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EARNINGS MANAGEMENT AND CORPORATE SOCIAL RESPONSIBILITY *

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Abstract

By drawing on stakeholder-agency theory and the earnings management framework, we hypothesize a positive connection between corporate social responsibility and earnings management. We argue that earnings management damages the interests of stakeholders. Hence, managers who manipulate earnings can deal with stakeholder activism and vigilance by resorting to corporate social responsibility (CSR) practices. Furthermore, CSR is a powerful tool that can be used to garner support from stakeholders and, therefore, provides an avenue for entrenchment to those managers that manipulate earnings, so as to reduce significantly their chances of being fired. Finally, we expect that the positive connection between corporate social responsibility and financial performance is negatively moderated when combined with earnings management practices. We demonstrate empirically our theoretical contention by making use of a database comprising 593 firms from 26 nations for the period 2002-2004.

Keywords: Corporate social responsibility, earnings management.

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1. INTRODUCTION

Accounting earnings are one of the most frequently cited performance statistics that are of major interest to external capital providers, suppliers, employees, customers, communities and regulators. Ideally, financial reporting helps the better-performing firms to distinguish themselves from poor performers and facilitates stakeholders to make financial decisions (Healy and Wahlen, 1999). However, managers can exercise some discretion in computing earnings, without violating generally accepted accounting principles, thereby causing reported incomes to appear either greater or lesser than they are in reality. In fact, Watts and Zimmerman (1990) define earnings management as managers exercising their discretion over the accounting numbers, and that this intervention in the external financial reporting process may be intended to either mislead some stakeholders about the underlying economic performance of the company, or to influence contractual outcomes that depend on reported accounting numbers (Healy and Wahlen, 1999: 368).

In the absence of the potential for private benefits, rational managers would not engage in earnings management. Prior research on earnings management has identified three sets of incentives that spur this practice: capital markets, contractual arrangements, and regulatory motivations (Healy and Wahlen, 1999). First, the evidence demonstrates that managers try to influence short-term prices, particularly around the time of certain types of corporate events like stock issues (DuCharme *et al.*, 2004). Other authors, however, have suggested that managers may use their discretion to manage earnings in order to send private information to financial markets over future prospects for the firm. In effect, Ronen and Sadan (1981) developed a model in which earnings management is aimed at removing transitory items, allowing investors to predict better the expected earnings and cash flows. Second, other researchers have examined lending and compensation contracts, written in terms of accounting numbers, and have suggested that these contracts create incentives for

earnings management with a view to boosting bonus awards (e.g., Holthausen *et al.*, 1995), improving job security (e.g., DeAngelo, 1988), and mitigating the potential violation of debt covenants (e.g., DeFond and Jiambalvo, 1994). Finally, there are also regulatory motivations for earnings management. Managers of firms in regulated sectors suffer acute pressure from antitrust authorities regarding price controls and market shares. Such pressure stimulates earnings management practices as a stratagem to appear less profitable (Watts and Zimmerman, 1978). In summary, the earnings management literature suggests that capital markets, contractual arrangements, and regulatory considerations induce firms to manage earnings.

These deliberate managerial actions, contrived to disguise the real value of a firm's assets, transactions, or financial position, have negative consequences for: shareholders; employees; the communities in which firms work; society at large; and managers' reputations, job security and careers (Zahra *et al.*, 2005). One of the most far-reaching consequences of actions like the manipulation of earnings is that the firm loses the support of stakeholders; this may lead to an increased activism and vigilance from shareholders and other affected stakeholder groups (Zahra *et al.*, 2005: 818). The consequence is that the manager is under the threat of: rogue behaviour by employees; misunderstanding from customers; pressure from investors; defection from partners; legal action from regulators; boycotts from activists; illegitimacy from the community; and exposure from the media. Ultimately, these threats may destroy the firm's reputation capital (Fombrun *et al.*, 2000).

As a defence against stakeholder activism and vigilance, which could cost a manager his job and damage the firm's reputation, managers have all the incentives to compensate stakeholders through corporate social responsibility (CSR) practices. CSR is related to ethical and moral issues concerning corporate decision-making and behaviour and, as such, addresses complex issues like environmental protection, human resources management,

health and safety at work, local community relations, and relationships with suppliers and customers (Castelo and Lima, 2006). Engaging in socially responsible activities not only improves stakeholder satisfaction, but also has a positive effect on corporate reputation. Disclosure of information about corporate behaviour and outcomes regarding social responsibility may help build a positive image among stakeholders (Orlitzky *et al.*, 2003). This positive image helps firms to establish community ties and become socially integrated and build reputation capital; hence, improving their ability to negotiate more attractive contracts with suppliers and governments, to charge premium prices for goods and services, and to reduce their cost of capital (Fombrun *et al.*, 2000). Therefore, by resorting to *CSR* practices, the firm is able to gain support from its different stakeholders: employee commitment, customer loyalty, and collaboration from partners. Also, by the same token, the firm can obtain more favourable regulatory treatment, endorsements from activist groups, legitimacy from the community, and favourable coverage from the media (Castelo and Lima, 2006), so as to avoid the eventual detrimental impact of government actions (Patten and Trompeter, 2003).

Then, our basic conjecture is that, an executive who manipulates earnings has an incentive to project a socially-friendly image, given that *CSR* activities are a powerful tool for obtaining support from stakeholders. This, in turn, will reduce the likelihood of the manager being fired due to pressure from discontented shareholders or other stakeholders whose interests had been damaged by the implementation of earnings management practices. Under such a scheme, *CSR* is used as an entrenchment mechanism (Cespa and Cestone, 2004) in the context of earnings manipulation.

We prove our contention using an international database, composed of 593 firms from 26 nations, for the period 2002-2004. This result highlights the perverse effects of combining *CSR* with earnings management, calling into question some social demands on

better-performing firms to devote part of their financial resources to improve their *CSR*. Accordingly, if these improvements are connected with earnings management practices, they may damage firms' long-term wealth.

The remainder of the article is structured as follows. Section 2 summarizes the most relevant literature related to the objectives of this work and develops the hypotheses. Section 3 is methodological and describes the sample, variables and empirical models to be tested. The empirical results obtained are presented in Section 4. The final section of the article illustrates the main conclusions of this research and a discussion of the significance of the results.

2. THEORETICAL FRAMEWORK AND HYPOTHESES

2.1. Earnings management and corporate social responsibility

Previous research (e.g., Davidson III *et al.*, 2004) has established a relationship between earnings management and agency theory. These studies adopt, as their starting point, the traditional view that the separation of ownership and control in modern corporations, together with the existence of information asymmetries within firms, spawn the possibility of opportunistic actions by the agent (the manager) who may have different objectives from those of the principal (the owner), and thus pursue self-serving goals (the agency problem). In this context, earnings management is considered a type of agency cost because managers look after their own interests by releasing financial reports that do not present an accurate economic picture of the firm. As a consequence, shareholders could make non-optimal investment decisions (agency cost). Therefore, earnings management is related to agency theory because the former can create or exacerbate agency costs.

However, earnings management not only affects a firm's owners, it has an impact on stakeholders too. Stakeholders are considered a group that "bear some form of risk as a result

of having invested some form of capital, human or financial, something of value, in a firm” (Clarkson, 1995). This means that managerial actions like earnings management that mislead stakeholders as to the real value of firm’s assets, transactions, or financial position, have serious consequences for shareholders, creditors, employees, and society as a whole (Zahra *et al.*, 2005). In a scenario when shareholders suspect earnings management, a firm immediately loses value on the stock market (Dechow and Sweeney, 1996). Predictably, this firm’s credit rating will then fall causing any bonds issued to lose value; this affects bondholders’ wealth. Similarly, banks may have lent money based on inflated income forecasts, thus making the recovery of loans problematic (DeFond and Jiambalbo, 1994). The employees are another stakeholder group affected by earnings management practices. D’Souza *et al.* (2000) studied the association between earnings management and labour costs and found that managers reduce reported earnings during labour union contract negotiations, relative to earnings released before and after contracts are negotiated, in order to reduce re-negotiated labour costs. Finally, any reporting of numbers that do not reflect the true economic condition of a firm can also lead to a general lack of faith in the integrity of managers, and lead to the erosion in confidence in markets and the institutions, which in turn could have serious consequences for society as a whole (Zahra *et al.*, 2005).

As managerial decisions directly impact all stakeholders groups, the manager can be viewed as the stakeholders’ agent, and not just a shareholders’ agent (Hill and Jones, 1992; Jones, 1995). Adopting this stakeholder-agency perspective, a firm is conceived not as a bilateral relationship between shareholders and managers, but as a multilateral set of relationships amongst stakeholders. Each stakeholder has, in turn, their own interests, which generally are in conflict with those of the other stakeholders’. Certainly, one of the most important conflicts of interest occurs between managers and all other stakeholders; an amplified agency problem (Hill and Jones, 1992), which sometimes prevents stakeholders

from maximizing their utility. Because managers control the decision-making process in the firm, they may use this power to their own benefit, thereby causing significant losses to the rest of the stakeholders. In this context, stakeholders tend to articulate responses to thwart these detrimental consequences of management power.

A primary response from stakeholders to such a manifestation of management power may be to punish management in an attempt to change this opportunistic behaviour (Rowley and Berman, 2000). Boycotts and lobbying are some of the examples of these actions (Baron, 2001; Feddersen and Gilligan, 2001; John and Klein, 2003). By wielding the threat of costly boycotts and media campaigns, stakeholders may enjoy substantial, although indirect, control over a firm. Complementary measures that may hinder managerial discretion are: employee unionization and activism, loss of confidence from customers, legal action from regulators, and the threat of defection from business partners (Castelo and Lima, 2006). In this context, the media can amplify the effect of such actions, thus, contributing to the reduction in management abuse. Several studies have shown that the media has been particularly influential in corporate socially responsible responses (e.g., Bansal, 2005). The increased media coverage raises the firm's visibility, causing public attention and scrutiny to be more severe. The threat of negative media publicity has two consequences for managerial practices (Bansal, 2005: 203). First, such publicity generates coercive pressure for firms to commit to sustainable development; threatening to erode the image of a firm that implements practices that the media considers unacceptable (e.g., Starbucks and its relationship with African coffee suppliers). And second, it can incite stakeholders to lobby organizations and governments in order to change business practices (e.g. the climate change lobby). In the specific case related to earnings management, some stakeholders have articulated specific responses. For example, shareholders and other stakeholders proactively seek reparations for the losses they have suffered (Zahra *et al.*, 2005). Further, some companies are starting to

develop in-house whistle-blowing programs in which employees can disclose concerns about accounting and operational issues discreetly and anonymously (Murdock, 2003).

In such a context, managers with capital markets, contractual, or regulatory motivations to manage earnings, may work to bolster their own job security by entrenching themselves and staying on in the job even if they are no longer competent or qualified to run the firm. A possible means of protecting their job (and maintaining private benefits) is by engaging in a broad array of activities that is aimed at developing relationships with corporate stakeholders and environmental activists, so-called corporate social responsibility (*CSR*), so as to gain support from these groups. *CSR* includes activities such as: incorporating social aspects into products and manufacturing processes; adopting progressive human resources practices; achieving improved environmentally-friendly ratings through recycling and pollution abatement; or by advancing the goals of community organizations (McWilliams *et al.*, 2006).

By means of *CSR* activities, the manager pursues different objectives to obtain: favourable coverage from the media; legitimacy from the community; favourable regulation; and less scrutiny from investors and employees. At the same time, such activity can reduce the likelihood of a firm's products being boycotted while avoiding lobbying against the company. In essence, a manager believes that by satisfying stakeholders' interests and projecting an image of social and environmental concern and awareness he can reduce the likelihood of being scrutinized by satisfied stakeholders for his management of earnings.

Such strategic use of *CSR* brings into doubt the efficiency of implementing socially-friendly policies as a corporate governance mechanism. This view differs from that provided by stakeholder theory by suggesting that stakeholder participation is an important way to: reinforce perceived legitimacy; increase the involvement of boards of directors; and to increase the scrutiny of top management. All these factors serve to enhance financial

performance (Luoma and Goodstein, 1999). However, our proposal goes in line with some authors in the finance tradition that have questioned the positive effect of stakeholder orientation on corporate governance. Williamson (1993), Tirole (2001), and Jensen (2001) argue that agency problems between owners and managers are aggravated when managers act on behalf of non-shareholder stakeholders; especially since stakeholder orientation implies participation by different groups of constituencies in the decision-making process as well as a multiplicity of objectives of those who share corporate control. This problem will add significant costs to the decision-making process (delayed decisions, mutual distrust; Tirole, 2001). Therefore, control concentrated in the hands of just one stakeholder (i.e. shareholders) is preferable to that distributed among different stakeholders.

A second argument that justifies the strategic use of *CSR*, by a manager who manipulates earnings, is connected to the implementation of entrenchment initiatives. From this viewpoint, concessions to social activists and pressure groups are simple self-entrenchment strategies for incumbent CEOs who face pressure from shareholders whose interests will be damaged, in the medium-term, as a result of earnings management practices. Pagano and Volpin (2005) argue that managers may reward stakeholders with generous social activities (*CSR*) as an entrenchment mechanism to avoid possible pressure from financial markets through hostile takeovers. Hence, we hypothesize that, when managers act in pursuit of private benefits by misleading others about the real value of the firm's assets, transactions, or financial position, they may seek the connivance of different stakeholders to validate such practices. Stakeholders can be lured by offers that satisfy their specific interests and policies aimed at improving a firm's *CSR*.

Therefore, we expect that executives with incentives to manage earnings will be very proactive in boosting their public exposure through *CSR* activities, particularly in firms with high visibility (i.e. in regulated sectors). Alternatively, firms with low levels of earnings

management have fewer incentives to seek public exposure by promoting socially responsible activities. This leads to the following hypothesis:

Hypothesis 1: Firms that manage their earnings are more likely to have superior CSR ratings.

2.2. Combining earnings management and corporate social responsibility and their impact on performance

The second aspect that we address in this article refers to the impact of *CSR* activities on financial performance, triggered by earnings management practices. The instrumental stakeholder theory (Donaldson and Preston, 1995) argues that good management implies positive relationships with key stakeholders, which, in turn, improve financial performance (Freeman, 1984; Waddock and Graves, 1997). The basic assumption behind this theory is that *CSR* may be an organizational device that leads to more effective use of resources (Orlitzky *et al.*, 2003), which then has a positive impact on corporate financial performance (CFP). Hence, the strategic management of stakeholder relationships – an intangible asset – can be viewed as a means of improving financial performance by invoking the resource-based theory of the firm (Hillman and Keim, 2001). Berman *et al.* (1999) also find support for the position that good stakeholder relationships have a direct positive effect on financial performance, a notion sometimes called the Good Management Hypothesis (Waddock and Graves, 1997).

The positive impact of *CSR* on *CFP*, however, has been questioned by various arguments. First, a short-sighted argument such that managers, especially those recently appointed and trying to acquire greater seniority, tend to pursue short-term policies that focus exclusively on financial results at the expense of long-term social issues (Preston and O'Bannon, 1997). Second, the management of relationships among a wide set of

stakeholders with conflicting objectives can result in an excessively rigid and resource-consuming organization that may damage a firm's financial performance (Aupperle *et al.*, 1985). Finally, managers may behave opportunistically, to the detriment of financial results, by following entrenchment practices (Jones, 1995) aimed at satisfying stakeholders' interests, as we have detailed in the previous section.

Along this line, we argue that when firms improve their *CSR* as a consequence of earnings management practices, the positive effect of *CSR* on *CFP* should be diminished significantly. This statement relies on the fact that managers who resort to accounting adjustments tend to over-invest in those activities that enhance a firm's *CSR*, as an entrenchment strategy. Social concessions emerging from this strategy are unproductive and, because they are costly, are expected to have a marginal negative impact on financial performance. For example, a manager may over-invest in on-going, complex projects by employing different stakeholders to satisfy their interests and, at the same time, manage earnings in order to give these stakeholders large concessions. Rowley (1997) emphasizes that high levels of *CSR* may involve relationships with a wide set of stakeholders with conflicting objectives that could delay the decision-taking process in the organization.

We hypothesize that a manager who engages in earnings management practices would attempt to involve as many stakeholders as possible, as a way to validate their actions and, hence, become indispensable (entrenchment strategy). This action leads to a reduction in the flexibility in the organization and affects its financial results detrimentally. Additionally, some authors remain skeptical about the supposed positive externalities caused by *CSR*. Friedman (1970) and Jensen (2001) argue that socially responsible initiatives are investments without pay-offs and, therefore, against the shareholder's best interest.

The preceding discussion suggests that the level of earnings manipulation moderates negatively the connection between corporate social responsibility and profitability. Hence, our second hypothesis reads:

Hypothesis 2: Earnings management will negatively moderate the relationship between CSR and CFP; the greater the level of earnings management the lesser the positive the effect of CSR on CFP.

3. EMPIRICAL ANALYSIS

3.1. Sample and Data

Our sample is composed of 593 industrial firms included in the 2002-2004 SiRi ProTM database. This database is compiled by the Sustainable Investment Research International Company (SiRi) – the world’s largest company specialized in the analysis of socially responsible investment, and based in Europe, North America, and Australia. SiRi comprises eleven independent research institutions, such as *KLD* Research & Analytics Inc. in the USA and Centre Info SA in Switzerland, and provides detailed profiles of the leading international corporations. Companies are analyzed according to their reporting procedures, policies and guidelines, management systems, and key data. This information is extracted from financial accounts, company documentation, international databases, media reports, interviews with key stakeholders, and ongoing contact with management representatives. The profile of each firm contains over 350 data points that cover all major stakeholder issues such as community involvement, environmental impact, customer policies, employment relations, human rights issues, activities in controversial areas (e.g. alcohol), supplier relations, and corporate governance.

We complement these data on corporate responsibility with financial data from the COMPUSTAT Global Vantage database for the year 2000 through 2005. The COMPUSTAT Global Vantage database contains balance sheets, income statements, cash flow statements, and stock data, all of which have been standardized to accommodate the wide variety of financial accounting practices across countries and industries. The final sample is an incomplete panel data of 593 companies from 26 countries. In our sample, information on social issues is available across the three years under analysis (2002-2004) for 356 firms.

3.2. Measures

Earnings management. There are several ways to measure earnings management. Recent empirical studies in accounting and finance have used the approach that divides current accruals into their discretionary and nondiscretionary components. Following Jones (1991) and Dechow *et al.* (1995), we define current accruals as:

$$Accruals = (\Delta CA - \Delta Cash) - (\Delta CL - \Delta STD) - DEP \quad [1]$$

Where ΔCA is the change in current assets; $\Delta Cash$ is the change in cash; ΔCL is the change in current liabilities; ΔSTD is the change in debt included in current liabilities; and DEP is the depreciation and amortization.

Thereafter, we compute the expected accruals utilising an explanatory model (see the appendix for details). The differences between accruals and expected accruals are the unexplained or discretionary accruals (DA); this difference is a proxy for management discretion on reported earnings ($Earn_manag$). In particular, we adopt Kothari *et al.* (2005) in order to extract the effect of performance on computing the discretionary accruals¹. The use of such an accrual measure enhances the reliability of inferences from earnings management studies with respect to discretionary accruals, as standard models (Jones and modified-Jones models) might be ill-specified because performance and estimated

discretionary accruals exhibit a mechanical relationship. Such an adjustment for performance eliminates, therefore, the criticism that is made in the earnings management literature, that discretionary accruals differences rely on differences in performance.

Finally, in order to test the robustness of our results, in some specifications we have used a different variable to detect earnings manipulation. In particular, we study earnings management by focussing on the practice of income smoothing (Yeo *et al*, 2002; Fudenberg and Tirole, 1995). Managers smooth earnings, as part of an entrenchment strategy, in order to ensure the stability of cash-flow streams so that they can satisfy the short-term interests of shareholders. The variable used (*Income_smoothing*), is defined as the correlation between changes in accruals and changes in cash flow within a four-year window. As the number of years in our sample is limited, we compute this variable using all available years from the COMPUSTAT Global Vantage database (1995-2004).

Corporate Social Responsibility (CSR). This was notoriously difficult to operationalize in the past (Waddock and Graves, 1997), because it is a multidimensional construct (Carroll, 1979) that should capture a wide range of items; ideally, one for each relevant stakeholder (Waddock and Graves, 1997). We use SiRi ProTM data, which includes eight research fields. The first one provides a general overview of a company and the last field reports the level of involvement in so-called controversial business activities. The remaining sections are devoted to measuring the extent of a firm's responsibilities to its stakeholders: community, corporate governance (shareholders), customers, employees, environment, and vendors and contractors. In Appendix 2, we show the items that are used to compute the score for a particular type of stakeholder, the workers. Similar items are used to compute the score for other stakeholders². The scores for each item are rated by the SiRi analysts on scales ranging from 0 (worst) to 100 (best) by taking into consideration four criteria: transparency, principles, management and operations. Importantly, each information

item is weighted according to a methodology which is sector-specific, developed by SiRi. For each sector, SiRi's analysts determine the firm's potential negative impact on each stakeholder item and assign weightings in proportion. Firms in the same sector are subjected to the same weighting scheme. Firms in other sectors use different schemes. For example, for energy companies, the items related to "environment" are assigned a heavier weighting than for companies in the financial services industry. The final score provided by SiRi is the weighted sum of each of the scores by its corresponding weight. In this study, we use that score and we detract the component that corresponds to shareholders. We do not consider such stakeholders in order to preclude the existence of endogeneity problems between our proxy of *CSR* and some explanatory variables that are closely connected to a firm's financial performance.

In order to test the moderating effect of earnings management on the relationship between *CSR* and financial performance (Hypothesis 2), in some specifications, we define the multiplicative variable $DEarn_Manag * CSR$, where $DEarn_manag$ that is equal to 1 when $Earn_manag$ is larger than the mean for the corresponding sector year and country.

Corporate Financial Performance (CFP). We use return on assets (*ROA*), which is the ratio of earnings before interests and taxes to the total values of assets. We rely on accounting measures because they are more sensitive to managers' manipulations than market measures. As pointed out by Orlitzky *et al.* (2003: 408), "indicators such as *ROA* and *ROE* are subject to managers' discretionary allocations of funds to different projects and policy choices, and thus reflect internal decision-making capabilities and managerial performance rather than external market responses to organizational actions".

This variable is used as a dependent one to test Hypothesis 2 and as an explanatory one to test the robustness of Hypothesis 1. In the latter case, we want to ensure that earnings management practices still have a positive influence on *CSR* after we detract the effect of a

firm's financial performance. We are particularly interested in analyzing the link between earnings management and *CSR*, net of the effect of *CFP*, because it may well be the case that earnings management determines financial performance and the latter, in turn, affects *CSR*³. Under this scheme, the effect of earnings management on *CSR* would vanish once we incorporate in our estimations a financial performance variable. Thus, according to this view, entrenchment does not take place and *CSR* is simply the consequence of increases in financial performance due to earnings management.

Control variables. In order to investigate whether there is an entrenchment motive that justifies the connection between earnings management and socially responsible behavior, in some specifications we define a dummy variable for entrenchment (*Dentrenchment*). In doing so, we follow the specification shown in De Miguel *et al.* (2004) and estimate a variable for performance (the return on assets) in terms of managerial ownership; both quadratic and cubic terms. As controls, we incorporate size, leverage and investment, as defined below. The results show that the relationship between performance and managerial ownership decreases in the range between 21% and 81%. Hence, we define the aforementioned dummy (*Dentrenchment*) as equal to 1 when managerial ownership is between 21% and 81% and zero otherwise. When managerial stake lies between these two numbers, a manager has sufficient power to trigger entrenchment initiatives without having to bear 100% of the corresponding costs. Also, we cross this variable with the aforementioned that characterizes earnings management (*Dentrench*Earn_manag*) in order to investigate whether the effect of earnings management on the definition of a firm's *CSR* is more pronounced in those situations when managers are set on entrenchment.

Also, it is important to eliminate the different sources of spurious correlation described in the literature. First, intangible resources generated by R&D investments make a firm's technology more flexible, thereby allowing the incorporation of customer preferences

into the design of goods produced. This factor improves customer satisfaction and, consequently, the firm's *CSR*. At the same time, several studies show that R&D investments favor the management of earnings to achieve certain goals (Baber *et al.*, 1991; Clinch, 1991; Dechow and Sloan, 1991). Thus, we introduce as a control, *R&D_intensity*, which is the ratio of R&D expenditures to total revenues. Second, an alternative channel that connects earnings management with *CSR* is ownership structure. Companies owned by large blockholders have both larger levels of *CSR* and a higher likelihood of managing earnings. For example, Carlson and Bathala (1997) show that earnings management practices are present particularly in those firms with institutional ownership. Concomitantly, Neubaum and Zahra (2006) find that long-term institutional owners, who tend to be controlling blockholders, affect positively a firm's *CSR*. Hence, we propose two variables of ownership in order to eliminate a possible spurious correlation due to ownership structure. The variable, *Ownership_concentration*, is the sum of the stakes of the three largest blockholders. We complement this variable with another that captures the presence of institutional blockholders (*Institut_ownership*), which is the stake in the hands of financial institutions.

The final channel that may explain the connection between earnings management and *CSR* is: managerial risk preferences. Managers who are risk averse tend to smooth earnings. Also, these managers tend to collude with other stakeholders (satisfying their interests) or collude with other firms (Spagnolo, 2005) as a way of diminishing the overall volatility of a firm's structural parameters. In our study, the managers' risk profile is studied indirectly through a variable of a firm's risk, given that managerial risk attitudes are translated into specific policies that determine the firm's overall risk exposure. As a measure of *Risk* we use the betas as reported in COMPUSTAT Global Vantage (e.g., Hillman and Keim, 2001).

The remaining controls are standard for the literature that studies the connection between variables of financial performance and social performance. (Waddock and Graves,

1997; Hillman and Keim, 2001): *Size* is approximated using total revenues, which is widely recognized as a determinant of a firm's financial and social responsibility. For financial structure, we use two variables: *Leverage* which is the ratio of total debt to the total value of assets, and *financial resources*, which is calculated as the ratio of cash-flow to total assets.

3.3. Methodology

We test our hypotheses making use of two basic specifications: one explains *CSR* and the other explains *CFP*. The main independent variable in both cases is the earnings management variable. In both specifications, we consider the same set of control variables in explaining financial performance as well as social responsibility. In particular, in order to explain *CSR* and test Hypotheses 1 and 2, we rely on the following regression:

$$\begin{aligned}
 CSR_{it} = & \mathbf{I}_1 + \mathbf{I}_2 (Earn_Manag)_{it} + \mathbf{I}_3 (CFP)_{it-1} + \mathbf{I}_4 (R \& D_efforts)_{it} + \\
 & + \mathbf{I}_5 (Ownership_concentration)_{it} + \mathbf{I}_6 (Institut_ownership)_{it} + \\
 & + \mathbf{I}_7 (Risk)_{it-1} + \mathbf{I}_8 (Size)_{it} + \mathbf{I}_9 (Leverage)_{it-1} + \mathbf{I}_{10} (Financial_resources)_{it} + \mathbf{h}'_i + \mathbf{e}'_{it}
 \end{aligned} \quad [2]$$

Hypothesis is supported when \mathbf{I}_2 is positive and significant. Additionally, in some specifications we add the *Dentrench*Earn_manag* as well as the *Dentrench* variable, defined before, in order to test the marginal effect of earnings management on *CSR* in a managerial entrenchment situation. According to our theoretical framework, we would expect a positive sign for the coefficient of such a variable.

The second specification is aimed at explaining financial performance. As mentioned before, we employ the same control variables as in specification [2] and the earnings management variable. Additionally, in accordance with the instrumental stakeholder theory, *CSR* is treated as a predictor variable. Finally, in order to identify whether or not discretionary accruals moderate the connection between *CSR* and financial performance, we use the aforementioned interaction variable (*DEarn_Manag*CSR*). Hence, the specification is as follows:

$$\begin{aligned}
CFP_{it} = & \mathbf{b}_1 + \mathbf{b}_2 (CSR)_{it-1} + \mathbf{b}_3 (Earn_Manag)_{it-1} + \mathbf{b}_4 (DEarn_Manag * CSR)_{it-1} + \\
& + \mathbf{b}_5 (R \& D_efforts)_{it} + \mathbf{b}_6 (Ownership_concentration)_{it} + \\
& + \mathbf{b}_7 (Institut_ownership)_{it} + \mathbf{b}_8 (Risk)_{it-1} + \mathbf{b}_9 (Size)_{it} + \\
& + \mathbf{b}_{10} (Leverage)_{it-1} + \mathbf{b}_{11} (Financial_resources)_{it} + \mathbf{h}''_i + \mathbf{e}''_{it}
\end{aligned}
\tag{3}$$

Hypothesis 3 is confirmed when the coefficient of the interaction term \mathbf{b}_4 is negative and significant.

In both specifications [2] and [3], we use fixed-effect estimations in order to prevent endogeneity problems, relying on the eventual correlation between the fixed unobservable component of the error term and some explanatory variables. In particular, we expect the unobserved determinants of *CSR*, like a firm's organization, to be perfectly correlated with a firm's *CFP*. Thus, we have to estimate in differences (fixed-effect estimation)⁴. Additionally, we lag some independent variables by one period to prevent endogeneity problems that are not linked to the constant unobservable heterogeneity. In particular, we lag the variable *CFP* by one period when estimating *CSR* (see equation [2]) because instrumental stakeholder theory establishes that the latter variable is a determinant of *CFP*. Regarding the specification of *CFP* (see equation [3]) we lag the variable for *CSR* because, as mentioned in the theoretical section, readily available financial resources may affect a firm's *CSR* – Slack Resources Hypothesis (Waddock and Graves, 1997). Also, in specification [3] we lag the variable for *Discretionary Accruals*, as well as the interaction term (*Earn_Manag*CSR*,) because bad financial results may trigger earnings manipulations. Finally,, in both specifications we lag two control variables: *Leverage* and *Risk* because debt capacity (closely related to risk) as well as overall firm risk are determined by a firm's financial and social results.

4. RESULTS

Table 1A reports means, standard deviations, minimum and maximum values. The descriptive analysis shows that the *CSR* variable shows a mean value of 47% on a scale between 0 and 100. Among the countries with the largest scores are: Luxembourg (72.64%); Taiwan (62.09%); Finland (60.52%); Denmark (58.84%); Norway (57.91%); Canada (56.58%); Austria (56.23%) and UK (55.63%). The worst performers are Mexico (27.95%); Singapore (27.08%) and Greece (26.64%), with the US (45.18%) slightly below the mean⁵. By sector, the highest ratings (54.14%) correspond to those with a 1digit SIC equal to 1 (Metal mining; Oil & Gas Field Exploration Services and General Building Contractors) and the worst (37.34%) correspond to those with a 1digit SIC equal to 7 (hotel services, recreation services). Within the regulated sectors, water supply and gas return a score much higher than the mean (57.58%), while the score for the telecommunication sector is closer to the mean (48.32%). Also, when we turn our attention to the *Earn_manag* variable, we find that discretionary accruals are larger (0.012) than the overall mean (-0.010), in regulated sectors (water, gas and electric services –2-digit SIC code=49). In the following analysis, we show that the connection between earnings management and *CSR* is more significant in regulated sectors.

The analysis of the correlation matrix⁶ (see Table 1B) shows that variations in earnings management show a positive correlation with variations in *CSR* (12%). This is also true for the variable that crosses earnings management with entrenchment (*Dentrench*Earn_manag*), which indicates that variations in earnings management practices, in a situation of eventual entrenchment, is positively correlated with variations in *CSR*. This correlation conforms to Hypothesis 1. Also in Table 1B, we observe that variations in discretionary accruals are positively correlated to variations in financial performance. This is consistent with the idea that managers manipulate earnings in order to

boost profits. Finally, we also find a positive correlation between variations in *CSR* and variations in *CFP* (4.8%). Remarkably, this correlation is much lower when the degree of earnings management is high ($DEarn_manag=1$) rather than low (2.33% versus 9.4%). This finding is in line with Hypothesis 2.

Insert Tables 1A and 1B about here

The analysis of specifications [2] is performed in Table 2A, while some robustness checks are conducted in Tables 2B and 2C respectively. More specifically, in Table 2A, we test the effect of a firm's earnings management practices on *CSR* (Hypothesis 1). Also, we study the significance of this effect by incorporating *CFP* as an additional predictor for discretionary accruals (column 3). In column 1 we test the direct effect of discretionary accruals on *CSR*. Results indicate that the effect of earnings management practices on social responsibility is positive and significant ($b = 0.836$, $p < .01$), thus providing support for Hypothesis 1. Also, in column 2 we investigate whether this effect is greater in a situation where we expect managerial entrenchment. We find that this is the case when the coefficient of $Dentrench * Earn_manag$ is positive (0.676, significant at $p > .05$). Hence, earnings management, as a managerial device to avoid stakeholder pressure, leads to improvements in *CSR*. Given that such practices may not only damage stakeholders' interests but those of shareholders as well, a manager may satisfy stakeholders' interests as an entrenchment mechanism in order to develop alliances with stakeholders as a defence against restive shareholders. This entrenchment motive that spurs improvements in a firm's *CSR* is supported in our analysis. Finally, we confirm these results by introducing a variable for financial performance (column 3). This obviates the possibility of establishing a spurious connection between earnings management and *CSR* through a firm's financial performance.

Concerning the rest of variables, as expected, we find that *CSR* is positively related to size and risk.

In column 4, we investigate whether a manager starts to increase *CSR* one period in advance, in anticipation of earnings management. To do so, we consider the mean value of *CSR*, between period t and $t-1$, as a dependent variable. The result, although less significant, also holds for this specification. Although there is a case for the anticipation argument, it is not very significant.

Insert Table 2A about here

In Table 2B, we investigate the robustness of our results when we compare regulated (water, gas, electric services, telecommunications) versus non-regulated sectors (columns 1 and 2). The results show that the positive impact of earnings management on *CSR* is more significant in regulated sectors. This is consistent with the idea that these are politically sensitive sectors where stakeholder power is particularly high. Finally, in columns 3 and 4, we compare Anglo-Saxon versus non-Anglo-Saxon countries⁷. We find that the effect is more important in Anglo-Saxon countries. This can be explained by more vigorous stakeholders' activism in such countries.

Insert Table 2B about here

In table 2C, we extend our robustness analysis and focus on a particular type of earnings manipulation; income smoothing. Columns 1 and 2 show that this variable has a positive impact on *CSR* that holds when we take into account the specification for the variable for discretionary accruals (*Earn_manag* in column 2). Finally, in columns 3 and 4, we limit our analysis to two particular types of stakeholders: customers and workers. We

choose these two types of blockholders because they are among the most salient. The results are robust for these stakeholders too. Remarkably, in an unreported estimation, when we focus on other stakeholders that have less power (suppliers, the community), the results do not hold. This behavior conforms to the scenario where a manager, who has manipulated earnings, seeks to reinforce relationships with stakeholders. His primary objective will be to look after the interests of the most important stakeholders.

Insert Table 2C about here

The results from the estimation of specification [3], to contrast Hypothesis 2, are presented in Table 3. We use the aforementioned variable (*Dearman_Manag*CSR*) to test the moderating role of discretionary accruals in the relationship between *CSR* and financial performance. Using that variable, we focus on the moderating role when the degree of earnings management is high enough. In line with our theory, we expect that the coefficient of such variable to be negative; suggesting that generous social concessions, defrayed through accounting manipulation, reduces the positive effect of *CSR* on financial performance.

Insert Table 3 about here

The results in column 3 of Table 3 show that the coefficient for *CSR* is positive ($p < .05$) whereas for the interaction term it is negative and significant ($p < .05$). Remarkably, the total effect of *CSR* on *CFP*, even when there is earnings manipulation, is still positive ($0.058 - 0.048 = 0.01$). These results provide support for Hypothesis 2 concerning the negative moderating effect of earnings management practices in the relationship between *CSR* and *CFP*. It is remarkable that the direct effect of the earnings management variable is

positive in the contemporaneous specification ($b = 0.46$, $p < .01$ column 1), given that earnings management practices are aimed at improving financial performance. However, when we lag this variable by one period (column 2), we find that these practices have a negative impact on financial performance. This finding suggests that earnings management practices are effective only in the short-term but not in the medium-term (one period ahead), which is precisely one of the reasons why managers develop *CSR* activities as an entrenchment mechanism

Turning our attention to the rest of variables, we find that financial performance increases with financial resources.

5. DISCUSSION AND CONCLUSION

In this paper, we investigate the relationship between corporate social responsibility (*CSR*) and earnings management practices. We defend the thesis that managers manipulate earnings in order to obtain private benefits, and through this practice damage the interests of stakeholders. As stakeholders exert pressure on firm decisions, managers may internalize the negative impact of their actions and work to compensate these constituencies through corporate social responsibility (*CSR*) activities. Predictably, by colluding with non-shareholders stakeholders, a manager is able to obtain: employee commitment, customer loyalty, collaboration from partners, more favourable regulation, endorsements from activist groups, legitimacy from the community, favourable coverage from the media and the capacity of influence some public policies. As a consequence, the projection of an image of social and environmental concern and awareness allows management to reduce the likelihood of earnings management practices being scrutinized by the firm's stakeholders. Therefore, we hypothesized a positive association between earnings management practices and *CSR* activities.

To demonstrate our theoretical contention, we make use of an international database provided by the Sustainable Investment Research International Company that scrutinizes firms with respect to their practices toward employees, communities, suppliers, customers, environment, and corporate governance. Empirical results confirm the existence of a positive relationship between both variables. After we control for different variables that may justify the existence of a spurious correlation (intangible resources, ownership structure and firm's risk), we see that firms that manage earnings show superior levels of *CSR*. We note that this result particularly clear in those situations where the literature shows that managerial entrenchment is more likely. We explain this result because managers who indulge in earnings management practices have two reasons to satisfy stakeholders' interests. First, a pre-emptive reason: managers anticipate that stakeholder activism in case of earnings manipulation may damage their position in the firm. A good way of avoiding such activism is by satisfying stakeholders' interests. Second, an entrenchment reason: managers tend to collude with other stakeholders as a hedging strategy against disciplinary initiatives from shareholders, whose long-term interests may be damaged by these earnings management practices.

The second result that we find is that the connection between earnings management and *CSR* is robust to the inclusion of variables like financial performance. This result suggests that the linkage between earnings management and *CSR* is not explained through the effect that these practices have on a firm's *CFP*. A firm's *CSR* can be increased, not only by inflated financial results, but also by the set of pre-emptive and entrenchment initiatives aimed to satisfy stakeholders' interests. Additionally, we conduct a set of robustness checks and the results hold for different specifications, different measures of earnings manipulation like income smoothing, as well as for particular types of stakeholders (workers and customers). Also, consistent with our theory, the results are more significant in those

politically sensitive sectors (regulated) and in Anglo-Saxon legal-origin countries, where we expect stakeholder activism to be more pronounced.

Finally, we demonstrate that the combination of earnings management practices and *CSR* activities is costly for the firm as the increase of social concessions to stakeholders, justified by means of earnings manipulation, has a marginal negative impact on financial performance. In other words, we find that the connection between social and financial performance is weaker in a context with high levels of earnings management.

5.1 Implications for Research

This work is a bridge between the corporate governance literature and stakeholder theory. According to the latter line of research, the management of stakeholders is a device to improve financial results (Jones, 1995; Donaldson and Preston, 1995), whereas corporate governance emphasizes the difficulty in reconciling the demands of a wide set of stakeholders (Jensen, 2001; Tirole, 2001). Thus, a desirable objective would be to define some criteria that distinguishes those situations where improvements in *CSR* are aimed at increasing financial performance, from those situations where the objective is managerial entrenchment. These latter situations have been dealt with in previous studies like those by Pagano and Volpin (2005) and Cespa and Cestone (2004). These authors connect social concessions to workers as an entrenchment strategy formulated to avoid takeovers.

Our main result is that the implementation of earnings management practices is a key element that distinguishes between both types of situation. Accounting performance manipulations are associated with the entrenchment dimension of a firm's *CSR*. Thus, shareholders should be aware that some improvement in *CSR* may simply be the consequence of managerial accounting manipulation. When this happens, a firm's financial performance is damaged significantly.

5.2 Policy implications

The conclusions derived from this study are important for both investors and public authorities. Investors should not take for granted that firms with a large *CSR* behave fairly. Our results show that these firms may very likely be involved in earnings management practices. Also, public authorities should be aware that a firm's *CSR* is the outcome of different investments by the firm. Thus, promoting a specific type of socially responsible behaviour may result in inefficient over-investment in such activities. This situation may be accompanied, as we find, by malpractices like earnings management.

5.3 Future research

A natural extension of our work is to focus on more specific dimensions of a firm's *CSR*, in order to identify the most relevant stakeholders that a firm particularly cares about when it manages its earnings. We provide some evidence in this direction given that customers and workers could be crucial target stakeholders for any manager set on entrenchment. However, further analysis is needed; particularly in the evolution along time of the earnings management-*CSR* linkage once more annual information on social issues is available. Also, it may be worth conducting this fine grained analysis differentiating by sectors and institutional frameworks. Another extension that we hardly explore in this paper is ownership structure. We expect a different connection between *CSR* and earnings management when the large blockholders are institutions instead of individuals. Finally, the development of richer predictive models of earnings manipulation that incorporate aspects like social responsibility is a natural objective that should be addressed in our future research.

ENDNOTES

¹ In particular, we introduce the variable of ROA as an explanatory variable of the predicted accruals. This is a way to eliminate the effect of performance from the unpredicted accruals (see the appendix for more details).

² Visit www.centreinfo.ch/doc/doc_site/SP-Novartis-06.pdf for an example of a detailed profile, and visit www.ais.com.es/ingles/productos/derivados.htm#1 for more information on SiRi ProTM.

³ The central argument draws on a stream of stakeholder theory called slack resources hypothesis (Waddock and Graves, 1997) that connects greater *CFP* to a surplus of resources that gives firms the necessary financial wherewithal to attend to social issues (McGuire *et al.* 1988, 1990; Kraft and Hage, 1990; and Preston *et al.*, 1991).

⁴ In order to control for temporal, sectoral and country effects in fixed-effect estimation, we detract from each dependent variable its mean value for the corresponding year, sector and country.

⁵ Our sample is composed of 26 different nations, being the most representative US (31.26%); UK (15.37%); Japan (8.51%); France (7.75%); Switzerland (7.37%); Germany (5.97%); Netherlands (4.96%); Sweden (3.68%); Italy (2.92%); and Canada (1.91%).

⁶ For the sake of consistency with the estimations, we show the correlations of differences in the variables. Note that in fixed-effect estimations, variables are taken as differences between periods.

⁷ We follow La Porta *et al* (1998) and separate the countries by those with French, German, Scandinavian and Anglo-Saxon-legal origin. Australia, Canada, Hong Kong, Ireland, Singapore, Thailand, UK and US fall within the latter category

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Appendix 1: Earnings Management

The estimation of earnings management is made through discretionary accruals (DA). These are computed by detracting the expected or non-discretionary accruals (NDA) from the total accruals (TA). We use the Kothari *et al* (2005) model to estimate *DA* and *NDA*. This model departs from the modified Jones model introduced by Dechow *et al.* (1995), and incorporates a non-deflated constant term as well as a term that captures performance (ROA). In particular, in the modified Jones model total accruals are estimated in terms of changes in sales minus receivables ($\Delta(Sales-Receivables)$) and property, plant and equipment (*PPE*). All these variables including the constant are deflated by lagged total assets (A_{t-1}). We estimate each year cross-sectionally and by considering a 1-digit SIC code. Moreover, as we make use of an international database, it is normal to find large differences in the level of earnings management across countries (Leuz *et al.*, 2003). Unfortunately, we do not have enough observations for each country and we cannot separate the analysis country-by-country. We employ a solution that includes in its specifications a set of country dummy variables. This estimation strategy has been used in several papers (Kang and Sivaramakrishnan, 1995; Han and Wang, 1998). Due to all these reasons, and considering the number of sectors (10) and countries (26) in our data, we propose the following specification for estimating NDA for firm *i* in sector *s* and year *t*:

$$\begin{aligned} \frac{Accruals_{i,st}}{A_{i,st-1}} = & \mathbf{a}_{0,st} + \mathbf{a}_{1,st} \left(\frac{1}{A_{i,st-1}} \right) + \mathbf{a}_{2,st} \left(\frac{\Delta(Sales - Receivables_{i,st})}{A_{i,st-1}} \right) + \\ & + \mathbf{a}_{3,st} \left(\frac{PPE_{i,st}}{A_{i,st-1}} \right) + \mathbf{a}_{4,st} \left(\frac{ROA_{i,st}}{A_{i,st-1}} \right) + \sum_{j=5}^{30} \mathbf{a}_{j,st} (Country_{i,st}) + \mathbf{e}_{i,st} \end{aligned} \quad [A.1]$$

Country sets are dichotomous variables that capture country effects. The expected portion of total accruals, the non-discretionary component, is calculated using the regression coefficients from equation [A.1]:

$$\begin{aligned}
NDA_{i,st} = & \hat{\mathbf{a}}_{0,st} + \hat{\mathbf{a}}_{1,st} \left(\frac{1}{A_{i,st-1}} \right) + \hat{\mathbf{a}}_{2,st} \left(\frac{\Delta(\text{Sales} - \text{Receivables})_{i,st}}{A_{i,st-1}} \right) + \hat{\mathbf{a}}_{3,st} \left(\frac{PPE_{i,st}}{A_{i,st-1}} \right) \\
& + \hat{\mathbf{a}}_{4,st} ROA_{i,st} + \sum_{j=5}^{30} \hat{\mathbf{a}}_{j,st} (\text{Country}_{i,st})
\end{aligned} \quad [\text{A.2}]$$

From the non-discretionary accruals, NDA , we compute the discretionary accruals, DA , as follows:

$$DA_{i,st} = \left(\frac{Accruals_{i,st}}{A_{i,st-1}} \right) - NDA_{i,st} \quad [\text{A.3}]$$

In this model, the change in sales minus receivables is used to control for firm growth since working capital is closely related to sales, while PPE is used to control for depreciation expenses contained in accruals. Finally, the variable of ROA detracts the effect of performance in explaining differences in accruals. As a result, NDA are the expected accruals given the firm's growth, performance and fixed assets, while DA represents the unexpected accruals, which is our proxy for *Earn_Manag*.

Appendix 2:

Description of the Items for Computing the Score of Employees' Satisfaction (Nestle) ^a

Stakeholder (<i>j</i>)	Items (<i>i</i>)	Score	Weight	Weighted score	Weight	Weighted score	
		S_{ij}	W_{ij}	$S_{ij} \times W_{ij}$	$\frac{W_{ij}}{\sum_i W_{ij}}$	$\frac{W_{ij}}{\sum_i W_{ij}} \times S_{ij}$	
Employees	D Separate employee report	100.0	0.010	1.020	0.060	6.000	
	D Employee information on website	100.0	0.003	0.340	0.020	2.000	
	D Employee information in annual report	100.0	0.010	1.020	0.060	6.000	
	D Policies/Principles regarding employees	100.0	0.003	0.340	0.020	2.000	
	D Description of employee benefits programmes	100.0	0.003	0.340	0.020	2.000	
	D Disclosure of quantitative data	70.0	0.003	0.238	0.020	1.400	
	P Formal policy statement on health and safety	80.0	0.007	0.544	0.040	3.200	
	P Formal policy on diversity/employment equity	80.0	0.007	0.544	0.040	3.200	
	P Formal policy on freedom of association	80.0	0.007	0.544	0.040	3.200	
	P Formal policy statement on child/forced labour	100.0	0.003	0.340	0.020	2.000	
	P Formal policy statement on working hours	80.0	0.007	0.544	0.040	3.200	
	P Formal policy statement on wages	80.0	0.003	0.272	0.020	1.600	
	M Board responsibility for human resources issues	100.0	0.005	0.510	0.030	3.000	
	M Specific health and safety targets	30.0	0.005	0.156	0.031	0.918	
	M Diversity/Equal opportunity programs	40.0	0.005	0.204	0.030	1.200	
	M Work/Life programs	40.0	0.005	0.204	0.030	1.200	
	M Training programs	80.0	0.005	0.408	0.030	2.400	
	M Participative management programs	40.0	0.005	0.204	0.030	1.200	
	M Systems for collective labour negotiations	40.0	0.005	0.204	0.030	1.200	
	M Cash profit sharing programs	0.0	0.003	0.000	0.015	0.000	
	M Ownership programs	40.0	0.003	0.100	0.015	0.588	
	M Regular employee satisfaction surveys	80.0	0.005	0.408	0.030	2.400	
	M Specific employment related indicators	80.0	0.005	0.408	0.030	2.400	
	C Total workplace time lost	30.0	0.002	0.069	0.014	0.406	
	C Health and safety fines	50.0	0.002	0.115	0.014	0.676	
	C Employee satisfaction	40.0	0.005	0.208	0.031	1.224	
	C Supervisory Board (NEDs)	80.0	0.002	0.184	0.014	1.082	
	C Management (EDs)	0.0	0.002	0.000	0.014	0.000	
	C Quality of industrial relations	60.0	0.005	0.270	0.026	1.588	
	C Subsidiaries with social certification	0.0	0.005	0.000	0.030	0.000	
	C Major recent lay-offs	50.0	0.005	0.225	0.026	1.324	
	C Health and safety incidents	50.0	0.005	0.225	0.026	1.324	
	C Freedom of association	50.0	0.005	0.225	0.026	1.324	
	C Discrimination	50.0	0.005	0.225	0.026	1.324	
	C Child/Forced Labour	100.0	0.000	0.000	0.000	0.000	
	C Restructuring	30.0	0.005	0.135	0.026	0.794	
	C Employment conditions	0.0	0.005	0.000	0.026	0.000	
	EMPLOYEES SCORE						63.371

$$SiRi_total_score = \sum_{ij} S_{ij} \times W_{ij}$$

71.432

^a D stands for “Disclosure”; P stands for “Policies and principles”; M stands for “Management procedures”, and C stands for “Controversies within the relationship with each stakeholder”.

TABLE 1A: Descriptive Statistics

Variable	Observations	Mean	Std.	Min	Max
<i>CSR</i>	1105	47.442	14.998	0.779	80.140
<i>ROA</i>	1105	4.565	8.856	-114.601	28.136
<i>Earn_manag</i>	1105	-0.010	0.144	-1.901	1.481
<i>DEarn_Manag*CSR</i>	1105	-1.695	5.202	-26.585	23.393
<i>Dentrenchment</i>	1105	0.012	0.108	0.000	1.000
<i>Dentrench*Earn_manag</i>	1105	-0.001	0.018	-0.414	0.105
<i>Income_smoothing</i>	873	0.103	0.606	-0.993	0.998
<i>R&D_intensity</i>	1105	41.187	113.077	0.000	896.687
<i>Ownership_concentration</i>	1105	15.290	6.950	3.130	100.000
<i>Institut_ownership</i>	1105	2.571	6.100	0.000	89.650
<i>Risk</i>	1105	1.046	0.762	-0.439	5.164
<i>Size</i>	1105	18403.810	32582.880	40.103	303756.000
<i>Leverage</i>	1105	24.121	15.667	0.000	91.460
<i>Financial_Resources</i>	1105	0.587	0.461	0.073	5.007

TABLE 1B: Correlations Matrix ^a

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
<i>CSR</i>	1	1.000													
<i>CFP</i>	2	0.048	1.000												
<i>Earn_manag</i>	3	0.122*	0.071*	1.000											
<i>Dentrench*Earn_manag</i>	4	0.088*	0.026	-0.030	1.000										
<i>DEarn_Manag*CSR</i>	5	0.297*	-0.090*	-0.040	-0.003	1.000									
<i>Income_smoothing</i>	6	0.051	0.030	-0.017	0.019	0.027	1.000								
<i>Dentrenchment</i>	7	-0.025	-0.021	0.018	-0.351*	0.055*	-0.005	1.000							
<i>R&D_intensity</i>	8	0.124*	0.015	0.026	0.026	0.003	0.009	-0.008	1.000						
<i>Ownership_concentration</i>	9	-0.118*	-0.014	-0.060*	0.000	0.015	0.022	-0.016	-0.012	1.000					
<i>Institut_ownership</i>	10	-0.034	0.029	-0.047*	0.014	0.016	0.047	-0.053*	0.014	0.287*	1.000				
<i>Risk</i>	11	0.097*	-0.044*	0.070*	0.021	0.019	-0.044	-0.049*	-0.002	0.035	-0.044*	1.000			
<i>Size</i>	12	0.194*	0.000	0.003	0.016	0.089*	0.010	-0.014	-0.020	-0.014	-0.038	-0.061*	1.000		
<i>Leverage</i>	13	-0.025	-0.204*	0.080*	-0.066*	-0.015	-0.042	0.020	0.011	0.045*	0.016	0.0950*	-0.054*	1.000	
<i>Financial_Resources</i>	14	-0.074	0.099*	0.015	0.042*	-0.002	-0.021	0.004	-0.043*	0.023	0.014	-0.042*	-0.053*	0.038	1.000

^a * Means that the correlation is significant at 10% level.

TABLE 2A: Estimation of CSR on Financial Performance and Discretionary Accruals ^a

Table 2A shows the results of estimating CSR in terms of earnings management and other control variables defined in the text. In column 4 the dependent variable is the average value of CSR between period t and t-1.

<i>Dependent Variable</i>	CSR	CSR	CSR	Average CSR
<i>CFP(t-1)</i>			0.066* (1.720)	0.047 (1.520)
<i>Earn_manag</i>	0.836*** (2.370)	0.704** (1.870)	0.689** (1.930)	0.495* (1.720)
<i>Dentrench*Earn_manag</i>		0.676** (1.960)	0.683** (1.990)	0.443* (1.600)
<i>Dentrenchment</i>		5.291 (1.460)	4.968 (1.390)	4.942* (1.710)
<i>R&D_intensity</i>	1.189 (1.170)	1.283 (1.250)	1.177 (1.160)	1.081 (1.320)
<i>Ownership_concentration</i>	-0.137 (-0.470)	-0.192 (-0.660)	-0.161 (-0.560)	-0.284 (-1.220)
<i>Institut_ownership</i>	0.072 (1.290)	0.080 (1.320)	0.072 (1.290)	0.069 (1.530)
<i>Risk(t-1)</i>	0.943 (1.480)	1.158* (1.750)	1.096* (1.720)	1.002** (1.960)
<i>Size</i>	4.670*** (2.760)	4.493*** (2.610)	4.514*** (2.670)	4.375*** (3.220)
<i>Leverage</i>	0.341 (0.350)	0.303 (0.310)	0.648 (0.650)	0.357 (0.440)
<i>Financial_resources</i>	-2.436 (-0.220)	-1.558 (-0.140)	-11.580 (-0.960)	-5.551 (-0.570)
<i>Constant</i>	-0.917** (-2.290)	-0.642 (-1.140)	-1.418*** (-2.940)	-1.141*** (-2.940)
Number of observations	1105	1105	1105	1105
<i>R</i> ²	4.46%	4.52%	4.96%	3.97%
<i>Fitness Test</i>	2.11 (0.030)	1.87 (0.035)	2.21 (0.01)	2.56 (0.003)
<i>Hausman Test</i>	14.79 (0.060)	23.54 (0.023)	19.01 (0.061)	25.53 (0.020)

^a Standardized regression coefficients are shown in the table. T-statistics in parentheses.

* $p = 0.10$; ** $p = 0.05$; *** $p = 0.01$

TABLE 2B: Robustness –Regulated Sectors; Anglo-Saxon Countries-

Table 2B shows the results of estimating CSR in terms of earnings management and other control variables defined in the text. In column 1, we focus on regulated sectors (water supply, gas supply, electric services, telecommunication), while in column 2 the results are from the remaining sectors. Column 3 focuses on Anglo-Saxon countries as defined in La Porta *et al* (1998) (*e. g.* Australia, Canada, Hong Kong, Ireland, Singapore, Thailand, UK and the US). Finally in column 4, we focus on non-Anglo-Saxon countries (French, German, Scandinavian-legal origin countries).

Dependent variable	CSR		CSR	
	Regulated Sect	Non-reg. Sect.	Anglo-Saxon	Non-Anglo-Sax
<i>CFP(t-1)</i>	0.018** (2.100)	0.004 (1.310)	0.004* (1.650)	0.011 (1.290)
<i>Earn_manag</i>	0.168** (1.890)	0.140 (1.120)	0.075*** (2.500)	-0.002 (-0.050)
<i>R&D_intensity</i>	-1.367 (-0.410)	0.122* (1.620)	-0.034 (-0.190)	0.110*** (2.610)
<i>Ownership_concentration</i>	0.136** (2.080)	-0.028 (-1.250)	-0.001 (-0.040)	-0.006 (-0.270)
<i>Institut_ownership</i>	0.029*** (2.370)	0.021*** (4.900)	0.005 (0.920)	0.011** (1.850)
<i>Risk(t-1)</i>	0.249*** (2.350)	0.241*** (4.620)	0.115** (2.240)	0.022 (0.320)
<i>Size</i>	1.243*** (2.720)	0.492*** (3.810)	0.281*** (2.360)	0.521*** (4.910)
<i>Leverage</i>	0.140 (0.820)	-0.014 (-0.170)	0.089 (1.180)	0.181** (2.200)
<i>Financial_resources</i>	-1.583 (-0.660)	0.241 (0.250)	-1.135 (-1.350)	1.654 (0.520)
<i>Constant</i>	-0.565 (-0.530)	-0.152*** (-3.440)	-0.485*** (-9.420)	-0.305 (-0.320)
<i>Number of observations</i>	196	909	819	286
<i>R²</i>	30.84%	14.16%	30.04%	25.34%
<i>Fitness Test</i>	4.15 (0.000)	8.36 (0.000)	17.37 (0.000)	4.72 (0.000)
<i>Hausman Test</i>	32.91 (0.000)	18.79 (0.043)	28.42 (0.001)	42.31 (0.000)

^a Standardized regression coefficients are shown in the table. T-statistics in parentheses.

* $p = 0.10$; ** $p = 0.05$; *** $p = 0.01$

TABLE 2C. Robustness: Income Smoothing; Particular stakeholders

Table 2C shows the results of estimating CSR in terms of earnings management and other control variables defined in the text. In columns 1 and 2, we define the variable for earnings management by a measure of income smoothing computed as the correlation between changes in accruals and changes in cash flow. In column 3 the dependent variable is the score for customer satisfaction, while the score for workers' satisfaction is the dependent variable in column 4.

<i>Dependent variable</i>	CSR	CSR	Customers	Employees
<i>CFP(t-1)</i>	0.058 (1.400)	0.055 (1.340)	0.122** (2.140)	0.043 (1.060)
<i>Income_smoothing</i>	0.991** (1.860)	0.953** (1.800)		
<i>Earn_manag</i>		5.484*** (2.450)	4.689** (1.980)	3.812** (2.230)
<i>R&D_intensity</i>	1.703 (1.480)	1.827 (1.590)	-0.760 (-0.500)	1.163 (1.090)
<i>Ownership_concentration</i>	-0.003 (-0.010)	-0.052 (-0.140)	-0.683 (-1.590)	0.064 (0.210)
<i>Institut_ownership</i>	0.036 (0.550)	0.035 (0.540)	0.166** (1.860)	-0.184*** (-3.170)
<i>Risk(t-1)</i>	1.635** (2.060)	1.621** (2.050)	-1.237 (-1.330)	0.989 (1.490)
<i>Size</i>	6.559*** (3.760)	7.304*** (4.150)	3.797* (1.660)	-0.562 (-0.320)
<i>Leverage (t-1)</i>	0.453 (0.390)	0.481 (0.420)	1.077 (0.730)	1.826* (1.740)
<i>Financial_resources</i>	-14.932 (-1.160)	-13.699 (-1.070)	-37.548** (-2.070)	-26.897** (-2.130)
<i>Constant</i>	-2.008*** (-3.480)	-1.910*** (-3.320)	-2.644*** (-2.770)	-2.410*** (-3.890)
<i>Number of observations</i>	873	873	1105	1105
<i>R²</i>	5.59%	6.78%	2.90%	3.62%
<i>Fitness Test</i>	3.12 (0.01)	3.44 (0.001)	1.78 (0.054)	21.93 (0.000)
<i>Hausman Test</i>	21.51 (0.01)	23.95 (0.008)	22.49 (0.021)	29.08 (0.001)

^a Standardized regression coefficients are shown in the table. T-statistics in parentheses.

* $p = 0.10$; ** $p = 0.05$; *** $p = 0.01$

TABLE 3: Moderating effect of Earnings management on the CFP-CSR

Table 3 shows the results of estimating CFP in terms of CSR as well as the variable for earnings management and other control variables defined in the text.

Dependent Variable	CFP	CFP	CFP
<i>CSR(t-1)</i>			0.049*** (2.760)
<i>Earn_manag</i>	0.457*** (3.170)		
<i>Earn_manag(t-1)</i>		-0.272* (-1.720)	-0.034** (-2.780)
<i>DEarn_Manag*CSR (t-1)</i>			-0.045*** (-3.340)
<i>R&D_intensity</i>	-0.217 (-0.430)	-0.007 (-0.010)	0.176 (1.050)
<i>Ownership_concentration</i>	-0.082 (-0.510)	-0.008 (-0.040)	-0.007 (-0.048)
<i>Institut_ownership</i>	-0.052* (-1.620)	-0.051 (-1.520)	0.005** (2.050)
<i>Risk(t-1)</i>	-0.135 (-0.500)	-0.503 (-1.470)	0.225*** (5.290)
<i>Size</i>	2.280*** (3.510)	7.539*** (9.270)	0.219* (1.100)
<i>Leverage (t-1)</i>	1.630*** (3.870)	1.105*** (2.310)	-0.035 (-0.830)
<i>Financial_resources</i>	85.369*** (48.880)	122.166*** (24.890)	25.633*** (20.890)
<i>Constant</i>	2.538*** (17.650)	3.139*** (16.130)	0.519*** (15.650)
<i>Number of observations</i>	1105	1105	743
<i>R²</i>	65.86%	42.39%	64.55%
<i>Fitness Test</i>	304.84 (0.000)	78.55 (0.000)	46.51 (0.000)
<i>Hausman Test</i>	127.74 (0.000)	131.94 (0.000)	303.48 (0.000)

^a Standardized regression coefficients are shown in the table. T-statistics in parentheses.

* $p = 0.10$; ** $p = 0.05$; *** $p = 0.01$