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ADOPTION OF SUSTAINABILITY REPORTING AND ASSURANCE: A STUDY AMONG THE TOP 300 COOPERATIVE AND MUTUAL ORGANIZATIONS

Helena María Bollas-Araya, *hebolar@ade.upv.es*
Faculty of Business Administration and Management, Universitat Politècnica de València

Fernando Polo-Garrido, *fpolo@cegea.upv.es*
Centre of Business Management Research (CEGEA), Universitat Politècnica de València

Elies Seguí-Mas, *esegui@cegea.upv.es*
Centre of Business Management Research (CEGEA), Universitat Politècnica de València

ABSTRACT

The relevance of sustainability reporting has greatly increased in recent decades, but the need to gain credibility has promoted companies to adopt assurance on sustainability reports. Prior research has analyzed these practices among stock companies. However, very few efforts have been made to develop a non-stock firm perspective. Social enterprises (e.g. cooperatives) have a special link with sustainability. Given the lack of previous studies, we aimed to analyze sustainability reporting and assurance among top cooperative and mutual organizations to find out whether adoption of reporting and assurance, and choice of assuror, were associated with factors country and sector. Our findings indicated that the cooperative and mutual organizations domiciled in stakeholder-orientated countries were more likely to adopt sustainability reporting and assurance, and to choose an accountant as their assurance provider. It seems that adoption of sustainability reporting and choice of assuror is associated with sector, with organizations in more sensitive sectors more likely to issue sustainability reports, and to hire non-accounting providers.

KEYWORDS

- Sustainability
- CSR
- Assurance
- Cooperatives
- Mutual Enterprises

INTRODUCTION

Due to accountability pressure and the demand for corporate behaviour transparency (Kolk, 2008), sustainability reporting has proliferated in response to stakeholders' concerns about environmental and social issues, governance and responsibility (Kolk and Perego, 2010; Simnett, 2012). Thus the number of enterprises that publish a sustainability report has increased considerably in the last few decades (CSR Network, 2003; Kolk, 2004; O'Dwyer and Owen, 2005; Simnett, 2012).

In the past, no generally accepted standard to govern such reports existed, which made it difficult to compare them and rendered them less credible (Simnett 2012). In order to ensure the homogeneity and quality of these reports, standards for reporting were developed. The most commonly used standard is the *GRI Sustainability Reporting Guidelines* from the Global Reporting Initiative (GRI). According to KPMG (2013), it has achieved widespread adoption with 82% of the Global 250 (G250: the top 250 companies of the Fortune 500 Index) and 71% of the National 100 (N100: the top 100 companies in 16 countries where KPMG operates).

Nevertheless, researchers have criticised sustainability reporting because it lacks accountability and transparency (Owen et al., 2000; Dando and Swift, 2003; Adams and Evans, 2004; MacLean and Rebernak, 2007), which has created the need for credible reported information in this area, known as the so-called 'credibility gap'.

Consequently, stakeholders wish to make sure that sustainability reports are more than just public relations instruments (KPMG, 2006). In line with this, Adams and Evans (2004) argued that voluntary assurance enhances the credibility of such reporting.

The need for credibility has accelerated the development of relevant assurance frameworks (FEE, 2004, 2006), such as the *AA1000 Assurance Standard (AA1000AS)* from AccountAbility, and the *International Standard of Assurance Engagements Other Than Audits or Reviews of Historical Financial Information (ISAE 3000)* from the IAASB. AA1000AS is an internationally accepted, freely available standard that provides requirements for conducting sustainability assurance, and it is based on the principles of inclusivity of stakeholders, materiality (from a stakeholder perspective) and responsiveness to stakeholders' concerns (AccountAbility, 2008a; 2008b). ISAE 3000 is a generic standard that provides principles and procedures for accounting firms to follow when reviewing non-financial information (IAASB, 2003). Neither standard is conflicting nor a substitute, but both are complementary as they provide comprehensive and robust external assurance (Accountability and KPMG, 2005).

The 2013 KPMG Survey of Corporate Responsibility Reporting (KPMG, 2013) noted that 59% of G250 companies and 38% of N100 companies use assurance as a strategy to verify and assess their corporate responsibility information. According to GRI (2013), of all the 2012 GRI-based reports, the external assurance percentage was 46% on a global scale. CorporateRegister (2013) pointed out that the annual growth rate in assured reports between 2000 and 2012 was 20%. This shows that assurance represents the next stage of development of sustainability reporting (ACCA, 2004).

Perego and Kolk (2012) pointed out that companies' willingness to enhance their credibility when facing stakeholders could explain adoption of assurance.

Previous studies have analysed sustainability reporting and assurance among stock companies. However, very few efforts have been made to develop a non-stock firm perspective, which identifies an interesting research gap. Cornelius et al. (2008) argued that CSR is a key consideration for all social enterprises (e.g. cooperatives). Therefore, it is timely to investigate their practices and whether they are subject to the same requirements as capitalist firms in terms of different degrees of internal and external CSR (Emanuele and Higgins, 2000).

Our research work focuses on the special case of cooperative and mutual organisations given their significant link with sustainability. In cooperatives, partners/owners also act as customers, suppliers and employees. Therefore, the strong correlation between stakeholders and cooperative management and management towards sustainability is clear (Server and Capó, 2011).

The aim of this paper was to determine whether the factors posited by the existing literature (i.e. country and sector) have an impact on the decision of cooperative and mutual organisations to issue sustainability reports, to assure their sustainability reports and to choose an assurance provider.

The paper is organized as follows. In the following section, we present a literature review. Next, we describe the methodology employed. Then, we discuss the results of our analysis. Finally, we present our conclusions.

LITERATURE REVIEW

Sustainability and cooperatives

The sustainability literature on cooperatives has significantly developed in recent years and deals with a wide range of topics. Therefore, a 'Cooperative discourse' on sustainability exists with special characteristics linked to historical, social, economic and political facts (Carrasco, 2007; Vargas and Vaca, 2005).

CSR implies an enterprise approach in which a company's strategic objective extends to pursue value for all stakeholders. This approach is not new to cooperative societies because, as the literature indicates, it is a model that is intrinsic to their nature. The pivotal role of partners in cooperative societies (shareholders, customers, suppliers, employees, etc.) implies that they assume different roles as stakeholders to facilitate CSR development, which have the ability to integrate their own needs and to establish solid relationships with them based on participation (Vargas and Vaca, 2005).

Cooperatives have moved towards the area of sustainability, which has placed them in a better strategic position (Collado, 2006). They are entities with a characteristic legal nature in which sustainability is fundamentally important as to the way they operate. Thus the 'cooperative identity' definition adopted by the International Cooperative Alliance (ICA) in 1995 is a first

approach to cooperatives' socially responsible behaviour (Server and Capó, 2011). 'A cooperative is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise' (ICA, 1995). In this definition, we can see some CSR-related matters, although it is in cooperative values where we can more clearly see the relationship between CSR and the cooperative movement (Carrasco, 2007).

Sustainability is an integral part of cooperative values (Belhouari et al., 2005): self-help, self-responsibility, democracy, equality, equity and solidarity. Since the beginning of the cooperative movement, members believe in the ethical values of honesty, openness, social responsibility and caring for others. These values are summarised in seven principles: voluntary and open membership; democratic member control; member economic participation; autonomy and independence; education, training and information; cooperation among cooperatives; concern for community. Three of these principles especially remind us explicitly of CSR-related matters (Carrasco, 2007). The fifth principle (education, training and information) indicates that 'cooperatives have to provide education and training for their members' (ICA, 1995). The sixth principle (cooperation among cooperatives) states that 'cooperatives serve their members most effectively and strengthen the co-operative movement by working together through local, national, regional and international structures' (ICA, 1995). The seventh principle (concern for community) specifies that 'cooperatives work for the sustainable development of their communities through policies approved by their members' (ICA, 1995). Hence, the compromise of cooperatives with the community, workers and the environment, since it affirms compromise with sustainability, is clear (Carrasco, 2007).

Sustainability shares numerous common points with cooperative values and principles (Server and Capó, 2011), and therefore constitutes an inherent ideology of cooperatives (Mozas and Puentes, 2010).

SUSTAINABILITY REPORTING AND ASSURANCE

Sustainability reporting is the process through which organisations communicate the social and environmental effects of their economic actions to stakeholder groups within society and to society at large (Gray et al., 1996). It has been commonly understood as a way of ensuring the legitimacy of organisations, a tool to manage stakeholder relationships, or a process to build good impressions and/or to hide conflicts (Spence and Gray, 2007). According to ACCA (2001, 2004), it is the main way through which companies can show their corporate legitimacy to stakeholders.

Sustainability reporting has attracted considerable attention from the academic community (Fifka and Drabble, 2012) in last few decades. Consequently, a wide range of empirical studies can be found (e.g., Gray et al., 1995; Guthrie and Parker, 1990; Adams et al., 1998; Kolk et al., 2001; Adams, 2002; Kolk, 2004, 2008, 2010). According to Fifka (2013), most have investigated and found that internal (e.g., size, industry, profitability) and external (e.g., public pressure, political regulation) factors influence sustainability reporting. In particular, corporate size seems an important variable, and there is also strong evidence that industry membership is related to

disclosure (e.g., Adams et al., 1998; Cowen et al., 1987; Hackston and Milne, 1996; Patten, 1991). Based on a sample of 2,113 sustainability reports issued between 2002 and 2004 by listed companies from 31 different countries, Simnett et al. (2009) indicated that large companies, the companies that reside in stakeholder-oriented countries, and the companies in mining, production, utilities and finance industries, were more likely to produce sustainability reports. Similarly, by taking a sample of companies listed on the Spanish stock market between 2005 and 2006, Reverte (2009) found that larger companies and those with greater media exposure were more likely to adhere to CSR standards and guidelines (such as GRI). Their results also revealed that companies from 'sensitive sectors' were more involved in CSR reporting.

However, sustainability reporting is subject to concerns in terms of the completeness and credibility of the information provided (Adams and Evans, 2004; Adams, 2004; Dando and Swift, 2003). Enterprises disclose only appropriate information to gain corporate advantage, and a good reputation instead of looking for transparency and accountability for stakeholders (Owen et al., 2000).

According to Simnett (2012), the provision of external assurance on the content and structure of CSR reports improves the relevance, reliability and comparability of reports and, therefore, enhances their overall credibility. Benefits of assurance are stakeholders' confidence in the quality of the sustainability information provided and/or more stakeholder trust in the level of commitment to sustainability agendas. Thus the companies that wish to enhance the credibility of their reports and to build their corporate reputation are more likely to adopt assurance (Simnett et al., 2009).

Previous studies have investigated the factors that influence the decision to adopt assurance (e.g., Simnett et al., 2009; Kolk and Perego, 2010; Sierra et al., 2013, Zorio et al. 2013). Using a sample of 2,113 companies (from 31 countries) that produced sustainability reports between 2002–2004, Simnett et al. (2009) found that those companies located in stakeholder-oriented countries and stronger legal environments were more likely to adopt assurance. Their results also showed that more assurance was adopted among the companies that engaged in more highly visible industrial activity, and in those with a larger 'social footprint'. These authors also pointed out that large companies were more likely to assure their sustainability reports. Kolk and Perego (2010) analysed the behaviour of G250 firms for the years 1999, 2002 and 2005, and found that adopting assurance was more likely for the firms domiciled in stakeholder-oriented countries and for those which have weaker enforcement mechanisms. Sierra et al. (2013) and Zorio et al. (2013) focused on the companies listed on the Spanish capital market between 2005 and 2010. Zorio et al. (2013) underlined that being included in IBEX-35 (the benchmark stock market index of Spanish capital markets) was another determinant of adopting assurance. They also found that size and industry were significant for explaining assurance. Specifically, for IBEX-35 companies, the decision to adopt assurance was seen to depend on company size, and being positively associated with ROA and negatively associated with ROE and leverage (Sierra et al., 2013). With a sample of Portuguese firms between 2008 and 2011, Castelo et al. (2014) indicated that size, leverage, profitability, listing status and industrial affiliation were determinants of assurance.

Similarly, determinants of choice of assuror have been analysed. The findings showed a significantly positive association between company size and auditor choice as an assurance provider; specifically, choosing a large accounting firm as an assurance provider was more likely for larger firms (Simnett et al., 2009; Kolk and Perego, 2010). Simnett et al. (2009) found that the companies domiciled in stakeholder-orientated countries were more likely to choose assurance from the auditing profession. In contrast, Kolk and Perego (2010) affirmed that the likelihood of choosing a large accounting firm as an assurance provider increased for the companies located in shareholder-oriented countries. Perego (2009) sustained that among the firms listed for the *2005 ACCA Sustainability Reporting Awards*, those domiciled in weaker legal systems were more likely to choose a large accounting firm as their assuror. According to Sierra et al. (2013), certain industries (e.g. oil and energy, basic materials and financial services) significantly tended to hire auditors as assurance providers. Zorio et al. (2013) evidenced that being included on a stock exchange and industry was clearly significant for deciding to hire an assuror.

Our study analysed the determinants associated with the decision to adopt voluntary assurance on sustainability reports and choice of assuror. Based on the literature, we put forward the following research questions:

> RQ1: Is adoption of sustainability reporting by the top 300 cooperative and mutual organisations associated with country orientation and the sector?
>
> RQ2: Is adoption of assurance by the top 300 cooperative and mutual organisations associated with country orientation and the sector?
>
> RQ3: Is the choice of assurance provider by the top 300 cooperative and mutual organisations associated with country orientation and the sector?

RESEARCH DESIGN

Data collection and sample description

In order to achieve our purpose, we took the top 300 cooperative and mutual organisations in the world listed in the *World Co-operative Monitor* (Euricse, 2012, 2013, 2014). These reports included data from 2010, 2011 and 2012, respectively. Therefore, we analysed 300 organisations from 28 countries and categorised them into eight economic sectors (agriculture and food, banking and financial services, wholesale and retail, health and social care, industry and utilities, insurance and mutual companies, other activities and other services) for a 3-year period and made 900 observations.

We employed the *GRI Sustainability Disclosure Database* to check what organisations disclosed a GRI-based sustainability report between 2010 and 2012. According to GRI (2012), a GRI report is any form of sustainability report that has used the GRI Guidelines (versions G3, G3.1 or G4) and contains a Content Index. However, the GRI Database also includes other forms of

sustainability and integrated reports, which it classifies as 'Non-GRI' and 'GRI-Referenced' reports. Therefore, we selected only those reports that followed guidelines G3 or G3.1, and we excluded the 'Non-GRI' and 'GRI-referenced' reports. We checked if these reports included an assurance statement. We found 75 GRI reports, of which 39 were assured.

TABLE 1. STATISTICS BY COUNTRY AND SECTOR

	Observations		GRI reports		Assurance	
Country	**n**	**%**	**n**	**%**	**n**	**%**
Argentina	1	0.1	0	0.0	0	0.0
Australia	9	1.0	0	0.0	0	0.0
Austria	9	1.0	2	2.7	2	5.1
Belgium	13	1.4	0	0.0	0	0.0
Brazil	11	1.2	3	4.0	2	5.1
Canada	30	3.3	5	6.7	0	0.0
Colombia	1	0.1	0	0.0	0	0.0
Czech Republic	1	0.1	0	0.0	0	0.0
Denmark	25	2.8	0	0.0	0	0.0
Finland	32	3.6	5	6.7	2	5.1
France	121	13.4	0	0.0	0	0.0
Germany	102	11.3	11	14.7	7	17.9
India	3	0.3	0	0.0	0	0.0
Ireland	6	0.7	0	0.0	0	0.0
Italy	47	5.2	2	2.7	2	5.1
Japan	55	6.1	1	1.3	0	0.0
Netherlands	39	4.3	19	25.3	9	23.1
New Zealand	15	1.7	0	0.0	0	0.0
Norway	21	2.3	3	4.0	1	2.6
Republic of Korea	1	0.1	0	0.0	0	0.0
Saudi Arabia	1	0.1	0	0.0	0	0.0
Singapore	7	0.8	0	0.0	0	0.0
South Korea	4	0.4	0	0.0	0	0.0
Spain	25	2.8	6	8.0	6	15.4
Sweden	18	2.0	6	8.0	3	7.7
Switzerland	27	3.0	6	8.0	2	5.1
United Kingdom	28	3.1	6	8.0	3	7.7
United States	248	27.6	0	0.0	0	0.0

Sector	n	%	n	%	n	%
Agriculture and food	243	27.0	27	36.0	11	28.2
Banking and financial services	42	4.7	11	14.7	5	12.8
Health and social care	12	1.3	0	0.0	0	0.0
Industry and utilities	32	3.6	2	2.7	2	5.1
Insurance and mutual companies	372	41.3	21	28.0	13	33.3
Wholesale and retail	188	20.9	14	18.7	8	20.5
Other	11	1.2	0	0.0	0	0.0
Total	900	100.0	75	100.0	39	100.0

As shown in Table 1, the panel of cooperative and mutual organisations comprised mostly organisations from the United States (27.6%), followed by France (13.4%) and Germany (11.3%). Data also indicated that publishing GRI reports was more frequent in the Netherlands (25.3%) and Germany (14.7%). Conversely, organisations from the United States and France did not issue any report. Adoption of assurance was more common in the Netherlands (23.1%), Germany (17.9%) and Spain (15.4%), while organisations from Canada and Japan did not assure their reports. When we shifted our attention to the diffusion dynamics at the sector level, most of the cooperative and mutual organisations included in the panel operated in the insurance (41.3%), agriculture and food (27%), and wholesale and retail (20.9%) sectors. When we focused on sustainability reporting, the most active sectors were agriculture and food (36%), insurance (28%) and wholesale and retail (18.7%). For assurance, the insurance sector occupied the first position (33.3%), the agriculture and food sector came in second place (28.2%), and the third place was occupied by the wholesale and retail sector (20.5%).

METHODOLOGY

To analyze whether adoption of sustainability reporting and assurance and choice of assuror were significantly associated with the country where the company was located and its sector, we employed cross tabulations and Pearson's chi-square test. In this context, we defined the variables presented in Table 2.

TABLE 2. MEASURING VARIABLES

Variables	Definition
GRI report	It indicates whether an organization adopts sustainability reporting following GRI guidelines. It takes a value of '0' when the organization does not issue a sustainability report or if it does not follow GRI guidelines and a value of '1' when the organization issues a GRI-based report.

Variables	Definition
Assurance	It indicates whether an organization adopts external assurance. It takes a value of '0' if the organization is a non-adopter, and '1' if it is an adopter.
Assuror	It indicates the type of firm that provides external assurance. It takes a value of '0' if the assurance provider does not belong to the accounting profession (including engineering firms and small consultancies/boutique firms), and a value of '1' when the assurance provider is an accountant.
Country orientation	Due to the disparate propensity among countries, we converted the COUNTRY variable into a dummy variable named COUNTRY ORIENTATION. According to Simnett et al. (2009) and Kolk and Perego (2010), it shows if the organization is domiciled in a common law or in a code law country. Companies domiciled in common law countries have a more shareholder-oriented corporate governance model, whose main purpose is to maximize shareholders' wealth, while the role of other stakeholder groups is less emphasized. In this legal system, firms deal with shareholders at arm's length; as a result, increased demand for information can be expected. In code law countries, companies have a more stakeholder-oriented model. It is considered that corporations have social responsibilities that go beyond achieving economic efficiency. Firms have social responsibilities not only towards their shareholders, but also towards all their stakeholders. There is a higher degree of insider owners, such as banks and other institutional investors, which acquire their information directly from management (Ball et al., 2000). Hence this variable takes a value of '0' if the country is shareholder-oriented and a value of '1' if it is stakeholder-oriented.
Sector sensitivity	In line with previous researchers (e.g. Sierra et al., 2014; Reverte, 2009; Seguí et al., 2015), we converted the SECTOR variable into a dummy variable named SECTOR SENSITIVITY. It takes the value of '0' if the sector is less sensitive and a value of '1' if the sector is more sensitive. The first group is composed of the agriculture and food, banking and financial services, health and social care, and industry and utilities sectors, while the wholesale and retail, insurance, other activities and other services sectors are included in the second group.

RESULTS

According to the results presented in Table 3, 3.2% of the cooperative and mutual organizations domiciled in shareholder-oriented countries issued a GRI-based sustainability report compared to 11.6% of the organizations located in stakeholder-oriented countries. Along these lines, we confirm that adoption of sustainability reporting was significantly associated with country orientation ($p < 0.01$). Specifically, the organizations domiciled in stakeholder-orientated countries were more likely to issue sustainability reports in accordance with GRI guidelines.

TABLE 3. COUNTRY ORIENTATION * GRI REPORT CROSSTABULATION

GRI report						
Country orientation	**Otherwise**		**GRI-based report**		**Total**	
	n	**%**	**n**	**%**	**n**	**%**
Shareholder[1]	335	96.8	11	3.2	346	100.0
Stakeholder[2]	489	88.4	64	11.6	553	100.0
Total	824	91.7	75	8.3	899	100.0
Pearson Chi-Square = 19.612; p = 0.000						

1. Australia, Canada, India, Ireland, New Zealand, Singapore, United Kingdom, United States.
2. Argentina, Austria, Belgium, Brazil, Colombia, Czech Republic, Denmark, Finland, France, Germany, Italy, Japan, the Netherlands, Norway, Republic of Korea, South Korea, Spain, Sweden, Switzerland.

Table 4 shows a higher percentage of GRI-based reports among the more sensitive sectors (12.2%) than among the less sensitive ones (6.1%). It seems that an association between sustainability reporting and sector exists ($p < 0.01$), and that the organizations operating in more sensitive sectors were more likely to issue reports following GRI guidelines.

TABLE 4. SECTOR SENSITIVITY * GRI REPORT CROSSTABULATION

GRI report						
Sector sensitivity	**Otherwise**		**GRI-based report**		**Total**	
	n	**%**	**n**	**%**	**n**	**%**
Less sensitive	536	93.9	35	6.1	571	100.0
More sensitive	289	87.8	40	12.2	329	100.0
Total	825	91.7	75	8.3	900	100.0
Pearson Chi-Square = 9.931; p = 0.002						

As we can see in Table 5, 27.3% of the cooperative and mutual organizations domiciled in shareholder-oriented countries adopted assurance compared to 56.3% of the cooperatives from stakeholder-oriented countries. Thus adopting assurance was more likely for the organizations located in stakeholder-oriented countries. Therefore, we state that adoption of assurance was significantly associated with country orientation ($p < 0.10$).

TABLE 5. COUNTRY ORIENTATION * ASSURANCE CROSSTABULATION

Assurance						
Country orientation	**No**		**Yes**		**Total**	
	n	**%**	**n**	**%**	**n**	**%**
Shareholder	8	72.7	3	27.3	11	100.0
Stakeholder	28	43.8	36	56.3	64	100.0
Total	36	48.0	39	52.0	75	100.0
Pearson Chi-Square = 3.158; *p* = 0.076						

As shown in Table 6, the cooperatives from less sensitive sectors tended to assure their sustainability reports (60%) more than those from more sensitive sectors (45%), although we did not find a significant association between adoption of assurance and sector ($p > 0.10$).

TABLE 6. SECTOR SENSITIVITY* ASSURANCE CROSSTABULATION

Assurance						
Sector sensitivity	**No**		**Yes**		**Total**	
	n	**%**	**n**	**%**	**n**	**%**
Less sensitive	14	40.0	21	60.0	35	100.0
More sensitive	22	55.0	18	45.0	40	100.0
Total	36	48.0	39	52.0	75	100.0
Pearson Chi-Square = 1.683; p = 0.195						

The results offered in Table 7 reveal that all the assurance adopters located in shareholder-oriented countries opted for a non-accounting provider to assure their sustainability reports, while 63.9% of the adopters from stakeholder-oriented countries preferred accountants to carry out external assurance. We found a significant association between choice of assuror and country

orientation ($p < 0.10$). The cooperatives and mutual organizations in stakeholder-oriented countries were more likely to choose accountants than those domiciled in shareholder-oriented countries.

TABLE 7. COUNTRY ORIENTATION * ASSUROR CROSSTABULATION

Assuror						
Country orientation	**Non-accountant**		**Accountant**		**Total**	
	n	**%**	**n**	**%**	**n**	**%**
Shareholder	3	100.0	0	0.0	3	100.0
Stakeholder	13	36.1	23	63.9	36	100.0
Total	16	41.0	23	59.0	39	100.0
Pearson Chi-Square = 4.672; *p* = 0.061 (Fisher's exact adjustment as 50% of cells expected less than 5)						

As seen in Table 8, 71.4% of the organisations that operated in less sensitive sectors chose accountants to perform assurance process, while 55.6% of those from more sensitive sectors preferred non-accounting providers to assure their sustainability reports. Thus choice of assuror was significantly associated with sector ($p < 0.10$), with less sensitive sectors being more likely to choose accounting providers and more sensitive sectors being more likely to choose non-accountants.

TABLE 8. SECTOR SENSITIVITY* ASSUROR CROSSTABULATION

Assuror						
Sector sensitivity	**Non-accountant**		**Accountant**		**Total**	
	n	**%**	**n**	**%**	**n**	**%**
Less sensitive	6	28.6	15	71.4	21	100.0
More sensitive	10	55.6	8	44.4	18	100.0
Total	16	41.0	23	59.0	39	100.0
Pearson Chi-Square = 2.917; p = 0.088						

CONCLUSIONS

This research work analyzed sustainability reporting and assurance among top cooperative and mutual organizations to find out whether adoption of reporting and assurance, and choice of assuror, were associated with factors country orientation and sector, as posited by existing literature in this area.

During our study period, 8.3% of the top cooperative and mutual organizations followed GRI guidelines to produce their sustainability reports, most were located in the Netherlands and Germany, and operated in the agri-food, insurance and wholesale and retail sectors. This percentage represents a low level of reporting compared to 82% for G250 companies. Of all the reports, 52% were externally assured, which came closer to the 59% obtained for G250 companies. In this case, most assured reports belonged to organizations from the Netherlands, Germany and Spain, which operated in the insurance, agri-food, and wholesale and retail sectors. As regards assurance provider, 59% of the reports were assured by accounting firms, a lower percentage than the 66.7% obtained for G250 companies, while 41% of assurance was carried out by non-accounting providers.

To answer our first research question, we can affirm that the decision to issue a GRI-based sustainability report was significantly associated with the country orientation where organizations were located. Thus adopting sustainability reporting in accordance with GRI guidelines was more likely for the cooperatives and mutual organizations domiciled in stakeholder-orientated countries than it was for those in shareholder-oriented countries, as by Simnett et al. (2009) also indicated. We also found an association between sustainability reporting and sector, which agrees with Adams et al. (1998), Cowen et al. (1987), Hackston and Milne (1996), Patten (1991) and Simnett et al. (2009). The organizations from more sensitive sectors issued more GRI-based sustainability reports during the study period than those from less sensitive sectors.

For our second research question, we found a significant association between adoption of assurance and country orientation. The cooperatives and mutual organizations from stakeholder-oriented countries were more likely to assure their sustainability reports than those from shareholder-oriented countries, which is in line with Kolk and Perego (2010) and Simnett et al. (2009), who found the country level factor to be a determinant of adoption of assurance. It was, however, surprising that the cooperatives from less sensitive sectors were more likely to adopt assurance than those from more sensitive sectors. Adoption of assurance was not significantly associated with sector. This goes against Simnett et al. (2009), Zorio et al. (2013) and Castelo et al. (2014), who have found evidence that industry influences the decision to adopt assurance.

In response to the third research question, we found a significant association between choice of assuror and country orientation. Choosing an accountant as an assurance provider was more likely for the cooperatives and mutual organizations in stakeholder-oriented countries than for those domiciled in shareholder-oriented countries. This is consistent with Simnett et al. (2009), but goes against Kolk and Perego (2010). Choice of assuror was also associated with sector, which is in line with the findings posited by Sierra et al. (2013) and Zorio et al. (2013).

Accounting providers were chosen especially by organizations from less sensitive sectors, while non-accountants were chosen by the organizations that operated in more sensitive sectors.

Despite their social features and being a supportive environment for sustainability, reporting is scarce among the top 300 cooperative and mutual organizations in the world. It is paradoxical that these organizations resorted less to sustainability reporting than big stock companies (Seguí et al., 2015). Conversely, it seemed that they were engaged in conferring credibility to the information disclosed in their reports.

This research work contributes to the sustainability reporting and assurance area. Apart from the Seguí et al. (2015) study, this is a pioneer work because it analyzed these practices from the cooperatives perspective, and it also contributes to cooperatives' research area. According to ICA (2013), sustainability is not a concept that is universally associated with cooperatives. The goal is to position cooperatives as builders of sustainability. The cooperative sector needs to convincingly demonstrate that sustainability is in the intrinsic nature of cooperatives, and that these organizations make a positive contribution to sustainability in three senses: economic, social and environmental. Therefore, these organizations should use their social nature to more actively include sustainability reporting among their practices and to lead this practice because, according to their principles and values, CSR is an integral part thereof. Consistent with Bollas-Araya et al. (2014), investing in sustainability reporting is a way to get legitimacy among stakeholders, to enhance the reputation and to gain competitive advantage. In the current situation, disclosing information about sustainability could help to reinforce the trust and credibility. In this way, the relationship between cooperatives and CSR may represent a valuable asset for business development only if these organizations are able to provide greater credibility and trust in society and if there is an effective dialogue with stakeholders.

Nevertheless, it should be noted that the results of this research have their limitations. Firstly, sample size is quite small since very few cooperative and mutual organizations issue a CSR report following GRI guidelines. The *World Co-operative Monitor* is a fairly recent project, which prevents it from covering a wider horizon, and limits the study to a 3-year observation period. Moreover, reports are continually being added to the GRI Database, which makes results dynamic and constantly evolving (GRI North America, 2014).

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ABOUT THE AUTHORS

Helena María Bollas-Araya
Faculty of Business Administration and Management, Universitat Politècnica de València

Helena María Bollas-Araya is PhD student in Business Administration and Management at the Universitat Politècnica de València (UPV). She has a Degree in Business Administration and Management and a Master's Degree in Financial and Tax Management. Her current research interests focus on social accounting, sustainability reporting and assurance, and cooperatives. She has participated in several international conferences and she has published several papers in journals such as Annals of Public and Cooperative Economics, REVESCO (Revista de Estudios Cooperativos) and CIRIEC–España, Revista de Economía Pública, Social y Cooperativa.

Fernando Polo-Garrido
Centre of Business Management Research (CEGEA), Universitat Politècnica de València

PhD Fernando Polo-Garrido is Associate Professor at the Business Administration Faculty of the Universitat Politècnica de Valencia, is Secretary-General of CEGEA (Centre for Business Management Research), Director of ACCOOP (International Research Network on Accounting for Cooperatives and Mutual Entities). He has led several research projects. He has published in leading accounting journals and he has been visiting scholar in University of Cambridge (UK), University of Lancaster (UK), University of Greenwich and Mount Saint Vincent University (Canada).

Elies Seguí-Mas
Centre of Business Management Research (CEGEA), Universitat Politècnica de València

Dr. Elies Segui-Mas is Associate Professor of financial economics and accounting at the Universitat Politècnica de València (UPV). He is a member of CEGEA (Centre of Business Management Research) at the same university. He has published numerous articles in several leading journals, like the Journal of Business Ethics, Service Business, Annals of Public and Cooperative Economics, CIRIEC-España and other. He became visiting professor at Bentley University (USA), Sheffield University (UK), AGH Cracow (Poland) and the Open University of Catalonia (UOC). He also held the Caixa-Popular Chair of Co-operatives at the UPV.