

# DETERMINANTS OF INTERNET CORPORATE SOCIAL RESPONSIBILITY COMMUNICATION

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## ABSTRACT

*The goal of this research is to identify determinants of internet Corporate Social Responsibility communication of 41 Belgian companies. Using a content analysis and scoring technique, this paper estimates the degree of website information disclosure of companies' involvement with corporate social responsibility. This score is then regressed via Ordinary Least Square (OLS) on variables presented in the literature as determinants of firm internet communication and led to the formulation of our research hypotheses. The results indicate that the firm size and listed status are positively related to the level of Corporate Social Responsibility communication through the web. In contrast, profitability age of the firm and sector are not significant.*

**JEL :** C31, M14, M15, M31, O32

**KEYWORDS:** Communication, Internet, Corporate Social Responsibility, Web

## INTRODUCTION

In times of a socioeconomic environment in perpetual movement, companies are increasingly aware of the impact of their activities on sustainable development which allows for meeting the needs of the present without compromising the capacities of future generations (Brundtland, 1987). In line with sustainable development is the corporate social responsibility of companies.

To facilitate dialogue and meet the expectations of stakeholders, companies are also brought to communicate more about their implemented sustainable practices. Among the communications used by these companies, the Internet has become a major tool. According to Wanderley et al. (2008), currently the Internet is one of the main channels of communication used by companies for disclosures regarding responsibility practices. It offers numerous advantages such as the disclosure of more information at a lower cost and in a reduced time, a larger public audience, etc. (Branco and Rodrigues, 2006; Jahdi and Acikdilli, 2009).

Recently, numerous researchers (Pollach, 2003; Welcomer et al ., 2003; Branco and Rodriguez, 2006; Laville, 2009) have examined the Internet as a Corporate Social Responsibility (CSR) communications tool. Little is known about the way companies use this communication channel, in particular within European countries. By focusing on Belgian market active companies, the current research fills this gap by analyzing the way companies communicate their CSR) practices through their Web site. Our study aims at classifying member companies of the Association Business and Society Belgium. This is done by establishing a scoring of CSR communication. Next, we highlight the main determiners of CSR communication on the Web.

In the first section, we provide a literature review. Next we formulate our research hypotheses concerning the determinants of Corporate Social Responsibility (CSR) communication over the web. In the following section, we will present our methodology. The findings are discussed in the third section. We first present

the results of the web content analysis and how we derive a CSR communication score for each firm in our sample. Next, we present the results of Ordinary Least Squares (OLS) regressions used to highlight the determinants of CSR communication on the web. The paper closes with some concluding comments.

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

According to Birth et al. (2008) Corporate Social Responsibility (CSR) aims to broadcast information justifying the company's behavior thereby affecting its perceived image to stakeholders and to the public. Capriotti and Moreno (2007) highlight that CSR communication is highly related to sustainable action. This allows making the public aware of company's acts, in addition to its economic objective, to reinforce its relationship with its stakeholders and to behave in clear and ethical ways.

Although research regarding Internet as a CSR communication tool has been growing (Pollach, 2003 ; Welcomeret al., 2003 ; Branco and Rodriguez, 2006 ; Birthet al., 2009), no known research regarding tools and strategies implemented by companies in their web CSR communications has been conducted. A few (Craven and Otsmani, 1999; Hamid, 2004) have suggested determiners of CSR communication.

Numerous studies have examined determinants of voluntary disclosure. Some authors have set the focus on financial communication (McNallyet al. 1982 ; Chow and Wong-boren, 1987 ; Raffournier, 1995 ; Craven and Martson 1999 ; Asbaugh et al. 1999 ; Debreceny et al. 2002 ; Ettredgeet al 2002 ; Rodriguez and Menezes 2003 ; Xiaoet al. 2004, Mendes-da-Silva and Christensen 2004 ; Laswadet al. 2005 ; Bollenet al. 2006; Paturelet al. 2006 ; Andrikopouloset al. 2007). Other authors have dealt with corporate communication (Adams and Hossain, 1998 ; Larran and Giner, 2001 ; Bonson and Escobar, 2002), while some were interested in identifying determiners of R&D communication (Ding and Stolowy, 2003). Each highlights explanatory variables of voluntary information. In the CSR context, we suggest a list of variables on which our research hypothesis rely.

It is widely accepted in the literature that there is a positive relation between company size and the level information published (Ding and Stolowy, 2003). The scope of research dedicated to determiners of voluntary disclosure show a positive size effect on the level of published information. Some authors (Mc Nallyet al, 1982; Debrecenyet al. 2002; Ettredgeet al 2002; Rodriguez and Menezes 2003; Xiaoet al. 2004, Mendes-da-Silva and Christensen 2004; Bollenet al. 2006; Andrikopouloset al. 2007) have highlighted the positive influence of the company's size on the level of internet financial communication. Still other researches find a positive relation between company's size and the level of information (Adams and Hossain, 1998; Bonson and Escobar, 2002; Larran and Giner, 2001). Ding and Stolowly (2003) showed that size is a significant explanatory variable of the level of information disclosure regarding R&D. The positive impact of company size on CSR information disclosure has been highlighted by Hamid (2004). These findings lead to the following hypothesis:

Hypothesis 1: the size of the company has a positive effect on its internet CSR communication score.

In our research firm size is measured by total assets, as in Mc Nallyet al (1982), Rodriguez and Menezes (2003) and Hamid (2004). We used the natural logarithm of the total assets. This logarithmic transformation was necessary to mitigate skewness in the data set (Adams and Hossain, 1998).

Hamid (2004) explains the level of information disclosure is higher in countries where the listed status is the main source of financing, compared to countries where the debt is the main source. In their research dedicated to Portuguese banks, Branco and Rodrigues (2006) explain that listed banks place more emphasis on CSR communication through their website. They justify this through the fact that the more famous a company, the higher the need for justifying their existence through CSR communication. Listed

companies are more notorious than non-listed companies. Ding and Stolowly (2003) highlight a positive and significant relation between listing status on a foreign market and information disclosure about R&D. Research conducted in Malaysia by Theoh and Thong (1984) reveals that listed companies communicate more CSR information than non listed companies. The reason is that listed companies can take advantage of information disclosure regarding their social activities. Hamid (2004) finds a positive relation between the listing status of a company and its level of CSR information disclosure. This leads us to the following hypothesis where listing status is measured by a binary variable which takes a value of 1 for listed firms and 0 for unlisted firms:

Hypothesis 2: The listing status of the company has a positive effect on its internet CSR communication score.

### Age

In his research regarding Corean listed companies, Choi (1999, cited by Hamid, 2004) shows that company age is related to its CSR information disclosure. The company's is linked to its reputation and its involvement in CSR activities. Other research (Hamid, 2004; Branco and Rodrigues, 2006) reveal also a positive relation between company's age and its level of CSR information disclosure.

This leads us to the following hypothesis where company age is measured as the number of years since the firm's inception:

Hypothesis 3: the age of the company has a positive effect on its internet CSR communication score.

### Profitability

A negative relation between the level of financial information disclosure and the company's profitability has been highlighted in several papers (Mendes-da-Silva and Christensen, 2004; Debreceeny et al. 2005; Paturelet et al. 2006). This negative relation is explained by the incurred competitive risk in cases of positive information disclosure. Due to lack of significative results, Hamid (2004) has not been able to validate his hypothesis of a negative impact of profitability on CSR communication score. This leads us to the following hypothesis:

Hypothesis 4: the profitability of the company has a negative effect on its internet CSR communication score.

In our research, performance is measured by the Return on Equity (ROE) ratio, like Hamid (2004), Debreceeny et al. (2005) and Paturelet et al. (2006). The Return on Assets (ROA) ratio could also have been a suitable indicator of profitability (Mc Nally et al, 1982) but its correlation with total assets would have distorted the results of our econometric model.

### Sector

The importance of sector is highlighted by several authors. Ding and Stolowly (2003) explain that the companies from the same sector evolve in the same environment and are under the same pressure which forces them to communicate. Entwistle (1999, cited by Ding and Stolowly, 2003) shows that companies from traditional sectors publish less R&D information than IT or biotech companies. Bonson and Escobar (2002) reveal a positive influence of sector on the quantity of information provided by the company. Companies from specific sectors must communicate on certain aspects in order to improve their image. The authors highlight that this is mainly the case for industrial companies which communicate more environmental information than firms in other sectors. According to Ding and Stolowly (2003), B2C and

equipment companies communicate less while pharmaceuticals, aeronautical and defense companies communicate more on R&D. In order to show their technology mastery and to set the focus on their expertise, IT companies tend to communicate more through their website. It seems that belonging to the industrial sector positively influences CSR information disclosure, and belonging to the IT sector has a positive impact on Internet communication. This leads to the following hypothesis:

Hypothesis 6: The membership in the IT sector or in the industrial sector has a positive effect on its internet CSR communication score.

In our research, sector is measured by a binary variable, which is assigned a value of 1 for companies from the industrial or IT sectors and a value 0 for other companies. We define the industrial sector as NACE codes 2003 from 10 to 50, and code 74.7 (industrial cleaning), as well as code 74.2 (Architecture and engineering). The IT sector is defined by NACE codes 2003 from 30 to 33 as well as code 64 (post and communication) and 72 (IT activities).

## DATA AND METHODOLOGY

This section has two parts. In the first part, we present our sample and some statistics are presented in Table 1 and Table 2. In the second part, we present our methodology.

### Sample Data

Our data concerns 41 companies which are members of the Business and Society Belgium (ABSB), and communicate in French on their website. This company's network is the reference regarding CSR in Belgium. It brings a support to companies wishing to integrate CSR in their management and in their activities. This is made possible through the share of good practices, the implementation of new CSR solutions and through CSR communication to stakeholders. The aim of our research is to analyse implemented strategies and tools in the framework of CSR communication. It seems relevant to base our sample on companies' inclined to communicate on these aspects. The member companies of the ABSB are registered in an active initiative of CSR. From then on; we suppose that they communicate in this direction through their Web site. Indeed, according to Chaudhri and Wang (2007) an active behavior of companies regarding CSR would lead them naturally to communicate on these aspects, in particular through their Web site.

Table 1: Companies' Sectors

Sector/Industry	Numbers of firms	Percentages
Manufacturing (NACEBEL : 01 à 41)	10	24.39%
Building and Construction (NACEBEL : 45)	1	2.44%
Retail and Consumer goods (NACEBEL : 50 - 55)	7	17.07%
Transportation and telecommunication (NACEBEL : 60 - 64)	4	9.76%
Financial services (NACEBEL: 65 - 67)	7	17.07%
Services industry (NACEBEL : 72 - 93)	12	29.27%
Total	41	100%

*This table shows in which sectors are the firms of ours ample.*

Table 2: Firm Size Indicators

Indicators	Mean	Standard deviation	Max	Min
Sales Revenues	68,453,840	387,757,139	2,228,400,000	2,016
Total Assets	53,169,653,788	229,649,107,039	1,163,643,000,000	4,097
Average number of employees	2,645	5,950	30,030	1

*This table shows some indicators of firms' size.*

## METHODOLOGY

Content analysis is the most used method for analyzing questions related to information disclosure relative to CSR through company websites (Branco and Rodrigues, 2006; Patten, 2002; William and Pei, 1999). On the basis of our literature review and to structure the information we have implemented an analysis grid allowing us to highlight the presence or the absence of certain elements of information. Next, we give one point for each item of the analysis grid present on the web site. A score for every company is so obtained. All items are assigned equal importance. This technique of scoring is the current practice in the study of voluntary information disclosures (Larran and Giner, 2001). Indeed, the quantity of disclosed items is a reasonable measure of the trend of the company toward information disclosure (Branco and Rodrigues, 2006).

The items in the analysis grid are divided into various categories: accessibility, sustainable contents related to the company, communication aiming to promote sustainability and the ergonomics of the Website and its interactivity. The "accessibility" category measures if there is a tab dedicated to CSR on the website homepage. A distinction for vocabulary is made: questioning if the words environment, CSR, sustainable development or expressions making reference to social responsibility (training (formation), working conditions) or societal (health) are used. If the company dedicates text concerning CSR on its homepage, it obtains an additional point. Another point is added if the company dedicates the total of its homepage to CSR. If a search engine is available, we observe the quantity of results obtained by search relative to the vocabulary presented above.

The second category analyses the contents dedicated to sustainable actions related the company: its strategy, its objectives, its commitments and its profits. A distinction is made between elements for environmental, social and societal character. Through the third category, we observe if the company gets loose from its own products and activities to insure the promotion of the sustainable development, defend causes, to give responsibly to the consumer and inform the public. The last category focuses on the practices of communication, the ergonomics of the Web site and its interactivity.

Using the analysis grid, we examined the websites of companies and assigned them one point for each item on the site. A score is therefore obtained for every company. From this score we were able to estimate the level of website information disclosure of the 41 companies in this study. Next, this score is examined using the ordinary least squares (OLS) method according to the explanatory variables related to the hypotheses of interest as in Debreceny and Rahman (2005), Paturelet al. (2006), Ben Rhouma and Cormier (2007) and Jouini (2007).

## EMPIRICAL RESULTS

This section contains two parts. In the first part, we present the findings of our web contents analysis and how we derive a Corporate Social Responsibility (CSR) communication score. In the second part, we present the results of our regression analysis.

### Corporate Social Responsibility Communication Score

Using the analysis grid we examined the websites of all the companies in our sample. A point was given for every item of the analysis grid on the website. The scores are presented in Table 3.

Table 3: CSR Communication Score

No	Company Name	Score	No	Company Name	Score	No	Company Name	Score
1	Coca-cola Belgium	32	15	Randstad	13	29	TNT Express	5
2	MIVB - STIB	29	16	ING	13	30	SWIFT	5
3	KBC	26	17	Danone	13	31	Axa	5
4	Electrabel	25	18	Alpro	12	32	Pricewaterhouse Coopers	4
5	Mobistar	24	19	Infrabel	11	33	Citibank Belgium	4
6	Delhaize Group	22	20	Cera	11	34	Care	4
7	GDF Suez	21	21	Siemens	10	35	Artoos	4
8	BNP Paribas Fortis	20	22	Ecover Belgium	10	36	SD WORX	3
9	Dexia	19	23	Reyners aluminium	9	37	ICHEC-Entreprises	3
10	Belgacom Group	17	24	Novo Nordisk	9	38	Elia	3
11	Ernst & Young	16	25	Cofely Services	8	39	Sanofi Pasteur MSD	2
12	Sodexho	15	26	Loterie Nationale	7	40	Baxter	2
13	Ricoh Belgium	15	27	Careco	6	41	Delta Lloyd	1
14	la Poste	14	28	Tractebel Engineering	5			1

*This table shows the CSR communication score for our sample's companies.*

On 56 items in our analysis grid, a maximum of 32 items were identified on the Web site of Coca-Cola Belgium. Several elements of its communication are interesting. On one hand, this company dedicates its homepage to the problem of sustainable development and distinguishes it by several tabs (Health, Environment and Work) related to the various spheres within which it is active. It takes into account the diverse sensibilities of its stakeholders. On the other hand, besides communication regarding the importance of dialogue with stakeholders, Coca-Cola Belgium highlights the pressure which it exercises on its commercial partners. It proposes in particular a charter of its "Sustainable development Commitment ." Besides, this company indicates exactly on its Web site its CSR strategy, but also its future objectives and its past results. Moreover, Coca-Cola Belgium supplies consumerist information allowing the consumers to identify the calories of drinks and other information.

The MIVB STIB (Belgian company in public transport) is in second position. This company communicates its strategy and its results at the environmental, social and societal level. Furthermore, the MIVB - STIB also supplies consumerist information. It also focuses external causes which require support on its Web site and proposes links towards associations with ethical vocation.

The KBC (banking sector) which is on the third step of the podium distinguishes itself mainly by its contribution at the environmental, social and societal level in terms of communication of its CSR strategy. It also proposes links towards associations.

By examining the other companies of the Top 10, we can highlight, in terms of CSR communication, the importance given to the environmental sector by Electrabel (supplier of energy) at the level of the strategy, future objectives and results; the support of Mobistar (telecommunication) for external causes on its Web site as well as its communication in terms of consumerist information; the interactive annual CSR report proposed by Delhaize Group (food Distributor) which has allowed this company to receive the price of the best sustainable development report; the willingness of GDF Suez (supplier of energy) for the support of external causes; the code of conduct environmental statement advanced by BNP Fortis (bank) on its site as well as its pressure on stakeholders; the communication relative to the responsible investments proposed by Dexia (bank); the word of the President of Belgacom ( telecommunication ) in favor of the CSR as well as its code of ethics for its suppliers. At the bottom of the classification, we find the only two pharmaceutical companies of our sample.

In terms of accessibility, most of the analyzed sites are multilingual (39). The fact that Belgium is a trilingual country and that the companies of our sample arise from international groups could explain this. When we observe tabs dedicated to CSR and to sustainable development, we notice that there is no homogeneity with regard to vocabulary. So, the companies of our sample clearly distinguish their environmental, social and/or societal commitment. This can be related to the fact that the current public is more warned and more able to understand that there are various concepts regarding the sustainable development.

Among 42 visited sites, 8 propose a text presenting the CSR on the homepage and 7 completely dedicate the front page to CSR. We note that both energy sector companies of our sample define themselves as socially responsible from the first visit. This can be explained by the negative image of the sector in which these companies are active, forcing them to reaffirm their responsible commitment. Moreover, a search engine is present on numerous sites. However we note that it does not often work properly and that the results are not always relevant.

Other tools provided by the Internet technology, contributing to improving the ergonomics of the Web site, are used relatively little by the sample companies. We find few sites proposing a newsletter (2), FAQ (3), an interactive report (4), illustrated texts with schema (5) or a specific CSR contact (6). One company proposes the word of the president in video (Electrabel), Five companies include on-line video of another actor. Illustrated texts with images are more frequently present (17). On the other hand, forums and blogs are absent in visited sites.

Although images were not the object of a detailed analysis, our results indicate that companies try to stress the impact of the textual communication by using images reflecting the field action. With regard to sustainable contents related to the company, press releases dedicated to CSR are used by 18 companies. We identify a willingness to strengthen communication related to sustainable development and around company involvement.

The least present items are: ethical publications (5), archives of the annual CSR reports (6), prizes and rewards (6), current CSR events (14) and the code of conduct (14). The annual CSR report is set on-line by 11 companies. A few companies emphasize a presidential speech concerning CSR or another actor (respectively 4 and 3 companies). We stress that they are, for the most part, in the top 10 of our classification. This practice is mostly used by companies communicating a lot on CSR. Concerning analyzed topics, the environment is the most prevalent, in terms of objectives, results or strategy. The

favorite topic of energy sector companies and cleaning products companies are centered around environmental problems.

Companies of the food sector (Danone, Alpro, Delhaize, Coca-Cola Belgium) seem to set the priority on the societal theme. It is namely present on the agencies interim site of our sample. It seems that companies communicate in a more important way on problems related to their activities and to which their stakeholders would be most sensitive. However, few companies (5) communicate on the dialogue they keep with their stakeholders. Three companies (Belgacom, Coca-Cola Belgium and BNP) urge their partners to align themselves with responsible practices, by requiring for example an ISO certification. Sustainable investments are highlighted by 6 companies of which 4 are from the banking sector (BNP, Cera, Dexia, and KBC). Indeed, one of the ways for companies of the banking sector to get involved in CSR is to promote sustainable investments. So by acting, they also promote their products.

The third category, dedicated to the promotion of sustainable development in the broad sense, is little visible. Fourteen companies offer a link towards an association, 5 defend a cause, 4 broadcast consumerist information and 2 try to give responsibilities to the consumer. No company warns the public about the offers of the market.

## RESULTS

The explanatory variables come from the Belfirst database (version 2008) published every year by the Van Dijk Office in partnership with the National Bank of Belgium. For each of these variables, we considered the last year of availability of the accounts. The variable definitions are presented in Table 4. We present the descriptive statistics of the explanatory variables in Table 5 and the correlation between those variables in Table 6. Because listing status and sector are binary variables, they are not presented in Table 5.

Table 4: Variables Definition

Variables	Measure
Size	Log total assets
Listing status	Listed firms = 1 and Unlisted firms = 0
Age	Number of years since the creation of the firm
Profitability	Return On Equities (ROE) ratio
Sector	IT or Industrial sector = 1 and others = 0

*This table shows how the explanatory variables are measured.*

The following regression equation was estimated to identify the determinants of CSR communication score:

$$\text{Score} = \alpha + \beta_1 (\text{size}) + \beta_2 (\text{listing status}) + \beta_3 (\text{Age}) + \beta_4 (\text{profitability}) + \beta_5 (\text{sector})$$

This model was tested using the 2007 version of the software STATA. Ordinary Least Squares estimates were obtained. The results are presented in Table 7.



Table 5: Descriptive Statistics

Variables	Mean	Std. Dev.	Min	Max
Score	11.6341	8.1754	1	32
Size	13.2696	5.5657	0	27.7825
Age	36.9512	27.6956	2	105
Profitability	30.1965	63.5167	-5.24	320.26

*This table shows the descriptive statistics of the explanatory variables*

Table 6: Correlation between Variables

	Score	Size	Listing status	Age	Profitability	Sector
Score	1.0000					
Size	0.0409	1.0000				
Listing status	0.4263	0.3838	1.0000			
Age	0.2331	0.2464	0.2821	1.0000		
Profitability	-0.0011	-0.1928	0.0046	-0.0325	1.0000	
Sector	0.0766	-0.0970	0.0605	0.0124	0.0376	1.0000

*This table shows the correlation between the explanatory variables.*

To obtain valid estimations of the variance and the covariance of our estimators, we used the variance and the standard distances corrected by heteroscedasticity. A Breush-Godfrey test made it possible to show the presence of autocorrelation of the residues. The quality of adjustment of this model is correct: 26.88 percent of R-squared. The results of the tests of Model 1, presented in Table 7, indicate that, as predicted, the coefficient of the size variable is statistically significant at the 5 percent level. The positive sign of this coefficient confirms our first hypothesis: the size of the company has a positive effect on its internet CSR communication score. This result confirms the conclusions of previous studies (Mc Nally et al, 1982 ; Adams and Hossain, 1998 ; Debreceeny et al. 2002 ; Ettredge et al 2002 ; Bonson and Escobar, 2002 ; Larran and Giner, 2001 ; Ding and Stolowy, 2003; Rodriguez and t Menezes, 2003 ; Xiao et al. 2004; Mendes-da-Silva and Christensen, 2004 ; Hamid, 2004 ; Bollen et al. 2006 ; Andrikopoulou et al. 2007)

Hypothesis two, which postulates a positive influence of the listing status on the CSR communication score on the web, is confirmed. This result confirms the conclusions of Ding and Stolowy (2003) and Hamid (2004). Other hypotheses were not confirmed: the coefficients of the variables of age, profitability and sector were not significant.

To refine this model, we proceeded to a Wald test on the coefficients of variables age, profitability and sector. The results of this test prompted us not to reject the null hypothesis of these coefficients and to extract these three variables from model one. The results of tests of Model 2 are presented in Table 8

Table 7: Results of the Regressions by OLS – Model 1

	Coefficient	Robust Std. Err.	Sign
Size	0.4410	0.1928	0.028 **
Listing Status	5.7668	3.4818	0.107
Age	0.0236	0.0369	0.527
Profitability	0.0070	0.0117	0.550
Sector	1.3920	2.3853	0.563
cons	2.9585	2.8739	0.310
Number of obs		41	
F stat		3.06	
Prob > F		0.0214	
R-squared		0.2688	

*This table shows the regression estimates of the equation: Score =  $\alpha + \beta_1$  (size) +  $\beta_2$  (listing status) +  $\beta_3$  (Age) +  $\beta_4$  (profitability) +  $\beta_5$  (sector). \*\*\*, \*\* and \* indicate the significance at the 1, 5 and 10 percent levels respectively.*

Table 8: Results of the Regressions by OLS – Model 2

	Coefficient	Robust Std. Err.	P>t
Size	0.4240	0.1920	0.033 **
Listing Status	6.4282	3.3453	0.062 ***
cons	4.7532	2.2525	0.041
Number of observations		41	
F stat		6.9	
Prob > F		0.0028	
R-squared		0.2527	

*This table shows the regression estimates of the equation: Score =  $\alpha + \beta_1$  (size) +  $\beta_2$  (listing status). \*\*\*, \*\* and \* indicate the significance at the 1, 5 and 10 percent levels respectively.*

The results of Model 2 presented in Table 8 indicate that the removal of these variables doesn't affect the quality of adjustment. We see a 25.27 percent of R-squared adjustment. In this new model, the size variable is always statistically significant at the 5 percent, but the listing status variable is now statistically significant at 10 percent.

## CONCLUSION

The goal of this research was to determine the intensity with which companies use the internet as a vector of Corporate Social Responsibility (CSR) communication and to identify the determinants of this level of communication through the web. Our study examines 41 companies that are members of Business and Society Belgium (ABSB), communicating in French on their website.

In order to reach our research objectives we used a scoring on the first step and the ordinary least squares (OLS) method on the second step. We first observed the websites of our companies and developed an analysis grid. We thus obtained a score for each firm included in our study. We then tried to identify the determinants of the financial communication score obtained by means of a regression.

Our literature review combined with our analysis establishes a classification of our sample's companies. This classification allows us to identify the most active companies in term of CSR communication. To do so, they use the various opportunities of communication offered by the Internet, but not always in a very complete way. This classification also allowed us, according to 4 categories of our analysis (accessibility – sustainable contents related to the company - promotion of sustainable action - ergonomics and interactivity), to highlight the strategic elements which companies emphasized in their CSR communication.

Our results emphasized that the used vocabulary in the accessibility section was not similar and that few firms dedicate a homepage to CSR. For the second category, although the business sector of the company seems to influence these communication topics, the environment is the favorite topic of the sample companies. However press releases regarding CSR are very present, this doubtless indicates a companies willingness to communicate on their respective involvement.

The promotion of sustainable actions seems to be least used by companies. Finally the fourth section is set aside by the communication strategies of our sample. We notice a very low use of the interactivity tools offered by the Internet. This analysis of implemented strategies in the various companies fills modestly the gaps on CSR practices, which were little studied in the previous research.

The results show that size of the company has a positive impact on the CSR communication score consistent with hypothesis 1, which indicates that bigger companies will communicate more CSR elements through their websites than other firms. Listing status also has a positive impact on CSR communication level trough the web, confirming the second hypothesis. This study doesn't allow us to confirm the influence of firm age, profitability and membership in the industrial of IT sector.

This study has several limitations. First, the period of study is a single year. Longitudinal studies would provide additional insights. Secondly the sample could be bigger. The 41 firms used here is however useful for a first study. We also have to moderate our conclusions as far as the methodology used in this research. We have focused our analysis on the Internet tool and ignored other media used by companies. If we had integrated other media, our classification could be different. Media act in synergy to strengthen the message, a point not considered in the analysis here.

## REFERENCES

Adams, M. & Hossain, M (1998) « Managerial discretion and voluntary disclosure: empirical evidence from the New Zealand life insurance industry », *Journal of Accounting and Public Policy*, no. 17, p. 245-281.

Andrikopoulos, A. & Diakidis, N (2007) “Financial reporting practices on the Internet: the case of companies listed in the Cyprus stock exchange”, *working paper*, p. 22.

Ben Rhouma, A. & Cormier, D (2007) “Déterminants de la communication sociale et environnementale des entreprises françaises”, *28ème Congrès de l'Association Francophone de Comptabilité « Comptabilité et Environnement »*, IAE Poitiers, Mai 2007.

Birth, G., Illia, L., Lurati, F. & Zapparini, A (2008) “Communicating CSR: Practices Among Switzerland’s Top 300 Companies”, *Corporate Communications: An International Journal*, vol. 13, no. 2, p. 182-196.

Bollen, L., Hassink, H. & Bozic, G (2006) “Measuring and explaining the quality of Internet investor relations activities: a multinational empirical analysis”, *International Journal of Accounting Information Systems*, vol. 7, p.273-298.

Bonson, E. & Escobar, T (2002) “A survey on voluntary disclosure on the Internet: Empirical evidence from 300 European Union companies”, *The International Journal of Digital Accounting Research*, vol. 2, no. 1, p. 27-51.

Branco, M.C. & Rodrigues, L.L (2006) “Communication of corporate social responsibility by Portuguese banks”, *Corporate Communication: an International Journal*, vol. 11, no. 3, p. 232-248.

Brundtland, G.H (1987) *Our Common Future*, Oxford University Press, Oxford.

Capriotti, P. & Moreno, A (2007) « Corporate citizenship and public relations: The importance and interactivity of social responsibility issues on corporate websites ». *Public Relations Review*, no. 33, p. 84-91.

Chaudhri, V. & Wang, J (2007) « Communicating Corporate Social Responsibility on the Internet. A Case Study of the Top 100 InformationTechnology Companies in India», *Management Communication Quarterly*, vol. 21, no. 2, p. 232-247.

Chow, C.W. & Wong-boren, A (1987) « Voluntary financial disclosure by mexican corporations », *The Accounting review*, vol. 62, no 3, p. 533-541.

Craven, B.M. & Marston, C.L (1999) “Financial reporting on the Internet by leading UK companies”, *The European Accounting Review*, vol. 8, no. 2, p. 321-333.

Craven B. M. & Otsmani B (1999) “Social and environmental reporting on the Internet by leading UK companies” *Paper presented at the 22<sup>nd</sup> annual congress of the European Accounting Association*, Bordeaux, France.

Debreceeny, R., Gray, G. & Rahman, A (2002) “The determinants of Internet financial reporting”, *Journal of Accounting and Public Policy*, vol. 21, Issues 4-5, Winter, p. 371-394.

Debreceeny, R. & Rahman, A (2005) “Firm-specific determinants of continuous corporate disclosures”, *The International Journal of Accounting*, vol. 40, Issue 3, p. 249-278.

Ding, Y. & Stolowy, H (2003) “Les facteurs déterminants de la stratégie des groupes français en matière de communication sur les activités de R&D”, *Finance et Contrôle Stratégie*, vol. 6, no. 1, mars, p. 5 – 29.

Entwistle, G. M. (1999), “Exploring the R&D disclosure environment”, *Accounting Horizons*, vol. 13, no. 4, p.353-385.

Ettredge, M., Richardson, V. & Scholz, S (2002) “Dissemination of information for investors at corporate web sites”, *Journal of Accounting and Public Policy*, no. 21, October, p. 357-369.

- Hamid, F. Z. A (2004) “Corporate social disclosure by banks and finance companies: Malaysian evidence”, *Corporate Ownership and Control*, vol. 1, no. 4, p. 118-30.
- Jahdi, K.S. & Acikdilli, G (2009) “Marketing communications and corporate social responsibility: Marriage of convenience or shotgun wedding”, *Journal of Business Ethics*, p. 103-113.
- Jouini, S (2007). “Les facteurs déterminants et les caractéristiques de la stratégie des entreprises en matière de communication financière sur leur site Web”, *28ème Congrès de l'Association Francophone de Comptabilité « Comptabilité et Environnement »*, IAE Poitiers, Mai 2007.
- Larran, M. & Giner, B (2001) “The use of internet for corporate reporting by Spanish companies”, *The International Journal of Digital Accounting Research*, vol. 2, no. 1, p. 53-82.
- Laswad, F., Fisher, R., and Oyelere, P (2005) Determinants of voluntary Internet financial reporting by local government authorities, *Journal of Accounting and Public Policy*, vol. 24, Issue 2, March-April, p. 101-121.
- Laville, E (2009) *L'entreprise verte*, Pearson Edition, 3<sup>ème</sup> édition.
- McNally, G., Eng, L. & Hasseldine, C (1982) “Corporate financial reporting in New Zealand: an analysis of user preferences, corporate characteristics and disclosure practices for discretionary information”, *Accounting and Business Research*, Winter, p. 11-20.
- Mendes-da-Silva, W. & Christensen, T (2004) “Determinants of Voluntary Disclosure of Financial Information on the Internet by Brazilian Firms”, *working paper*, August.
- Patten, D. M (2002) “Give and take on the internet : an examination of the disclosure practices of insurance firm web innovators”, *Journal of Business Ethics*, vol. 36 :3, p. 247-259.
- Paturel, R., Matoussi, H. & Jouini, S (2006) « Les motivations de la communication financière des entreprises françaises et britanniques à travers le web », *5ème Colloque International de la recherche en sciences de gestion*, Hammamet, Tunisie, Mars.
- Pollach, I (2003) “Communicating corporate ethics on the world wide web – a discourse analysis of selected company web sites”, *Business and Society*, vol. 42:2, p. 277-287.
- Raffournier, B (1995) « The determinants of voluntary financial disclosure by swiss listed companies », *European Accounting review*, vol. 4, no. 2, p. 261-280.
- Rodriguez, L. & Menezes, C (2003) “Financial reporting on the Internet. The Portuguese case”, *RAE Electronica*, vol. 2, no. 2, p. 22.
- Teoh, H. & Thong, G (1984) “Another look at corporate social and responsibility and reporting: an empirical investigation in developing country”, *Accounting, Organization and Society*, vol. 9, no. 2, p. 186-206.
- Wanderley, L. S., Lucian, R., Farache, F. & De Sousa Filho, J. O (2008) « CSR Information Disclosure on the Web: A Context-Based Approach Analysing the Influence of Country of Origin and Industry Sector », *Journal of Business Ethics*, vol. 82, p. 369–378.

Welcomer, P.L., Cochran, G.R., Rands, G. & Haggerty, M (2003), “Constructing a web: effects of power and social responsiveness on firm-stakeholder relationships”, *Business and Society*, vol. 42:1, p. 43-82.

Xiao, J., Yangb, H. & Chow, C (2004) “The determinants and characteristics of voluntary Internet-based disclosures by listed Chinese companies”, *Journal of Accounting and Public Policy*, vol. 23, Issue 3, May-June, p. 191- 225.

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