

# **THE ENGAGEMENT OF AUDITORS ON CORPORATE SOCIAL RESPONSIBILITY DISCLOSURE**

## **Abstract**

In this research, we aim at examining how large auditing firms and audit/non-audit fees affect Corporate Social Responsibility (hereafter CSR) disclosure. We show that the big four auditing firms and audit and non-audit fees paid by audited firms encourage CSR reporting. Overall, our findings suggest that big auditing firms play a relevant role in CSR disclosure, which may help to mitigate informative asymmetries between managers and stakeholders. Furthermore, audit and non-audit fees paid by audited companies promote the voluntary non-financial information disclosure. These findings should be of interest to policy makers, given the relevant role that CSR disclosure may play in the decision-making process of all the stakeholders.

**Keywords:** Audit fees, big auditing firms, corporate social responsibility, non-audit fees.

## **INTRODUCTION**

The term of CSR has evolved over time. Currently, the concept of CSR implies that companies integrate voluntarily economic, environmental, and social aspects in their decisions, operations and interactions with stakeholders. Many companies disclose their CSR matters in the annual sustainability report. However, the content and minimum information disclosed in the sustainability report are not established by law. They are just recommendations from bodies involved with CSR matters. The annual sustainability report suggested by the Global Reporting Initiative (GRI) is the most worldwide used by companies. The GRI guidelines provide several principles based on the quality of the report such as balance, comparability, precision, punctuality, clarity and reliability. The publication of GRI reports allows companies to enhance the quality and transparency of sustainability reports (Fernandez-Feijoo et al., 2014).

For over a decade, academics and researchers have analysed the differences between disclosing CSR information in the annual reports and on the Internet (Branco & Rodrigues, 2008), the relationship between CSR disclosure and financial performance (Malik, 2015), earnings management (Chih et al., 2008), credit ratings (Attig et al., 2013), cost of equity capital (El Ghouli et al., 2011) and firm reputation (Linthicum et al., 2010), among others. This evidence shows different contributions depending on the theoretical perspective.

In the aftermath of financial scandals such as Enron and Madoff in the USA and Afinsa-Fórum Filatélico, Gescartera and Gürtel in Spain, among others, audit quality has been questioned. Consequently, audit professionals and auditing firms have been seeking to recover the confidence and credibility of financial statements' users. Furthermore, audit and non-audit fees have been considered as a tool to influence the quality of financial information disclosed by firms in their annual reports (Chen et al., 2015). In this line, fees paid to auditors for auditing and non-auditing services (management and human resources consultancy and

tax advice, among others) may be large when the efforts exerted by auditors to review financial statements and other issues are higher, thus, increasing audit quality. Prior research shows the influence of auditing firms on earnings management (Nelson et al., 2002; Talpin et al., 2014) and higher audit quality (Hegazy et al., 2015), or the effect of audit fees on firm value (Lopo-Martinez & da Jesus-Moraes, 2014), free cash flow (Nikkinen & Sahlström, 2004), firm reputation (Chen et al., 2015) or quality of financial information (Hoitash et al. 2007) and the impact of non-audit fees on abnormal accruals (Antle et al. 2006), firm performance (Alshawish et al. 2015) or financial reporting quality (Habib, 2012), among others. Nevertheless, CSR literature has paid little attention to the relationship between auditing and CSR disclosure practices. Furthermore, to the best of our knowledge, this research focuses on different countries (Kuo et al., 2012; Khan et al., 2013; Chen et al., 2015), but none of them refers to the Spanish context, characterised by a high ownership concentration and low investor protection. Thus, the aim of this paper is twofold. First, we evaluate how big auditing firms influence CSR reporting, and second, we analyse how audit and non-audit fees affect CSR disclosure.

Our results show that big auditing firms are positively associated with CSR reporting, suggesting that they are a relevant mechanism to disclose CSR practices since companies audited by them are more likely to improve CSR reporting. We also demonstrate that audit and non-audit fees paid by audited companies have a positive effect on CSR reporting. Overall, our findings suggest that in Spain, despite ownership concentration, the lack of liquid capital markets, inexistence of active market control and the financial crisis, big auditing firms play a relevant role in enhancing CSR disclosure. Additionally, the results provide evidence that as audit and non-audit fees increase, CSR disclosure also does. This may be justified because auditors employ more time and efforts in audit and non-audit services, which may improve CSR reporting.

Our study contributes to the literature in several ways. First, this study encourages the debate on CSR disclosure practices and the reasons that explain how CSR reporting can be enhanced, giving special attention to the contributions of big audit firms on CSR practices in a difficult scenario like Spain, where the financial crisis and the succession of financial scandals have led to the loss of credibility and transparency of the financial system. Second, our results support the thesis that big auditing firms improve CSR reporting providing to stakeholders more transparent and credible financial and non-financial information. Third, our paper is, to the best of our knowledge, the first to analyse the relationship between audit and non-audit fees and CSR disclosure. Thus, this paper explains how auditors and audit and non-audit fees are relevant in disclosing CSR information. Finally, this analysis is relevant in Spanish context as it offers a new understanding and greater insights into the relationship between auditing and CSR, showing that big auditing firms and audit/non-audit fees improve CSR disclosure.

This article proceeds as follows. In section 2 the institutional setting is described. Thereafter, we present the literature review and hypotheses (section 3), we explain the research method (section 4), we discuss the results (section 5), and we present conclusions, highlight contributions, and offer recommendations for future research (section 6.)

## **INSTITUTIONAL SETTING**

In most of the European code law countries, including Spain, the protection of minority shareholders and corporate governance rules are weak. In Spain, central and regional governments have made strong decisions and initiatives to implement CSR disclosures practices, supporting the European Union decisions on CSR initiatives (European Commission, 2011).

The National Securities Market Commission (CNMV) published the Spanish Listed Companies Transparency Act (Law 26/2003) in 2003, whose aim was also to establish the minimum content and structure of CSR report. This law recommends listed firms to disclose economic, social and environmental information for shareholders in particular and, stakeholders in general.

In June 2006, the Spanish Government developed the White Book on CSR (*Libro Blanco de RSC*) in order to promote and strengthen CSR disclosure. The Parliamentary Commission on CSR presented in this book its contributions and conclusions about this issue. In 2008, the Spanish government created the Government Committee on CSR (Consejo Estatal de RSE-CERSE) appointed by the Ministry of Work and Foreign Affairs. The objectives of this committee are to identify and promote the best practices in CSR. Some years later, through the new Act 2/2011, of 4 March, Law for Sustainable Economy, the Spanish Government encourages firms to create and disclose a set of indicators, based on globally recognized standards that could be used as reference models. Companies could publish the information about policy and results of CSR activities, goals, characteristics, indicators in an annual report. Furthermore, each Autonomous Community (regional government) has developed measures to enhance CSR disclosure.

The Spanish regulatory bodies have published a set of codes of Corporate Governance in order to protect minority shareholders, to enhance the transparency of the stock market and to improve the quality of financial information. These codes are: Olivencia Report in 1998, Aldama Report in 2003 and the Unified Code of Corporate Governance or Conthe Code in 2006, updated in 2015. These codes are characterized by recommending compliance with corporate governance regulations, and in case of non-compliance, companies should explain the reasons (comply or explain principle). Concerning CSR, the Conthe Code (2015) recommends the minimum content that CSR annual reports should disclose. It also provides

the bases for disclosing transparent financial and non-financial information on the company's business. However, firms are not sanctioned if they do not comply with these recommendations.

The Spanish CSR observatory (2013) conducted a study with the IBEX-35 firms, reporting that 29 companies release corporate social responsibility information either in stand-alone reports or integrated into annual financial reports. Authors such as Kolk and Perego (2010) and Fernandez-Feijoo et al. (2014), among others, document that in civil law environments like Spain, Portugal or Denmark, the disclosure of CSR information is higher than other countries such as the USA.

In the wake of the financial scandals, Spain was affected by international regulatory trends and recommendations aimed at re-establishing users' trust in financial information. The regulatory response in Spain was based on the Financial System Reform Act, 2002 (Law 44 / 22 November 2002), which sought to achieve greater transparency and improve the credibility of financial information by regulating auditors' independence and requiring publication of audit and non-audit fees paid to the company's auditor. The aim of the requirement of full disclosure of audit and non-audit fees of auditing firms is to supply information to investors and let the market decide whether the magnitude of non-audit fees impairs their confidence about auditors' independence. The prior Auditing Law 19/1988 was replaced by the Act 12/2010, and this Act was replaced by the Act 22/2015. Both Acts support the previous requirements of audit and non-audit fees, requiring also the Act 22/2015 that auditors must inform the Institute of Accounting and Auditing (ICAC) annually about the fees and hours invoiced to each audited firm, distinguishing between audit and non-audit fees. Auditors can provide non-audit services to their clients when these services do not impair auditor independence. Thus, the Auditing Law indicates that non-audit services may threaten auditor

independence because auditors may have to revise financial statements prepared by them or have personal interest with the client, among others.

We argue that the Spanish context provides an interesting setting and an opportunity to analyse the impact of auditing firms and audit/non audit fees on CSR disclosure, since CSR reports are not compulsory for listed companies, but institutional bodies encourage them to disclose economic, social and environmental information.

## **THEORETICAL FRAMEWORK AND HYPOTHESES**

The most influential theoretical framework to analyse the effect of big auditing firms and audit and non-audit fees paid to auditors on CSR disclosure is rooted in agency theory (see Pisani et al., 2017). This theory posits that the divergence of interests between principal (shareholders) and agent (managers and directors) causes information asymmetries between the parties, since owners tend to delegate some responsibilities on their behalf, generating agency problems (Jensen & Meckling, 1976). Therefore, given that shareholders have imperfect information about firms and managers' behaviours, managers can act in their self-interest (Jensen & Meckling, 1976). Consequently, financial statements provided by managers to shareholders can be erroneous, unclear or falsified intentionally. Shareholders may need to develop control mechanisms for monitoring managers to reduce agency costs such as external audits (Anderson et al., 1993), and CSR activities or disclosure (Harjoto & Jo, 2011; Fernandez-Feijoo et al., 2014; Martínez-Ferrero et al., 2015; Jo et al., 2016). These mechanisms also lead to a higher credibility and transparency of firms (Fernandez-Feijoo et al., 2014; Ravlic & Yarnold, 2015).

Firms use CSR issues to build a socially responsible reputation (Linthicum et al., 2010; Ioannou & Serafeim, 2014) and a brand image (Ioannou & Serafeim, 2014), which allow them to benefit in front of capital markets, stakeholders and the society in general terms. This view is supported by Branco and Rodrigues (2006), who show that firms that provide a better

socially responsible reputation may enhance the relations with bankers, investors, customers, suppliers and competitors.

Agency theory posits that owners prefer to contract external auditors since their opinions are independent from the firms. In this sense, companies prefer to hire big four auditors in order to maintain their reputation, and change the auditors' firm before the public announcement of an error, indicating the necessity of the companies to disclose true and transparent information. The quality of auditing services depends on the likelihood that the auditor both discovers the accounting breach and communicates the mistake (DeAngelo, 1981). Furthermore, one of the main responsibilities of auditors is to recommend that their clients disclose social and environmental information to stakeholders (Nordgren & Wang, 2012). In general terms, previous research has analysed the association between auditing firms and voluntary disclosure of information. Concretely, Barros et al. (2013) and Al-Jandadi et al. (2013) find that large auditing firms (Big four) improve the voluntary disclosure information in French and Saudi Arabia companies, respectively. Therefore, these findings support the idea that big auditing firms supply more reliable information. Additionally, authors such as Ahmad et al. (2003), Aparecida-De Moraes et al. (2005) and Murcia and Dos Santos (2010) analyse the association between big auditing firms and voluntary disclosure of environmental, social and economic information. Lim et al. (2008), Nordgren and Wang (2012) and Białek-Jaworska and Matusiewicz (2015) report a positive relation between big four auditing firms and the voluntary disclosure of CSR information. Large auditing firms provide assurance of the reports quality, improving their credibility and reducing the manipulation of accounting information (Dechow et al., 2010). In this vein, Perego (2009) reports that in countries characterised by weak corporate governance rules, companies choose a large auditing firm as assurance provider. Sierra et al. (2013) also find that the decision to disclose CSR reports depends on whether financial statements are audited by one of the big



auditing firm or not. According to Ackers (2009), big auditing firms are the prevalent provider of CSR assurance. Therefore, big auditing firms can encourage the voluntary disclosure of CSR information, developing different marketing strategies to assure the disclosure of the sustainability report (Sierra et al., 2013; Ferreira-Gomes et al., 2015).

Thus, based on the above arguments, big auditing firms improve financial reporting quality by constraining opportunistic and unethical accounting practices (Lim et al., 2008; Uwuigbe, 2011); consequently, they also encourage companies to enhance CSR reporting, ensuring a higher quality of nonfinancial information. The increase of voluntary CSR disclosure by firms provides credibility and transparency to nonfinancial information, such as social and environmental.

Hence, we posit the following hypothesis:

***Hypothesis 1:** Firms audited by big auditing firms are positively associated with CSR reporting*

According to Jensen and Meckling (1976), agency costs are composed of monitoring costs, bonding costs and residual loss, being audit fees one of the main components of supervision costs. Audit fees are defined as the auditor's effort for auditing financial statements, which affect directly the audit risk that the auditor is willing to assume (Simunic, 1980; Hay et al., 2006). The audit pricing is a relevant matter in the corporate governance literature because it may enhance financial reporting quality (Hoitash et al., 2007), firm value (Lopo-Martinez & da Jesus-Moraes, 2014), free cash flow (Nikkinen & Sahlström, 2004), firm reputation (Chen et al., 2015), voluntary disclosure of CSR (Chen et al., 2015) and CSR performance (Chen et al., 2012), among others.

Agency theory suggests that problems generated by the separation between managers and owners may affect auditor's risk assessments, which in turn may influence variations in audit fees. Kim and Kim (2013) also show that companies with weak governance have more

audit risk, and thus, they will pay higher audit fees since auditors put more efforts to audit their financial statements, and invest more hours in reviewing the information. This opinion is also supported by Simunic and Stein (1996).

According to agency theory, audit fees paid to auditors not only can provide credibility and transparency to financial reporting, but also to non-financial reporting such as CSR disclosure. Given that CSR reporting is voluntary, its credibility can be under suspicion, and consequently, CSR needs to be assessed, for example by an auditor. Following Ball et al. (2002), financial performances audited by independent experts may enhance the trustworthiness of the information that the management team discloses voluntarily to external users, particularly stakeholders. Thus, in accordance with Ball et al. (2002), the certificatory role of auditors also provides assurance to non-financial voluntary disclosure, such as CSR reporting. Additionally, the lack of convergence between financial information and CSR can be confusing and misleading and, therefore, managers can lose trustworthiness and reputation. Accordingly, in order to mitigate this potential problem, the management team can prefer to devote more resources to auditing services to guarantee the reliability of both financial and non-financial information (CSR disclosure) (Chen et al., 2015). Hence, higher audit fees will imply higher financial reporting quality that includes CSR reporting. In this line, Tuo (2015) provides evidence that auditors charge higher audit fees when firms disclose the sustainability report, since this report is complementary to conventional financial statements. Chen et al. (2012), Kim and Kim (2013) and Chen et al. (2015) also report a positive association between audit fees and the voluntary disclosure of CSR.

Non audit-services are perceived as one of the main concerns because of numerous financial scandals that have happened in the last decade. The growth of non-audit fees paid to auditors may be because managers have less fear to demand advisory services from their auditors. However, these fees can compromise auditor's independence, as auditing literature

suggests (Frankel et al., 2002; Dobler, 2014), mainly because this leads to a greater economic dependence from auditors to their clients and, as a result, it may affect negatively audit quality (DeAngelo, 1981; Ye et al., 2011). Therefore, in order to reduce or mitigate the negative effects that users may perceive by the lack of auditor independence, because audit firms provide jointly audit and non-audit services (DeFond et al., 2002; Frankel et al., 2002; Reynolds & Francis, 2000), audit firms that offer non-audit services will encourage the disclosure of CSR information. The mandatory disclosure of non-audit fees in financial statements is used as an indicator to reduce the auditor's opportunistic behaviour and at the same time, to evaluate the auditors' activities in the audited firm. Because of this scrutiny, when these non-audit fees are charged they can contribute to increase non-financial information (social and environmental). Arnold et al. (2014) provide evidence that the joint provision of audit and non-audit services allows auditors to know additional aspects of their clients and, accordingly, the supplying of non-audit services will enhance auditor's ability to disclose breaches. Previous evidence reports the impact of non-audit fees charged by auditors on abnormal accruals (Antle et al., 2006), firm performance (Alshawish et al., 2015) or financial reporting quality (Habib, 2012), among others. Nevertheless, there is no evidence, to the best of our knowledge, which analyses the relationship between non-audit fees and CSR disclosure.

According to the above arguments, audit and non-audit fees paid to auditors can increase the assurance of financial information and CSR reporting. Thus, we hypothesize that audit and non-audit fees can contribute to credible and transparent non-financial information, affecting positively CSR reporting.

Thus, we propose the two following hypotheses:

**Hypothesis 2a:** Audit fees paid by audited firms are positively associated with CSR reporting

**Hypothesis 2b:** Non-audit fees paid by audited firms are positively associated with CSR reporting

## **EMPIRICAL DESIGN**

### **Sample**

The sample is composed by Spanish non-financial listed firms in the period 2004-2014. We excluded financial companies from the sample because they are under the scrutiny of financial supervisors and because they comply with particular accounting rules, reducing the comparability of the data.

We built an unbalanced panel of 1.312 firm-year observations. However, according to Arellano (2003), the results provided by unbalanced panels are as reliable as those based on balanced panels.

Financial, audit and corporate governance data was obtained from the Public Register of the Spanish Securities Market Commission (CNMV), from the “Sistemas de Análisis de Balances Ibéricos” (SABI) database and from the corporate governance annual reports that listed companies are required to disclose since 2003. Most listed firms disclose in the annual reports the non-audit services received from their auditing firms. CSR data was obtained from companies’ web pages and from the Global Reporting Initiative (GRI) web page. The GRI is an important tool for firms that want to be accountable to their stakeholders and to provide financial, environmental and social performance information (Fernández-Feijoo et al., 2014b).

### **Variables**

The CSR index used as dependent variable is defined as CSR6. It is based on the level of CSR information disclosed and its assurance, in line with Kuo et al. (2012) and Kim and Kim (2013), among others. The index is calculated adding the following six items, measured as dummies variables: (1) Disclosure of CSR information (if firms provide economic, social and

environmental information), (2) Disclosure of CSR information in a standalone report (3) Disclosure of the CSR information in accordance with the GRI guidelines, (4) the CSR report is audited by the GRI, (5) the CSR information is also audited by an external and independent body (external assurance) and (6) whether the assurance scope refers to the entire CSR report. Thus, the maximum value of the index can be 6.

As independent variables, we define big auditing firms as **BIGFOUR**, and it is calculated as a dummy variable that equals 1 if the company is audited by one of the Big Four auditing firms (KMPG, Deloitte, E&Y and PWC) and 0, otherwise. The variable audit fees is defined as **LNAFEES**, and it is measured as the logarithm of audit fees (expressed in thousands of Euros). Finally, we also use the variable non-audit fees, defined as **LNNAFEES**, and calculated as the logarithm of non-audit fees (expressed in thousands of Euros).

We control some characteristics that potentially affect CSR reporting, according to previous literature. Board size is denoted as **BDSIZE** and it is measured as the total number of directors on boards. Previous evidence provided a positive relationship between board size and CSR (Cuadrado-Ballesteros et al., 2015; Barakat et al., 2016). **INDP** represents the proportion of independent directors on boards. Authors such as Khan et al. (2013) and Harjoto et al. (2015), among others, revealed a positive relationship between independent directors on boards and CSR. **INST** measures the proportion of institutional directors on boards. Harjoto and Jo (2011) and Harjoto et al. (2015) provided evidence of the negative impact of the proportion of institutional directors on CSR. Ownership concentration is also analysed and is defined as **OWNCON**. Testera-Fuertes and Cabeza-García (2013) and Harjoto et al. (2015) reported a positive relationship between ownership concentration and CSR. Firm size is incorporated through the logarithm of total assets and defined as **SIZE**. Past research (e.g., Harjoto et al., 2015) reported a positive association between firm size and CSR. The variable

return on assets is also used and is defined as ROA. It is calculated as the operate income before interests and taxes over total assets.

Khan et al. (2013), Harjoto et al. (2015) and Barakat et al. (2016) found that firms with a high ROA had greater potential for CSR. We also control for leverage of the company, defined as LEV. It is calculated as the ratio of book value of debt over total assets. Previous literature (e.g., Barnea & Rubin, 2010) showed that high financial leverage was negatively related to CSR. Finally, we consider the business sector, defined as SECTOR. It is a dummy variable that equals 1 if the company belongs to the sector analysed and 0, otherwise. We use the industry classification set up by the CNMV, and the sectors used are the following: SEC1 (transport and communications sector), SEC2 (cement, glass and construction material sector), SEC3 (commerce and other services sector), SEC4 (construction sector), SEC5 (energy and water sector), SEC6 (insurance sector), SEC7 (chemical industry sector), SEC8 (real estate sector), SEC9 (mass media sector), SEC10 (basic metal), SEC11 (new technologies sector), SEC12 (other manufacturing industries sector), SEC13 (metalworking sector) and SEC14 (agriculture and fishing sector). Nordgren and Wang (2012) demonstrated that consumer goods industry had a negatively significant relationship with corporate social disclosure in China. In Table 1 we provide the summary of the dependent, independent and control variables.

<Insert Table 1 about here>

Thus, we propose the following baseline model:

$$CSR_{it} = \alpha + \beta_1 \cdot BIGFOUR_{it} + \beta_2 \cdot LNAFEES_{it} + \beta_3 \cdot LNNAFEES_{it} + \beta_4 \cdot BDSIZE_{it} + \beta_5 \cdot INDP_{it} + \beta_6 \cdot INST_{it} + \beta_7 \cdot OWNCON_{it} + \beta_8 \cdot SIZE_{it} + \beta_9 \cdot ROA_{it} + \beta_{10} \cdot LEV_{it} + \beta_{11} \cdot SEC(i)_{it} + \mu_i + \vartheta_t + \varepsilon_{it}$$

where  $\mu_i$  and  $\bar{U}_t$  represents firm fixed and year fixed effects, respectively, and  $\varepsilon_{it}$  is the error term. Firm fixed effects are used to capture companies' constant and non-observable features that are potentially correlated with CSR variable.

## RESULTS

### Descriptive analysis

Descriptive statistics are shown in Table 2. According to Table 2, companies' CSR reporting is 0.776 out of 6 (12.93%), on average, indicating that CSR disclosure of Spanish listed firms is established at a low quality level. Thus, Spanish listed firms should increase CSR reporting in order to get or to approach to a score of 6.

Audit and non-audit fees are 4.52 and 2.63, respectively, on average, (expressed in thousands of Euros). This suggests that audited firms pay for auditing services twice the amount paid by non-audit services. The board size is, on average, 10.20 members, the proportion of independent directors is 30.27% and the proportion of institutional directors is 44.69%. It is noteworthy that the ownership concentration is 43.67%, evidencing the high ownership concentration in Spain. Furthermore, the mean size of the company is 10.56 (napierian logarithm of the total assets, expressed in thousands of Euros), the return on assets is 2.55% and the level of leverage of the companies is, on average, 53.19%, while 84.07% of the firms of the sample have been audited by one of the big four auditing firms. Concerning the business sector, 4.27% of the firms in the sample belongs to SEC1 (Transport and communications), 3.05% to SEC2 (Cement, glass and construction material), 9.30% to SEC3 (Commerce and other services), 6.02% to SEC4 (Construction), 9.38% to SEC5 (Energy and water), 4.19% to SEC6 (Insurance), 2.60% to SEC7 (Chemical industry), 13.16% to SEC8 (Real Estate), 3.28% to SEC9 (Mass media), 3.74% to SEC10 (Basic Metal), 7.55% to SEC11

(New Technologies), 23.55% to SEC12 (Other manufacturing industries), 8.31% to SEC13 (Metalworking) and 1.60% to SEC14 (Agriculture and fishers).

<Insert Table 2 about here>

We have calculated the correlation matrix to test for multicollinearity, not reported for the sake of brevity. None of the correlation coefficients are greater than 0.80 (see Archambeault & DeZoort, 2001). Thus, these findings suggest that multicollinearity should not be a concern.

### **Baseline Regression Results**

Table 3 reports the estimated results from the baseline regression models. We have built three models in order to analyse the individual effect of the three independent variables on CSR disclosure practices. As can be observed, the three models are statistically significant.

In Model 1, we analyse the effect of big auditing firms on CSR disclosure practices. The results report that the variable big audit firms presents the expected sign and is statistically significant. Hence, the first hypothesis cannot be rejected. This result suggests that firms audited by large audit firms contribute to increase CSR disclosure. Similar evidence was reported by Lim et al. (2008), Uwuigbe (2011), Nordgren and Wang (2012) and Białek-Jaworska and Matusiewicz (2015), among others. This result implies that big auditing firms enhance the disclosure of economic, environmental and social information. Our results support the premise that big auditing firms have greater ability to increase the quality of non-financial information, giving a signal of credibility and transparency to CSR reports.

Model 2 and 3 examine the impact of audit and non-audit fees paid by audited companies on CSR disclosure practices, respectively. These findings also show that the audit and non-audit fees are positive and statistically significant, as predicted. Therefore, the second and third hypotheses cannot be rejected. Our results suggest that higher audit and non-audit fees paid by audited companies contribute to increase CSR reporting. Authors such as Chen et al. (2012), Kim and Kim (2013) and Chen et al. (2015) also report a positive association between



audit fees and CSR disclosure practices. Our evidence suggests that audit fees and non-audit fees paid to auditors play an important role in enhancing CSR activities. Therefore, our findings support the view that audit and non-audit fees paid by audited companies promote the voluntary non-financial information disclosure in order to provide this relevant information to investors, since it is not incorporated in the mandatory financial statements. Additionally, our research also supports the thesis that auditors may foster firms to report more CSR information and to improve assurance when they jointly supply audit and non-audit services, since this joint provision may cause a negative impact on the perception that users have of the auditor independence.

Concerning to control variables, we can observe that board size (BDSIZE), independent directors (INDEP), ownership concentration (OWNCON), firm size (SIZE) and return on assets (ROA) report a positive sign, as expected, and are statistically significant in the first and third model. The proportion of independent directors, are not statistically significant in Model 2. In accordance with agency theory, we can conclude that board size, independent directors, ownership concentration, firm size and return on assets have a positive significant influence on CSR reporting and, hence, on the protection of shareholder's interest and resolution of agency problems. Furthermore, the variables proportion of institutional directors on boards (INST) and business sector in which a firm operates (SEC(i)) present a negative sign and are statistically significant in the three models. The negative impact of the industry variable on CSR reporting may be justified because this study was conducted in a period where Spain has suffered a pre and post financial crisis and, therefore, the sector may prove less valuable as a factor explaining CSR disclosure than other factors. This evidence is in line with Ho and Taylor (2013), who analysed three periods (1996, 2001 and 2006) and reported that industry categories such as trading and services and industrial products in 1996 and 2001 and consumer products in 2001 influenced negatively the disclosure of financial and capital

market data information, while consumer products, industrial products, construction and property and plantation industries affected negatively the corporate and strategic disclosure index and the corporate social responsibility disclosure index in 2006. Furthermore, country-specific features may also influence more on CSR reporting than sector, consistent with Nordgren and Wang (2012). The variable leverage is not statistically significant.

<Insert Table 3 about here>

Endogeneity concerns might arise in analysis such as this. Therefore, we also address the potential endogeneity between large audit firms and audit/non-audit fees and CSR disclosure practices. We wonder whether big auditing firms and higher audit/non-audit fees lead to better CSR reporting, or whether companies with better CSR reporting attracts big auditing firms and higher audit and non-audit fees. It is more likely that the causality runs from large auditing firms and higher audit/non-audit fees to CSR disclosure, but it is also possible that CSR reporting might have an effect on big auditing firms and higher audit/non-audit fees. This issue has been addressed by bringing lagged independent variables into our regressions. The findings, unreported for the sake of brevity, are consistent with the findings reported in the baseline regression models.

### **Sensitivity Analysis**

We have checked the robustness of our findings using as dependent variable the mean of the CSR6 measure. The findings, unreported, support our earlier evidence on the baseline models, i.e., the link between big audit firms and audit/non-audit fees and CSR disclosure practices. Thus, the positive effect of large audit firms and audit/non-audit fees paid by audited companies on CSR does not depend on the CSR calculation.

## CONCLUSIONS

CSR disclosure by firms has recently received much attention in prior literature (Kuo et al., 2012; Khan et al., 2013; Ravlic & Yarnold, 2015), being intrinsically linked to the debate on corporate governance for scholars and practitioners.

Therefore, the aim of this study is to analyse whether the big four auditing firms and audit/non-audit fees are potential determinants of CSR disclosure practices by Spanish non-financial listed firms for the period 2004-2014.

Our study provides evidence of the role that big auditing firms play as a mechanism of corporate governance and their implications in CSR disclosure practices. Concretely, our findings report that firms audited by large audit firms positively influence CSR disclosure practices. Additionally, our results also confirm that audit and non-audit fees have a positive influence on CSR reporting.

Our findings have political and practical implications. Firstly, our results may be useful for stakeholders, since firms audited by a big auditing firms and that pay higher audit and non-audit fees are more likely to be encouraged to the disclose non-financial information (social and environmental) such as CSR reporting, which is considered as complementary to conventional financial statements (Tuo, 2015). Most of the Spanish listed firms are audited by one of the large auditing firms, hiring not only audit services, but also non-audit services. Secondly, our evidence may help auditing firms, particularly big auditing firms, to enhance their reputation, decreased in the last years due to financial scandals and worldwide crisis. Therefore, our findings may improve the perception of big auditing firms in the Spanish context since this paper shows the relevant role played by them in disclosing CSR information. Thirdly, this analysis may contribute to promote the debate on CSR in Spain and on how firms should be aware of the necessity of integrating this matter into business strategy. This study can give a new perspective about the implications of the Spanish listed

firms on CSR, examining the information disclosed by firms in their sustainable annual reports and the effect that auditing firms and audit/non-audit fees have on CSR reporting. Thus, our results should encourage Spanish government to make institutional changes in order to encourage companies to use a more complete CSR reporting and to audit them to enhance credibility, which will improve the decision making process of firms, given the relevant role that CSR disclosure may play in the decision-making process of all the stakeholders. Fourthly, our findings should motivate academics to continue analysing the impact of non-audit fees using other theories, since this study contributes to the corporate governance literature from an agency theory perspective. These results could open a research area in the corporate governance field. Finally, our empirical findings show that non-audit services (non-audit fees), despite the fact that they may have potential negative effects on auditor independence, are associated to best CSR disclosure practices and, consequently, they should be taken into account as an important strategic decision. To the best of our knowledge, there is no prior research that examines the association between non-audit fees and CSR disclosure.

Several limitations should be noted. First, the sample used in this study comes from Spanish non-financial listed companies for the period 2004-2014. Therefore, the results of this study should not be extrapolated to other countries and periods. Second, the sample was limited to non-financial companies, so these results cannot be generalized to financial companies.

Our findings suggest opportunities for future research. It would be interesting to examine if the presence of female directors on boards and their leadership style have impact on CSR disclosure practices, but developing an explanation not only based on agency theory, but also on legitimacy and stakeholder theories.

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**TABLE 1**  
**Variable description**

<b>Variables</b>	<b>Description</b>
CSR6	The aggregation of the six following items, measured as dummies variables: (1) Disclosure of CSR information (Firms provide economic, social and environmental information), (2) Disclosure of CSR information in a standalone report (3) Disclosure of the CSR information in accordance with the GRI guidelines, (4) the CSR report is audited by the GRI, (5) the CSR information is also audited by an external and independent body (external assurance) and (6) whether the assurance scope refers to the entire CSR report.
BIGFOUR	Dummy variable that equals 1 if the company is audited by one of the Big Four auditing firms (KMPG, Deloitte, E&Y and PWC) and 0, otherwise
LNAFEES	The log of audit fees (expressed in thousands of Euros)
LNNAFEES	The log of non-audit fees (expressed in thousands of Euros)
BDSIZE	The number of directors on boards
INDEP	The proportion of independent directors on boards
INST	The proportion of institutional directors on boards
OWNCON	The ownership concentration in the firm
SIZE	The log of total sales
ROA	Operate income before interests and taxes over total assets
LEV	Debt over total assets
SEC1	Dummy variable: 1= Transport and communications; 0 = Otherwise
SEC2	Dummy variable: 1= Cement, glass and construction material; 0 = Otherwise
SEC3	Dummy variable: 1= Commerce and other services; 0 = Otherwise
SEC4	Dummy variable: 1= Construction; 0 = Otherwise
SEC5	Dummy variable: 1= Energy and water; 0 = Otherwise
SEC6	Dummy variable: 1= Insurance; 0 = Otherwise
SEC7	Dummy variable: 1= Chemical industry; 0 = Otherwise
SEC8	Dummy variable: 1= Real Estate; 0 = Otherwise
SEC9	Dummy variable: 1= Mass media; 0 = Otherwise
SEC10	Dummy variable: 1= Basic Metal; 0 = Otherwise
SEC11	Dummy variable: 1= New Technologies; 0 = Otherwise
SEC12	Dummy variable: 1= Other manufacturing industries; 0 = Otherwise
SEC13	Dummy variable: 1= Metalworking; 0 = Otherwise
SEC14	Dummy variable: 1= Agriculture and fishers; 0 = Otherwise

**Table 2**  
**Main Descriptive Statistics**

Mean, standard deviation and percentiles. Panel A and B show the continuous and dummy variables, respectively. CSR6 is the dependent variable, measured as the aggregation of the items that the firm provides of a total of 6 items; BIGFOUR if the company is audited by one of the Big Four auditing firms (KMPG, Deloitte, E&Y and PWC) and 0, otherwise; LNAFEES is the log of audit fees (in thousands of Euros); LNNAFEES is the log of non-audit fees (in thousands of Euros); INDEP is the proportion of independent directors on the board; INST is the proportion of institutional directors on board; OWNCON is the ownership concentration in the firm; SIZE is the log of total sales; ROA is the Operate income before interests and taxes over total assets; LEV is the debt over total assets; SEC1 if the company operates in transport and communications sector and 0, otherwise; SEC2 if the company operates in cement, glass and construction material sector and 0, otherwise; SEC3 if the company operates in commerce and other services sector and 0, otherwise; SEC4 if the company operates in construction sector and 0, otherwise; SEC5 if the company operates in energy and water sector and 0, otherwise; SEC6 if the company operates in insurance sector and 0, otherwise; SEC7 if the company operates in chemical industry sector and 0, otherwise; SEC8 if the company operates in real estate sector and 0, otherwise; SEC9 if the company operates in mass media sector and 0, otherwise; SEC10 if the company operates in basic metal sector and 0, otherwise; SEC11 if the company operates in new technologies sector and 0, otherwise; SEC12 if the company operates in other manufacturing industries sector and 0, otherwise; SEC13 if the company operates in metalworking sector and 0, otherwise; SEC14 if the company operates in agriculture and fishing sector and 0, otherwise.

<b>Panel A. Continuous variables</b>						
<b>Variables</b>	<b>N</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Perc. 25</b>	<b>Perc. 50</b>	<b>Perc. 75</b>
CSR6	1312	0.776	1.455	0.000	0.000	1.000
LNAFEES	1312	4.525	1.382	3.689	4.477	5.416
LNNAFEES	1312	2.632	2.427	0.000	2.708	4.852
BDSIZE	1312	10.200	3.840	8.000	10.000	12.000
INDEP	1312	30.271%	19.160%	18.750%	30.000%	41.176%
INST	1312	44.693%	24.014%	25.833%	44.445%	62.500%
OWNCON	1312	43.667%	27.641%	19.009%	41.911%	65.417%
SIZE	1312	10.561	3.219	9.283	11.002	12.924
ROA	1312	2.555%	18.595%	-1.056%	2.616%	7.850%
LEV	1312	53.191%	34.945%	31.646%	52.644%	70.854%
<b>Panel B. Dummies variables</b>						
	<b>0</b>	<b>% (0)</b>	<b>1</b>	<b>% (1)</b>		
BIGFOUR	209	15.930%	1103	84.070%		
SEC1	1256	95.732%	56	4.268%		
SEC2	1272	96.951%	40	3.049%		
SEC3	1190	90.701%	122	9.299%		
SEC4	1233	93.979%	79	6.021%		
SEC5	1189	90.625%	123	9.375%		
SEC6	1257	95.808%	55	4.192%		
SEC7	1278	97.409%	34	2.591%		
SEC8	1139	86.840%	173	13.160%		
SEC9	1269	96.723%	43	3.277%		
SEC10	1263	96.265%	49	3.735%		
SEC11	1114	92.454%	99	7.546%		
SEC12	1003	76.448%	309	23.552%		
SEC13	1203	91.692%	109	8.308%		
SEC14	1291	98.399%	21	1.601%		

**Table 3**  
**Results of the Tobit regressions for Big Four auditing firms, Audit and Non-audit fees**

	<b>Expected sign</b>	<b>Model 1 Estimated coefficient (p-value)</b>	<b>Model 2 Estimated coefficient (p-value)</b>	<b>Model 3 Estimated coefficient (p-value)</b>
BIGFOUR	+	1.312** (0.011)		
LNAFEES	+		0.725*** (0.000)	
LNNAFEES	+			0.355*** (0.000)
BDSIZE	+	0.330*** (0.000)	0.266*** (0.000)	0.291*** (0.000)
INDEP	+	1.725** (0.022)	0.846 (0.260)	2.180*** (0.002)
INST	-	-2.240*** (0.000)	-2.133*** (0.000)	-1.537*** (0.008)
OWNCON	+	1.227*** (0.004)	0.960** (0.016)	1.084** (0.010)
SIZE	+	0.172*** (0.003)	0.067 (0.223)	0.128** (0.016)
ROA	+	2.112** (0.032)	2.457** (0.011)	2.138** (0.015)
LEV	+	0.218 (0.568)	-0.0715 (0.856)	-0.115 (0.761)
SEC1	-	-6.057*** (0.000)	-6.124*** (0.000)	-5.183*** (0.000)
SEC2	-	-7.891*** (0.000)	-7.591*** (0.000)	-6.939*** (0.000)
SEC3	-	-7.388*** (0.000)	-7.328*** (0.000)	-6.837*** (0.000)
SEC4	-	-4.868*** (0.000)	-4.517*** (0.000)	-4.326*** (0.000)
SEC5	-	-5.513*** (0.000)	-5.888*** (0.000)	-4.999*** (0.000)
SEC6	-	-9.270*** (0.000)	-9.170*** (0.000)	-8.053*** (0.000)
SEC7	-	-7.685*** (0.000)	-7.835*** (0.000)	-7.189*** (0.000)
SEC8	-	-8.750*** (0.000)	-8.489*** (0.000)	-7.981*** (0.000)
SEC9	-	-6.539*** (0.000)	-6.321*** (0.000)	-5.981*** (0.000)
SEC10	-	-8.748*** (0.000)	-8.303*** (0.000)	-7.920*** (0.000)
SEC11	-	-5.825*** (0.000)	-5.770*** (0.000)	-5.320*** (0.000)
SEC12	-	-7.747*** (0.000)	-7.774*** (0.000)	-6.869*** (0.000)
SEC13	-	-9.964*** (0.000)	-10.004*** (0.000)	-9.466*** (0.000)
Observations		1312	1312	1312
Test statistic		35.070*** (0.000)	39.48*** (0.000)	41.29*** (0.000)

Significant at \*\*\* for 99 percent confidence level, \*\* for 95 percent and \* for 90 percent.