# The prominence of social responsibility disclosure in Portuguese companies' web pages

#### Abstract

This study investigates Portuguese companies' use of the Internet to communicate social responsibility information, and the factors that affect this use. It examines the characteristics of companies that influence the prominence of social responsibility information on the Internet. Firm-specific factors that explain SRD by companies operating in a European country in which capital market fund raising is not regarded to be an important source of financing are analysed. The results are interpreted through the lens of a "political economy" framework which combines stakeholder and legitimacy theories perspectives, according to which companies disclose social responsibility information to present a socially responsible image so that they can legitimise their behaviours to their stakeholder groups and influence the external perception of reputation. Results suggest that a theoretical framework combining stakeholder and legitimacy theories may provide an explanatory basis for SRD by Portuguese companies. However, this study does not provide us with enough evidence to determine that the prominence given to CSR activities by Portuguese companies in their websites is linked to relationships with their stakeholders.

**Key words:** social responsibility disclosure; legitimacy theory; stakeholder theory; Internet; Portugal

#### **1. Introduction**

Social responsibility disclosure (SRD) has been broadly defined as the "process of communicating the social and environmental effects of organisations' economic actions to particular interest groups within society and to society at large." (Gray et al., 1996, p. 3) Thus, it seeks to reflect several social and environmental aspects upon which companies' activities may have an impact: employee related issues, community involvement, environmental concerns, other ethical issues, etc. SRD refers to the disclosure of information about companies' interactions with society.

Most of the empirical studies on social responsibility disclosure (SRD) have focused on the annual report, which is considered as the most important tool used by companies to communicate with their stakeholders (see, for example, Gray et al., 1995b; Neu et al., 1998). However, the Internet has become an important medium through which companies can disclose information of different natures and thus some recent studies have been made analysing companies' web pages has a SRD medium (see, for example, Esrock & Leichty, 1998, 2000; Maignan & Ralston 2002; Patten, 2002; Cooper, 2003; Campbell & Beck, 2004; Capriotti & Moreno, 2007; Chaudry & Wang, 2007). Some studies also compare SRD through the Internet with similar disclosure in annual reports (see, for example, Williams & Pei, 1999; Patten & Crampton, 2004; Frost et al., 2005).

This study focuses on information disclosed on the Internet. The purpose is to understand SRD on the Internet by Portuguese companies by developing a series of testable hypotheses using a theoretical basis which combines stakeholder and legitimacy theories. This study focuses on the prominence of disclosure, and disregards aspects such as the amount of information and its presentation. We seek to identify the factors that influence SRD practices by answering the following question: what characteristics of the Portuguese companies included in the sample are associated significantly with the prominence of SRD on the Internet?

Several studies have tested determinants of SRD with regard to the traditional printbased reporting environment (see, for example, (for example, Archel, 2003; Brammer & Pavelin, 2008; García-Ayuso & Larrinaga, 2003; Neu et al., 1998; Parsa & Kouhy, 2008; Patten, 1991; Purushothaman et al., 2000; Suwaidan et al., 2004; Williams, 1998). The same kind of association as the one established by research based on corporate annual reports is proposed for Internet SRD. This study has an exploratory nature. One of its main purposes is to know if Portuguese companies use their web pages as a medium to disclose social responsibility information and if they recognize the importance of SRD by placing social responsibility information in prominent sections of the web site.

The results are interpreted through the lens of a theoretical framework according to which companies disclose social responsibility information mainly to present a socially responsible image so that they can legitimise their behaviours to their stakeholder groups and influence the external perception of reputation (Hillman & Keim, 2001; Hoogiemstra, 2000). Companies with a higher visibility seem to exhibit greater concern to improve the corporate image through SRD. Although results suggest that the framework proposed may be an explanation of SRD by Portuguese companies, this study does not provide us with enough evidence to determine that the prominence given to CSR activities by Portuguese companies in their websites is linked to relationships with their stakeholders.

This study contributes to understanding of the SRD by revealing associations between SRD on the characteristics of firms. In particular, it enhances understanding of the determinants of SRD in a country characterised by small and medium companies whose managers generally do not perceive capital markets to be an important source of financing.

This study examines empirical evidence from Portugal for two reasons. First, we want to add to the scarce research on SRD by Portuguese companies by providing new empirical data. Most of the present literature is based in Anglo-Saxon countries and evidence should be added about other geographic, cultural and institutional contexts. In contrast to the understanding of SRD from common law English-speaking countries (Australia, Canada, UK, USA), the determinants of SRD in Continental Europe, particularly in Portugal, are still relatively unknown. Second, while the existing literature focuses on SRD mainly by large companies, this paper analyses the disclosure of social responsibility information by a sample of companies which are predominantly small- and medium-sized companies (SME). This paper adds to the research which investigates the prevalent view that SMEs are unlikely to disclose social responsibility information due to their financial constraints and the perception that they have very little social conduct on which to report (Parsa & Kouhy, 2008).

The remainder of this study is organized as follows. In the following section, the question of annual reports and the Internet as disclosure media is explored. Thereafter follow sections on the theoretical framework used, hypothesis development, the methodology, the results and a discussion. Finally, some conclusions are drawn.

#### 2. Theoretical Framework

Legitimacy theory has been recently considered to be the dominant theory in the SRD research (Hoogiemstra, 2000, p. 55). However, social and political theories, in particular legitimacy and stakeholder theories, should be considered as complementary rather than alternative or opposite (Gray et al., 1995a, p. 52). This is the perspective adopted in this study, with legitimacy theory being considered as a perspective which is clearly consistent with stakeholder theory, with both theories enriching each other

The benefits of corporate social responsibility (CSR) are related substantially to its effect on corporate reputation (see, for example, Fombrun et al., 2000). Companies with good social responsibility reputation may improve relations with external actors such as customers, investors, bankers, suppliers and competitors. They may also attract better employees or increase current employees' motivation and morale as well as their commitment and loyalty to the company, which in turn may improve financial outcomes. Disclosure of information on a company's behaviours and outcomes regarding social responsibility may help build a positive image with stakeholders.

SRD is particularly important in enhancing the effects of CSR in corporate reputation. Hooghiemstra (2000) argues that SRD is a communication instrument that companies use to create, protect or enhance their images or reputations. In fact, it can assist a company in the creation of a competitive advantage because "creating a positive image may imply that people are to a great extent prepared to do business with the company and buy its products." (op. cit., p. 64) It can be analysed as "a public relations vehicle", which is "aimed at influencing people's perceptions about the company." (op.

#### cit., p. 57)

In this study, companies are considered to engage in some form of stakeholder management driven by three different kinds of motivations. Some companies believe that being and being seen as social responsible will bring them a competitive advantage, allowing them to achieve better economic results. They expect that having good relations with their stakeholders is susceptible of leading to increased financial returns.

Other companies engage in CSR activities and disclosure because of external pressures, either conforming to what other companies do, because they believe that not doing so would harm them in terms of their profitability and survival, or responding to discrediting events, which they believe to be detrimental to their profitability and survival and must be addressed in order to mitigate their effects. These companies engage in social responsibility activities and disclosure in order to conform to stakeholder norms and expectations about how their operations should be conducted, thus constituting mainly a legitimacy instrument used by a company to demonstrate its adherence to such norms and expectations. These motivations are consistent with social and political theories explanations, in particular stakeholder and legitimacy theories (see, for example, Deegan, 2002; Hillman & Keim, 2001; Neu et al., 1998; O'Donovan, 2002; Patten & Crampton, 2004).

Finally, other companies, probably a small number of them, engage in social responsibility activities and disclosure because their managers' personal values are aligned with CSR values. Social issues may merit moral consideration of its own apart from their interest to stakeholders and lead managers to consider the social impacts of corporate activities in their decision making. However, it is difficult to believe that they will take decisions which they know will be detrimental to the company's financial performance. Personal values and the ethical and moral aspects which underlie them will not be explored and thus this aspect will not be analysed in this study.

For the purposes of this study the fundamental aspect is that legitimacy requires a reputation that must be retained, that is, it requires a company to convince its relevant publics that its activities are congruent with their values. Thus, reputation and legitimacy are inextricably linked and in this article the distinction between the two will not be further explored.

#### 4. Development of hypotheses

This section develops the study's hypotheses relating to the factors expected to affect Portuguese companies' use of the Internet for SRD. The study does not attempt to model in detail all possible relationships. Instead, it focuses on those that we believe are most relevant to a discussion of SRD on the Internet.

Based on the existing literature, we selected a number of characteristics that we felt are most likely to be either positively or negatively associated with SRD. In this section, a review of the key studies and arguments for these characteristics leads to posing eight hypotheses.

#### **Profitability**

Several empirical studies have concluded that profitability does not appear to be a significant determinant of SRD (for example, Archel, 2003; Brammer & Pavelin, 2008; García-Ayuso & Larrinaga, 2003; Patten, 1991; Purushothaman et al., 2000; Williams, 1998). From a legitimacy theory perspective, profitability can be considered to be related positively or negatively to SRD (Neu et al., 1998). On the other hand, from a stakeholder perspective (Roberts, 1992), economic performance is expected to be associated positively with social responsibility activities and disclosure.

In view of the existence of these different interpretations, in this study the association between profitability and SRD is tested without making any a priori assumption about the sign of such association (see, for example, Archel, 2003; García-Ayuso & Larrinaga, 2003; Purushothaman et al., 2000).

H1: There is an association between the economic performance of a company and the prominence of its SRD on the Internet.

#### Leverage

The creditors' power as a stakeholder depends upon the degree to which the company relies on debt financing (Roberts, 1992). The more the company relies on debt financing, the more likely it is to disclose more social responsibility information in order to be seen as a company with lower risk. However, noting a lack of conclusiveness in the studies which explore this relationship, Purushothaman et al. (2000, p. 112) point out that companies with high leverage may have closer relationships with their creditors and use other means to disclose social responsibility information. Thus, in this study the association between leverage and SRD is tested without making any a priori assumption about the sign of such association.

H2: There is an association between a company's leverage and the prominence of its SRD on the Internet.

#### Company size

Company size is usually used as a proxy for public pressure. SRD is related to corporate size, with the largest companies disclosing more than smaller ones (see, for example, Archel, 2003; Neu et al., 1998; Patten, 1991, 1992, 2002; Purushothaman et al., 2000). It can be said that the larger the company, the higher the visibility, hence the increased disclosure. Larger companies, probably because of visibility issues, are subject to greater public scrutiny than smaller companies, thus being under greater pressure to behave in more socially responsible manner and more likely to disclose social responsibility information.

H3: There will be a positive relationship between the size of a company and the prominence of its SRD on the Internet.

#### Industry affiliation

Another commonly used proxy for public pressure is industry affiliation. Industry affiliation was found to be related to SRD by legitimacy theory studies, with industries with high public visibility or a potentially more important environmental impact or having less favourable public images disclosing more social responsibility information than its counterparts (see, for example, Archel, 2003; Clarke & Gibson-Sweet, 1999; García-Ayuso & Larrinaga, 2003; Patten, 1991, 1992, 2002).

H4: There is an association between industry affiliation of a company and the prominence of its SRD on the Internet.

#### Listing status

Listed companies have been used in many studies (see, for example, García-Ayuso & Larrinaga, 2003; Hackston & Milne, 1996; Haniffa & Cooke, 2005; Purushothaman et al., 2000; Williams, 1999; Williams & Pei, 1999). Listed companies are usually subject to more extensive disclosure requirements with respect to various aspects of their operations. Hence, listed companies are more likely to disclose social responsibility information.

On the other hand, listed companies are considered to be more visible than unlisted companies. Although listed companies are not subject to more extensive disclosure requirements with respect to social responsibility activities than unlisted ones, they tend to receive more attention from the general public and are subject to more extensive media coverage (Archel, 2003). Listed companies are expected to be more visible and thus to disclose more social responsibility information than their counterparts.

H5: Listed companies are expected to place social responsibility information in more prominent sections of the web site than unlisted companies.

#### Age

This variable refers to the length of time a company has been in business. As companies grow older they are expected to establish relationships with a more widespread group of stakeholders. With this increasing spread of stakeholders, the need for social responsibility disclosure as a means of communicating with stakeholders increases (Parsa & Kouhy, 2008). On the other hand, the value of reputation and the history of involvement in social responsibility activities can be higher the more mature a company is and also the cost of socially irresponsible activities may be more significant (Choi, 1999; p. 88). It is assumed in this study that older companies may have improved their disclosure practices over time as they have been subject to the demands of stakeholders over a longer period of time.

H6: Older firms are expected to place social responsibility information in more prominent sections of the web site than younger companies.

#### Legal form

The two principal forms of limited liability organization are the public company or corporation (Sociedade Anónima - S.A.) and the quota company (Sociedade por Quotas - Lda.) and these are the most common corporate formations in Portugal for both foreign and national investors. However, other forms are possible and can be used, such as non-limited liability firms or mixed types of limited and non-limited liability companies or partnerships.

Alves (2005) tested the association between financial reporting on the internet and the legal form in Portugal and found that it is a determinant factor.

H7: There is an association between the legal form of a company and the prominence of its SRD on the Internet.

#### Geographical location

Companies located in more developed areas of the country are expected to have a more diverse group of stakeholders and thus place social responsibility information in more prominent sections of the web site.

H8: Companies located in Lisbon are expected to place social responsibility information in more prominent sections of the web site than their counterparts.

#### 5. Research method

#### 5.1. Sample selection

Central to our analysis is the firm-level SABI database from the Bureau van Dijk. It is a database of company accounts, ratios, activities, ownership, and management for Spanish and Portuguese companies.

The SABI database includes firm-level accounting data in standardized financial format for balance sheet items, income statement items, and financial ratios. In addition to financial information, SABI also provides other firm-level information. We use information on the year of incorporation to calculate the age of the firm. SABI also assigns companies a CAE code – the Portuguese standard of industry classification – which we use to classify firms and construct industry dummy variables.

We use the 2007 edition of SABI and limit our sample to the year 2006. The reason to limit our analysis is that it is the most recent year regarding which there are available data. We then impose a number of restrictions on the data. First, we require reporting firms to have their website url reported in the database. Second, we require reporting firms to have some basic accounting information pertaining to 2006 reported in the database (i.e., data on total assets, liabilities, profits). Finally, we exclude all legal forms other than the equivalent of public companies or corporations (Sociedade Anónima - S.A.) and quota companies (Sociedade por Quotas - Lda.).

In April and May of 2008, the companies which composed the sample were surveyed to determine whether they had an accessible web page. Out of these, those which did not

have an accessible web page were excluded from the sample. Of the remaining companies, only those having a fully functioning web page (that is, not under construction or maintenance) were included in the final sample.

As shown in Table 1, the sample is constituted of 209 companies. Manufacturing and Wholesale and retail trade, repair of motor vehicles, motorcycles and personal and household goods are the sectors which present larger number of companies (70 and 64 companies each and around 64% of the total taken together). Real estate, renting and business activities is the sector which follows in terms of degree of importance (with 34 and about 15% of the total).

Take in Table 1

#### 5.2. Data capture

In our data gathering, we went to the 209 companies' websites and searched for a section devoted to disclosure of social responsibility information. Following Chaudhry & Wang (2007), we assessed the placement of CSR information on the corporate Web site (home page vs. other sections) as an indication of communication prominence.

For Internationally based firms, we did not start to count levels until reaching a Portuguese version of the corporate homepage.

According to Pollach (2005, p. 289), the sections which present the company (e.g. entitled "About Us") are the most salient attempts at self-presentation on corporate web sites. Thus, we consider that companies which have a section devoted to SRD on their homepage or in a section "About Us" are those which give greater prominence to SRD.

A score based on the primary link for the section devoted to CSR and on the aspects of CSR which are covered was constructed. Six concrete options are considered:

Section covering several aspects of CSR on the home page (5)

Section covering only one aspect of CSR on the home page (4)

Section covering several aspects of CSR on the "About us/Institutional" section (3) Section covering only one aspect of CSR on the "About us/Institutional" section (2) Section on CSR on other sections (1) No section (0)

#### 5.3. Variables

#### Profitability

When measuring corporate performance one can use accounting or market-based measures. In contrast with accounting-based measures, market-based measures are less subject to bias of managerial manipulation and do not rely on past performance (McGuire et al., 1988, p. 859). However, they are based on investors' viewpoints on company performance, thus ignoring other stakeholder groups (*ibid*.). This is the main reason for adopting an accounting-based variable in this study.

Thus, in this study return on assets (ROA) is used as a measure for economic

performance (see, for example, Belkaoui & Karpik, 1989; Bewley & Li, 2000; Brammer & Pavelin, 2008; Cormier et al., 2004; Leventis & Weetman, 2005; Patten, 1991). ROA is measured by the ratio Net income/total assets (Belkaoui & Karpik, 1989; Leventis & Weetman, 2005).

#### Leverage

Leverage is measured by the ratio Total debt/total assets (see, for example, Belkaoui & Karpik, 1989; Brammer & Pavelin, 2008; Suwaidan et al., 2004).

#### *Company size*

Because there are no theoretical reasons which might clearly justify choosing a particular measure of size (Hackston & Milne, 1996, p. 87), the measure used in this study is total assets as reported on the balance sheet (Brammer & Pavelin, 2004; Haniffa & Cooke, 2005).

#### Industry affiliation

Because it is an exploratory study, we have distinguished between primary, secondary and tertiary sectors. The primary sector includes Agriculture, farming of animals, hunting and forestry and Fishing. The secondary sector includes Mining and quarrying, Manufacturing, Production of electricity, of gas and of water supply, and Construction. The tertiary sector includes trade and services. Given that only two companies belong to the primary sector, a one/zero variable is used to designate industry affiliation: one if the company belongs to the secondary sector and zero otherwise.

#### Age

The age variable is computed as the number of years since the firm is founded to year 2008 (see, for example, Barako, 2008).

#### Listing status

A one/zero variable is used to designate listing status: one if the company is listed on the Portuguese Stock Exchange (Euronext – Lisbon) and zero otherwise (see, for example, Archel, 2003).

#### Legal form

A one/zero variable is used to designate legal form: one if it is a Sociedade Anónima - S.A. and zero otherwise (Sociedade por Quotas - Lda.) (see, for example, Alves, 2005).

#### Geographical location

A one/zero variable is used to designate listing status: one if the company is located in Lisbon and zero otherwise.

#### 6. Results and discussion

#### 6.1. Descriptive analysis

As indicated in Table 2, only 34 of the 209 companies have a specific section on CSR. Regarding the link for the section on CSR, only 9 companies (about 4%) had the primary link for a section covering several aspects of CSR on their corporate home page, and 9 (about 4%) had the primary link for a section covering only one aspect of CSR on their corporate home page. 10 companies (about 5%) had the primary link for a section covering several aspects of CSR in their "about us" section, and 5 (about 2%) had the primary link for the section covering only one aspect of CSR in their "about us" section. One company had the primary link for the specific section on CSR in other section. All the other companies (about 84% of them) had no section on CSR.

Take in Table 2

Table 2 also reveals that the majority of the companies with a score of 5 belong to the Manufacturing and Real estate, renting and business activities sector (3 companies each). Half the companies with a score of three are from the Real estate, renting and business activities sector. Although Manufacturing is the sector with a larger number of companies with a section on CSR, Construction is the sector regarding which a larger percentage of companies (33%) has a section on CSR.

The majority of the companies with a section covering several aspects of CSR call it "Social Responsibility" (6) or "Sustainability"/"Sustainable development" (6). Only two companies call it "Corporate responsibility". Regarding the companies with a section covering only one aspect of CSR, the majority of the companies call it "Environment" (10). Names, such as "Environmental management and social intervention", "Quality and environment", "Quality, environment and safety" or "Environment and safety", are used also.

#### 6.2. Tests of hypotheses

#### 6.2.1. Descriptive statistics and bivariate analysis

Table 3 contains the descriptive statistics for the continuous independent variables (Panel A) and the categorical independent variables (Panel B) defined above.

Take in Table 3

Given its exploratory nature, in this study non-parametric bivariate and multivariate statistical methods were used to test the relationships between the independent variables and SRD. The bivariate test used is the Mann-Whitney U-test for the ordinal-scaled variables (listing status; geographical location; industry affiliation) and the Spearman's Rho for the other variables (profitability; leverage; size; age). The non-parametric multivariate test used in this study is the logistic regression analysis (see, for example, Ahmad et al., 2003; Ayadi, 2006; Barako, 2008; Choi, 1999). The logistic regression does not assume linearity of relationship between the independent variables and the dependent, does not require normally distributed variables, does not assume homoscedasticity and is less sensitive to the existence of outliers.

#### Tests using Spearman's Rho

The correlations between SRD and profitability (H1), leverage (H2), size (H3) and age (H6) are analysed using Spearman's Rho. Table 4 reports the results of the Spearman's Rho tests.

#### Take in Table 4

There is a positive and statistically significant relationship between SRD prominence and size (H3 is accepted). Profitability and leverage do not appear to be important determinants of SRD (H1 and H2 are rejected).

#### Tests using Mann-Whitney U

In order to identify whether being listed on the Euronext-Lisbon or not (H5), being a sociedade anónima or a sociedade por quotas (H7) and being located in Lisbon or not (H8) the Mann-Whitney U-test is used. Results of the Mann-Whitney U tests regarding SRD prominence on the internet are presented in Table 5.

#### Take in Table 5

Mean SRD prominence ranks suggest that companies listed on the Euronext-Lisbon give more prominence to SRD on the internet than their counterparts. Hypothesis H5 is accepted. Although mean SRD prominence ranks suggest that sociedades anónimas, companies from Lisbon and companies belonging to the secondary sector disclose more information than their counterparts, geographical location and industry affiliation do not appear to factor explaining SRD prominence. Hypotheses H4, H7 and H8 are thus rejected.

#### 6.2.2. Multivariate analysis

The general form of the model examined is stated as:  $Disc_i = \beta_{0i} + \beta_{1i}Profit_i + \beta_{2i}Lev_i + \beta_{3i}S_i + \beta_{4i}Ind_i + \beta_{5i}LS_i + \beta_{6i}A_i + \beta_{7i}LF_i + \beta_{8i}GL_i + u_i$ Where, for company i: Disc<sub>i</sub> (0,1): is the dependent variable (existence of a section with SRD) Profit<sub>i</sub>: profitability; Lev<sub>i</sub>: leverage; S<sub>i</sub>: size; Ind<sub>i</sub>: industry; LS<sub>i</sub>: listing status; A<sub>i</sub>: age; LF<sub>i</sub>: legal form; GL<sub>i</sub>: geographical location; u<sub>i</sub>: error term.

The possible existence of multicollinearity is tested based on the correlation matrix incorporating all the continuous independent variables (Table 6). The present sample exhibits some significant bivariate correlations: for example, between Age and Leverage and between Leverage and Profitability. However, none these is higher than 0.35. Results thus indicate that multicollinearity is unlikely to be a problem<sup>1</sup>.

#### Take in Table 6

Results of the logistic regression appear in Table 7. The model has a modest explanatory power. The model  $\chi 2$  is 27,771, with a p = 0.001. The classification accuracy rate is 86,1%. The logistical regression model provides 21% predictive power using the Nagelkerke R<sup>2</sup> approximation. These results suggest the model as a significant logistic regression model and hence suitable for further examination.

Take in Table 7

Further examination of the regression results indicates that the coefficients of all independent variables of interest are in the hypothesized direction, except in the case of the variable age. Only Size is statistically significant. Unlike the bivariate tests reported earlier, the variable Listing status is no longer significant. Statistical findings suggest that the larger the companies the more likely the companies prominence of SRD on the internet is higher.

Consistent with previous studies size, which is considered as a proxy for social visibility, has a positive relationship with the prominence of SRD on corporate web sites. These results are consistent with the expectations resulting from the theoretical framework proposed and with previous SRD studies (see, for example, Archel, 2003; Belkaoui & Karpik, 1989; Choi, 1999; García-Ayuso & Larrinaga, 2003; Gray et al., 1995a; Hackston & Milne, 1996; Neu et al., 1998; Parsa & Kouhy, 2008; Patten, 1991, 1992; Purushotaman et al., 2000; Suwaidan et al., 2004).

Unlike Roberts (1992), who found an association between SRD and corporate age, and Choi (1999), who found that in low profile industries corporate age is associated with the quality of environmental disclosure, we found a lack of association between prominence of SRD and corporate age. The results obtained are similar to those of Parsa

<sup>1</sup> As a rule-of-thumb, multicollinearity in regression analysis is considered harmful only when they exceed 0,8 (Gujarati, 1995).

& Kouhy (2008), who also analysed a sample of SMEs. The findings in this study suggest that as Portuguese companies grow older and become more established and have more stakeholders, they do not necessarily give more prominence to CSR activities in their Websites to serve the information requirements of their increasing number of stakeholders. Parsa & Kouhy (2008, p. 357) interpret their findings as implying that companies are likely to report social information if they intend to enhance their reputation and not as a result of becoming more established and establishing relationships with more stakeholders. These authors suggest that these results are more in support of signalling theory than stakeholder theory.

Regarding profitability, most empirical studies have concluded that it does not appear to be a significant determinant of SRD (see, for example, Archel, 2003; Belkaoui & Karpik, 1989; Hackston & Milne, 1996; Patten, 1991; Purushotaman et al., 2000; Roberts, 1992; Williams, 1998). Our findings are consistent with previous SRD studies.

Contrary to several studies which found a positive relation between SRD and leverage (see, for example, Roberts, 1992; Purushotaman et al., 2000; Parsa & Kouhy, 2008), in this study no relationship between leverage and the prominence of SRD is detected. Companies do not seem to report social responsibility information and place it in prominent sections on their website in order to have easier access to financial resources.

Regarding the inexistence of a significant relationship between industry and the prominence of SRD, the results are consistent with those of Purushotaman et al. (2000). Given the amount of studies which find such an association (see, for example, Archel, 2003; Bewley and Li, 2000; Choi, 1999; García-Ayuso and Larrinaga, 2003; Hackston and Milne, 1996; Parsa & Kouhy, 2008; Patten, 1991; Roberts, 1992), it is possible to suggest that the insignificant result in this study is probably related to the broad classification scheme used.

Although bivariate analysis suggests that listed companies give more prominence to SRD on the internet than their counterparts, the variable listing status is not significant in the results of the multivariate analysis. Although listed companies may well have a larger number of stakeholders, this does not suppose that they place social responsibility information in more prominent sections on their website. These results are consistent with those of Archel (2003), who found that listing status was not a significant variable.

#### 7. Conclusions

CSR is related to all those aspects upon which companies' activities may have an impact: employee related issues, community involvement, environmental concerns, other ethical issues, etc. SRD refers to the disclosure of information about companies' interactions with society, and it is an important instrument in the dialog between business and society.

The purpose of this study is to understand SRD on the Internet by Portuguese companies by developing a series of testable hypotheses using a theoretical basis which combines stakeholder and legitimacy perspectives. Companies are considered to engage in SRD driven by two different kinds of motivations. Some companies expect that having good relations with their stakeholders is susceptible of leading to increased financial returns by assisting in developing valuable intangible assets such as corporate reputation

(Hillman & Keim, 2001). Other companies engage in CSR activities and disclosure to conform to stakeholder norms and expectations about how their operations should be conducted, thus constituting mainly a legitimacy instrument used by a company to demonstrate its adherence to such norms and expectations (see, for example, Deegan, 2002; Neu et al., 1998; O'Donovan, 2002; Patten & Crampton, 2004).

The strategy adopted was one of examining a sample of companies, and using proxies for explanatory factors related to company characteristics, such as size, financial performance, leverage or industry affiliation. The same kind of association as the one established by research based on corporate annual reports is proposed for Internet social responsibility disclosure. To determine the prominence of social responsibility disclosure included on the corporate web sites, each of the companies' web sites was accessed during the months of April and May of 2008 and analysed for the provision of social responsibility information in an autonomous section.

The importance of SRD seems to be growing all over the world, and the same appears to be the case in Portugal. There are studies which show that Portuguese companies do disclose social responsibility information on the internet (Branco & Rodrigues, 2008). However, this study points to the conclusion that they do not place social responsibility information in prominent sections of the web site. Larger companies and listed companies seem to place social responsibility information in more prominent sections of the web site.

Parsa & Kouhy (2008) investigated the prevalent view that SMEs are unlikely to disclose social responsibility information due to their financial constraints and the perception that they have very little social conduct on which to report. The findings obtained by these authors illustrate that SMEs disclose social responsibility information regardless of their financial constraints, most likely in the same manner as large companies do, because they realise the significance of SRD in establishing and retaining their corporate reputation. Contrary to Parsa & Kouhy (2007), the findings in this study suggest that SMEs are unlikely to disclose social responsibility information or at least to give prominence to CSR activities in their websites.

Although size appears to be a significant determinant of prominence of SRD on corporate websites, this study does not provide us with enough evidence to determine that the prominence given to CSR activities by Portuguese companies in their websites is linked to relationships with their stakeholders.

This study contributes to research by providing new empirical data on SRD by Portuguese companies and by analysing the prominence of SRD. This study presents a limitation which is related to the size of the sample. In effect, when compared to other studies the sample used is small. Another limitation is related to the use of a very limited data capture method which obviously has implications on the conclusions.

Possible extensions to this study are related to the use of a larger sample of companies, the use of a more refined data capture methodology and the use of a more refined industry classification scheme.

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Sector	n	%
Agriculture, farming of animals, hunting and forestry	2	0,96
Manufacturing	70	33,49
Production and distribution of electricity, of gas and of water supply	5	2,39
Construction	15	7,18
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	64	30,62
Hotels and restaurants	4	1,91
Transport, storage and communication	10	4,78
Real estate, renting and business activities	32	15,31
Health and social work	2	0,96
Other community, social and personal service activities	5	2,39
Total	209	100,00

### Table 1: Sample companies by sector

	Score					
Sector	5	4	3	2	1	0
Agriculture, farming of animals, hunting and forestry	0	0	0	0	0	2
Manufacturing	3	3	2	3	0	59
Production and distribution of electricity, of gas and of water supply	1	0	0	0	0	4
Construction	2	1	1	0	1	10
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	0	2	1	1	0	60
Hotels and restaurants	0	0	0	1	0	3
Transport, storage and communication	0	2	1	0	0	7
Real estate, renting and business activities	3	0	5	0	0	24
Health and social work	0	0	0	0	0	2
Other community, social and personal service activities	0	1	0	0	0	4
Total	9	9	10	5	1	175

### Table 2: SRD prominence by sector

#### Table 3: Summary descriptive statistics of dependent and independent variables

Panel A:	Continuous	inder	pendent	variables
I unter i li	Commuous	much	Jenuent	<i>i</i> al labies

Variable	Minimum	Maximum	Mean
Age	3,00	162,00	27,99
Size	509,00	25468911,00	355685,58
Profitability	-25,00	34,46	4,09
Leverage	0,10	1,00	0,65

Panel B: Categorical independent variables

	n	%
Lisbon	70	33,49
Sociedade Anónima	140	66,99
Listed	15	7,18
Secondary	90	43,06

## Table 4: Correlations between dependent variable and continuous independent variables (Spearman's rho)

	Age	Size	Profitability	Leverage	
SRD	-0,147	0,283**	0,009	0,064	
**. Correlation is significant at the 0.01 level (2-tailed).					

# Table 5: Tests for the relation between the dependent variable and categorical independent variables

Mann-Whitney U test				
	Mann-Whitney			
	U	Asymp. Sig. <sup>a</sup>		
Industry (secondary				
sector)	5094,500	0,349		
Listing status	811,000	0,000		
Legal form	4242,500	0,260		
Geographical location	4607,000	0,333		

a: two-tailed

### Table 6: Correlation matrix for the continuous independent variables (Pearson above diagonal, Spearman below)

	Age	Size	Profitability	Leverage			
Age	1	0,094	0,017	-0,200**			
Size	0,094	1	-0,054	0,059			
Profitability	0,017	-0,054	1	-0,362**			
Leverage	-0,200**	0,059	-0,362**	1			
**. Correlation is significant at the 0.01 level (2-tailed).							

 Table 7: Results of logistic regression – Presence of section devoted to SRD

 Coefficient
 Sig

	Coefficient	Sig.	
Geograpical location	0,17674193	0,720	
Legal form	0,57967960	0,258	
Age	-0,00398063	0,694	
Listing status	0,88077014	0,259	
Industry affiliation	0,71573794	0,122	
Size	0,0000082	0,031	
Profitability	0,00310943	0,932	
Leverage	1,19388161	0,355	
Constant	-3,48045310	0,003	
Model $\chi^2$ (p = 0.001)	27,771		
% Correctly classified	86,10%		
Nagelkerke R2	0.211		
-			