosed its increasing participation in anti-corruption initiatives throughout the world and its membership in additional anti-corruption institutions and movements such as the UNGC or Transparency International (before 2006), the World Economic Forum Partnering Against Corruption Initiative (since 2007), the Commission on Anti-Corruption of the International Chamber of Commerce (since 2008), the Anti-Corruption and Compliance Declaration (since 2009),

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<sup>3</sup> Such programs and initiatives included a compliance committee; a mandate for a new Chief of Compliance Officer; a new managing board position for legal and compliance matters; a reinforcement of supplier and business partner audit, qualification, risk identification and measurement procedures; supplier conferences with an emphasis on compliance and the Siemens Compliance Program; the Code of Conduct for Business Suppliers; intensive training for employees both on general compliance and specifically on corruption to incentive related schemes; watchdogs and monitors in the form of an ombudsman; a "Tell Us" helpdesk for reporting incidents; and the Siemens Integrity Initiative.

the Coalition for Transparent Business in the Czech Republic, and the United Nations Anti-Corruption Convention. Siemens also reported an increased effort to dialogue with its stakeholders (e.g., the Siemens Materiality Portfolio included in its annual report since 2007).

It is interesting to note that while the concept and terminology on anti-corruption/anti-trust appeared as a major concern in 2007, it lost its importance over the years being replaced by the wider term “compliance” in 2008 and “integrity” in 2009 and 2010. We also note that the variety of instruments used followed the same pattern as the volume of disclosure—it increased in 2007, then achieved its peak in 2008 with some items fading out or disappearing in the following years (see Table 7) as it is the case with the “Approve it” and “Improve it” functions which were disclosed only in 2008.

Overall, the analysis of Siemens' annual and sustainability reports in the years following the 2006 corruption scandal reveal a mixed strategy—symbolic strategies such as ignoring the issues, admitting guilt, associating with symbols and institutions and performing ceremonial conformity; and, substantive strategies such as make actual changes in its methods of operations, tracking outputs in the form of key performance indicators and altering resource dependencies.

*Table 7 - Details on implementation measures disclosed*

	2006	2007	2008	2009	2010
Communication Mechanisms					
Compliance Officer at Business Unit	x	-	-	-	-
Ombudsman	x	x	x	x	x
Ask Us Helpdesk	-	x	x	x	x
Tell Us Helpdesk	-	x	x	x	x
“Find it”	-	-	x	-	-
“Approve it”	-	-	x	-	-
“Improve it”	-	-	x	-	-
Incentive related scheme for employees	-	-	x	x	x
Processes to encourage Business Partners					
Acceptance of the code of Conduct for Business Suppliers	-	x	x	x	x
Supplier audits	-	x	x	x	x
Supplier qualification process	-	x	x	x	x
Supplier evaluation based on Country risk	-	-	x	-	-
Business Partner Compliance Due Diligence Tool	-	-	x	-	-

### 4.3 Effect of public pressure on disclosure volume

Several past studies suggest that increased media attention—a potential proxy for social and political pressure leads companies to increased disclosure in their annual reports (Bansal, 2005; Cormier, Magnan and Van Velthoven, 2005). In a recent study, Eljido-Ten (2011) concluded that the influence of media coverage on annual reports, particularly related to environmental disclosure, is higher for negative and “unobtrusive” events. We believe that this is also the case for compliance and corruption. For the Siemens case, our results indicate that disclosure on corruption and compliance in sustainability reports follows the evolution of our proxy for public attention, which is in line with media agenda setting theory and previous literature suggesting that increased media attention leads to increased disclosure.

In contrast to sustainability reports, peaks in annual report disclosures were systematically found one year before the peaks in media attention, which reinforces one of our previous findings that annual report disclosures seem to be more proactive while sustainability report disclosures are more reactive. A possible explanation is that Siemens anticipated different informational needs from the stakeholders targeted by each type of report. For instance, annual report readers could be more demanding and sensitive to this type of event given that corruption scandals can have some material impacts on the company’s financial statements and possible impacts on their own wealth. The company may proactively disclose information even before facing media pressure as it could consider the annual report audience better informed, hence feel “pressure” from this stakeholder group at an earlier stage and not so much as a consequence of higher media influence.

*Table 8 - Media attention devoted to the theme of corruption at Siemens AG (2000 - 2011)*

Number of Google entries for “Siemens Corruption”													
	Pre-event Period				UNGC 10th Principle		Corruption scandal	First fine	Final Settlement	Post-event Period			
	00	01	02	03	04	05				06	07	08	09
Media Attention (Google entries)	1	1	-	-	-	1	33	55	143	43	45	110	
Nr. of Sentences on Compliance SR	0	6	11	18	-	0	8	187	281	132	42	39	
Nr. of Sentences on Corruption SR	0	4	1	1	-	0	0	47	69	43	36	118	
Nr. of Sentences on Compliance AR	0	0	5	0	9	11	43	144	103	122	54	61	
Nr. of Sentences on Corruption AR	0	0	0	0	0	0	49	159	57	54	89	145	

**Table 9 - Media attention and corporate press releases (2004 - 2011)**

Number of Google entries for "Siemens Corruption"								
	UNGC 10th Principle		Corruption scandal	First fine	Final Settlement	Post-event Period		
	04	05	06	07	08	09	10	11
Media Attention (Google entries)	-	1	33	55	143	43	45	110
% of press releases on compliance	0	0	2	11	12	8	5	8
% of press releases on corruption	0	0	2	6	10	6	2	6

When comparing the percentage of corporate issued press releases dedicated to the issues of compliance and corruption by searching for media attention dedicated to the theme of "Siemens corruption" in Google, we seem to find evidence that negative media attention is associated with reactive press releases. Details are provided in Table 9.

Overall, except for 2011, results from Table 8 in Table 9 seem to be consistent with those of Aerts and Cormier (2009), who argue that negative media attention motivates reactive corporate press releases but not annual report disclosures.



## >> 5. DISCUSSION AND CONCLUSIONS

Consistent with prior research (for instance Patten, 1992; Deegan and Rankin, 1996; Cho, 2009; Islam and Mathews, 2009; Eweje and Wu, 2010), our findings suggest that Siemens AG engaged in legitimacy repairing strategies by increasing disclosure when faced with an event threatening its legitimacy—the occurrence of the 2006 corruption scandal. We find no evidence concerning legitimacy maintenance strategies associated with the first positive and external event, that is the UNGC 10<sup>th</sup> principle on anti-corruption. The results of this study are aligned with past evidence since post-event disclosure clearly outcasts pre-event disclosures (de Villiers and van Staden, 2006; Cho, 2009).

In addition, we find evidence supporting slight differences in disclosure strategies between the two main sources of content analysis—the annual report and stand-alone sustainability report. Concerning the latter, findings are consistent with previous studies since the peaks of disclosure breadth and extensiveness occur in the year following the event as in (as in Deegan, Rankin and Voght, 2000) and (as verified also by Deegan and Rankin, 1996). Moreover, changes in disclosure on compliance and corruption appear to follow the same trend as increases in media attention. This is consistent with media agenda setting theory and legitimacy theory since as a general rule a company's disclosure changes in reaction to increased public pressure. Concerning the annual report, results suggest that during the 2006-2008 period peaks in disclosure breadth and extensiveness occurred a year earlier than in the SR and before the heightened media attention. One potential explanation for this difference of timing in the peaks of reporting is that the company may assume that annual report readers constitute a different audience than the sustainability readers and that the former have different and more demanding informational needs at least in terms of the timeliness of the reporting. We could assume that sustainability reports are more targeted to general stakeholders such as the community, consumers, employees, and certain types of investors as opposed to annual reports, which are more financial and technical in nature target a better informed and more demanding public such as shareholders, banks, tax authorities, and financial analysts. Such an assumption combined with the idea that the company may perceive social information as useful for investment decisions can potentially explain the occurrence of earlier peaks of information disclosure in the annual report when compared to the sustainability report. This finding contributes to previous research as it presents

mixed findings. For example, Milne and Chan (1999) find that CSD had little impact on the decisions made over investment funds while Deegan and Rankin (1997) conclude on the materiality of environmental disclosures for shareholder decision making along with individuals inside the organization but not for analysts or stockbrokers. Teoh and Shiu (1990) conclude that general CSD was not relevant for institutional investors decision-making although it has potential to increase its relevance if presented in a quantified, financial form focusing on product improvement or fair business practices. Hence, additional research in this area appears warranted.

Concerning the specific legitimacy repairing strategies used by the company, we conducted analyses indicating that in the presence of a corruption-related threatening event Siemens AG followed a mix of symbolic and substantive strategies (as suggested by Dowling and Pfeffer, 1975; Ashforth and Gibbs, 1990; Savage, Rowlands and Cataldo, 2000). After the 2006 scandal, the company created watchdogs and monitors, became associated with several ethical institutions and created its own anti-corruption global initiatives, which can be perceived as symbolic strategies. At the same time the company implemented new processes, codes and procedures while reinforcing existing structures and creating new ones, strengthening its monitoring practices and implementing key performance indicators to evaluate its anti-corruption and compliance performance which are more substantive in nature.

Like all studies, ours is subject to several limitations. First, it does not allow for any generalization given the unique case and context that we examine. Second, it is limited to the extent that public company information is made available only online in the form of corporate reports and press releases. Third, the use of the number of Google entries as a proxy for public pressure is not (yet) supported by previous research and may not constitute the optimal proxy. Despite these limitations, however, this study contributes to existing research in several ways. It first brings additional evidence to the scarce research body on the social dimension of CSD. Results concerning CSD are relevant contributions to legitimacy theory and media agenda setting theory. Further and to the best of our knowledge, this is the first study focusing on the specific impacts of such a relevant social event as corruption on CSD. Finally, the specific results of this study document the strategic changes in Siemens AG's disclosure breadth and extensiveness, when faced with specific threats to its legitimacy, provide additional arguments for the need of better legislation/regulation or at least mandatory standards to ensure that companies disclose relevant, reliable and consistent information about important social issues such as corruption—a serious economic, social, political and moral

issue (Argandoña, 2007). Therefore, the findings from this study seem relevant for several key societal stakeholders such as governments, corporate governance institutions, NGOs and CSR promoters such as the UNGC.

Finally, this study uncovered several issues for further investigation. Additional research could be conducted concerning the impact of corruption related events in other companies in different contexts. The present work also revealed the need for more research concerning factors influencing disclosure on corruption. Although studies have considered the materiality and importance of social disclosure in the annual report for its users (see for instance Campbell, Craven and Shrives, 2003), a lack of research exists concerning differences in informational needs of the users of CSD in both the annual and sustainability report, or possible differences in pressure generated by those different constituents.

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## Appendix 1a - Disclosure variety on Compliance and Corruption in SIEMENS AG Sustainability Reports

	SUSTAINABILITY REPORTS																							
	COMPLIANCE											CORRUPTION												
	00	01	02	03	04	05	06	07	08	09	10	11	00	01	02	03	04	05	06	07	08	09	10	11
<b>INDEX TOTAL SCORE</b>	0	3	4	5	-	2	3	26	31	25	23	23	0	2	0	1	0	0	0	16	20	7	12	9
<b>COMMITMENT AND POLICY</b>	0	1	1	1	-	0	1	1	1	1	1	1	0	0	0	1	0	0	0	1	1	1	1	1
Commitment to integrity/ compliance / fight corruption		1	1	1			1	1	1	1	1				1				1	1	1	1	1	
<b>RISK EXPOSURE</b>	0	0	0	0	-	0	0	3	3	2	2	2	0	0	0	0	0	0	0	1	2	0	1	0
Carrying out risk assessment							1	1	1	1	1										1		1	
Policies/rules for high-risk areas							1	1													1			
Risks according to stakeholders							1	1	1	1	1									1				
<b>IMPLEMENTATION</b>	0	2	3	4	-	2	2	12	12	11	11	10	0	2	0	0	-	0	0	7	10	4	6	6
<b>Internal organization:</b>	0	1	1	1	-	1	1	2	2	2	2	2	0	1	0	0	-	0	0	2	2	2	2	1
Corporate structure							1	1	1	1	1									1	1	1	1	
Programmes, processes, code of conduct, rules, etc.		1	1	1	-	1	1	1	1	1	1			1						1	1	1	1	1
<b>Employees:</b>	0	0	1	2	-	0	0	6	6	6	4	4	0	1	0	0	-	0	0	4	6	1	2	2
Communication on the commitment to all employees			1	1				1	1	1	1	1		1						1	1		1	1
Existing training								1	1	1	1	1								1	1		1	1
Incentive related scheme								1	1	1												1		
Other processes employee oriented								1	1	1	1										1			
Existence of communication/reporting channels				1				1	1	1	1	1								1	1			
Consequences of non-compliance								1	1	1		1								1	1	1		
<b>Suppliers and Business Partners:</b>	0	1	1	1	-	1	1	4	4	3	5	4	0	0	0	0	-	0	0	1	2	1	2	3
Communication on the commitment towards S and BP		1	1	1		1	1	1	1	1	1	1								1	1			1
Existing training											1	1												1
Actions/instruments to encourage business partners								1	1	1	1	1									1	1	1	1
Existence of communication/reporting channels								1	1		1													
Consequences of non-compliance								1	1	1	1	1												1
<b>MONITORING</b>	0	0	0	0	-	0	0	5	5	5	5	5	0	0	0	0	-	0	0	4	5	2	2	2
Review of monitoring and improvement results								1	1	1	1	1									1			
Practices concerning dealing with incidents								1	1	1	1	1								1	1	1	1	1
Public legal cases regarding corruption/non compliance								1	1	1	1	1								1	1	1	1	
External review of programs								1	1	1	1	1								1	1			1
Existing control system								1	1	1	1	1								1	1			
<b>KEY PERFORMANCE INDICATORS</b>	0	0	0	0	-	0	0	5	10	6	4	5	0	0	0	0	-	0	0	3	2	0	2	0
<b>Employees:</b>	0	0	0	0	-	0	0	2	4	3	1		0	0	0	0	-	0	0	2	1	0	0	0
Training								1	1	1	1									1				
Incentive System									1	1														
Other instruments used									1															
Consequences of non-compliance								1	1	1										1	1			
<b>Suppliers and Business Partners:</b>	0	0	0	0	-	0	0	1	2	0	2	1	0	0	0	0	-	0	0	0	0	0	2	0
Instruments to encourage business partners								1	1		1	1											1	
Consequences of non-compliance									1		1													1
<b>Structure, inputs and outputs:</b>	0	0	0	0	-	0	0	2	4	3	1	4	0	0	0	0	-	0	0	1	1	0	0	0
Corporate structure									1	1														
Communication - questions, inquiries								1	1	1	1	1												
Communication - reported incidents									1			1								1				
Compliance/corruption cases								1	1	1		1									1			
Other compliance KPI's												1												

Note: cells are shadowed in the first year of disclosure.



