THE DISCLOSURE IN SOCIAL REPORTING OF ENERGY SECTOR: EXPERIENCES FROM ITALY, THE USA AND CHINA

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Abstract

Attention towards CSR issues is very high in Europe and America, but also in countries like China, which have little cultural tradition of it. The purpose of this paper is to evaluate the quality and the trend of social reporting in Italy compared with in the USA and China by exploring the indicators disclosed within social reports. The study considered the energy and utilities sector by analysing the quality of social reporting through the indicators disclosed in 2009, 2010 and 2011 reports according to GRI guidelines. The research results show the quality level of social reporting in Italy is higher than that of the USA and China. However the research hypothesis was not confirmed as the quality does not show an increased trend. Chinese companies show opposite results as the quality levels dropping notably between 2009 and 2011.

Keywords: Social Reporting, CSR, Energy Sector, Italy, the USA, China

Although the article is the result of a team effort, Elena Gori can be considered the author of "Method" and "Conclusions", Alberto Romolini the author of "Results and discussion", and Silvia Fissi the author of "Introduction" and "Literature review".

1. Introduction

Over the last few years, social reporting has been increasing importance among corporations and their stakeholders around the world (Hahn and Kühnen, 2013; IIRC, 2011).

Attention towards social reporting is very high in Europe and America, but also in countries like China, which have little cultural tradition of it (UNEP, 2010). According to KPMG (2013), the insufficiency of social disclosures will eventually change due to external pressure from expansion of foreign trade, local enterprises seeking overseas listing and increasing product sourcing from Chinese suppliers by many multinational companies or the imposition of supply chain requirements on local manufacturers (Yang and Yaacob, 2012).

Comparative studies of social reporting are relatively recent (Williams and Aguilera, 2008), while theoretical perspectives on corporate social performance or stakeholder management have been developed for over two decades (Freeman, 1984; McWilliams and Siegel, 2000). It is only in the last decade that studies have begun to explore differences in social reporting from a comparative perspective. Some comparative studies compared the perspectives and strategies on social reporting in different

corporate governance systems, such as contrasting Anglo-American versus Continental European approaches to CSR (Habisch *et al.*, 2011). Other studies aimed to show differences in companies' approaches to social reporting in countries with similar socio-political tradition within these corporate governance systems (Kolk, 2008).

Previous studies on quality comparing different countries only examined social reports for one single year and so they were unable to highlight trends in reporting quality (Williams and Aguilera, 2008). Egri and Ralston's research (2008) found that some countries are not well represented by current research and that studies did not include countries that might have different demographic characteristics.

In this paper, we have focused our attention on social annual reporting by analysing GRI indicators of utilities sector companies in Italy, the USA and China. We compare the Italian situation in between two poles: the one with a long tradition of social reporting like the USA and the other characterised by an emerging market and constantly increasing attention to social reporting like China (Gao, 2011; Ip, 2008; Sá de Abreu *et al.*, 2012). Given that Italy is among the most advanced countries in Europe for social reporting (KPMG, 2011), we believe it is interesting to find out if there are differences in

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growth of quality in social reporting between an advanced economy and a developing one. At the end, China is the biggest developing country in the world and it has a totally different culture and political economy from the West, however state-owned companies are very keen to address social issues which are also used in "political slogans" by the Chinese government (Yang, 2008).

2. Literature review

In recognition of the wide variety of material that appears in sustainability reports, there have been a number of studies focusing on sustainability reporting practices, including the content, scope and structure of the reports (Beloe *et al.*, 2006).

National-level studies have also been carried out in numerous countries over the last 10 years, including Bangladesh (Sobhani et al., 2009), Canada (Davis and Searcy, 2010), Germany (Gamerschlag et al., 2011), Greece (Skouloudis et al., 2010), Italy (Costa and Menichini, 2013; Perrini et al., 2006; Secchi, 2006), Norway (Vormedal and Ruud, 2009), Sweden (Hedberg and Von Malmborg, 2003), Switzerland (Stiller and Daub, 2007) and Thailand (Ratanajongkol et al., 2006). The majority of studies focused on assessing the quality of disclosure by evaluating the social reporting of Stock Exchange listed companies. Authors utilised various methods of analysis: content analysis, benchmarking analysis, case studies and so on. The above studies show that the quality of social reporting depends on qualitative and quantitative information and on the extent to which the company has managed to improve its economic, environmental and social effectiveness and efficiency in the reporting period (Daub, 2007).

The majority of publications on quality of social reporting have focused on the design of sets of indicators (Spangenberg, 2002; Zhao *et al.*, 2012). In order to define indicators, companies should carry out stakeholder engagement activities, as they are a crucial element in order to assess the quality of the social reporting model. Research on indicators has focused on both the individual corporation and sector-level (Searcy, 2012). Searcy (2012) pointed out that previous research has focused on short time horizons in order to evaluate sustainability indicators and this is a particularly important oversight given the explicit long-term focus of sustainability (Lenzen *et al.*, 2004).

Little research has been conducted on the indicators used to convey quantitative information in social reports, but, as Daub (2007) explains, indicators represent the concrete data on the corporation's performance with respect to sustainability and thus are considered at least as important as the qualitative part of sustainability reporting. Other examples of studies into indicators are those of Adams and Frost (2006) who highlighted the importance of including key performance

indicators in sustainability reporting, but few studies have explored the specific indicators disclosed. An exception to this is the study of Skouloudis and Evangelinos (2009) who conducted a review of 17 sustainability reports published by Greek companies. They conducted an analysis of economic, environmental and social performance disclosures.

One of the first in-depth reviews of indicators was provided by Roca and Searcy (2012) concerning sustainability reports and the use of indicators in Canada. Roca and Searcy do not try to evaluate the quality of social indicators, limiting their research to identifying indicators that are currently disclosed in sustainability reports. Their findings highlight a wide variety of indicators disclosed (585 different indicators), variously distributed among the three main issues: economic, environmental and social.

The GRI are the reporting guidelines most commonly used by international companies even if these guidelines do not support standardisation of reporting (Morhardt *et al.*, 2002). In fact, GRI guidelines do not require companies to fulfil or handle all topics. Thus, companies are free to choose from the guidelines in any way they prefer and this contributes to the difficulty of assessing social reporting quality.

The primacy of the GRI model is underlined by the fact that, according to a recent survey, 77% of the G250 companies claimed to have followed GRI guidelines (KPMG, 2011). Other reports have highlighted that GRI guidelines have been voluntarily applied in over 1,000 companies worldwide (GRI, 2010a). GRI guidelines have been applied by corporations in numerous sectors including energy, water and waste management (GRI, 2010b). However, despite its popularity, there are several studies that go beyond the GRI's indicators (Keeble *et al.*, 2003).

At the sector level, the GRI has recently developed supplements - in varying stages of development - for several sectors, including among others automotive, electric utilities, mining and metals, oil and gas and telecommunications (GRI, 2010a). The supplements provide sector-specific guidance on the application of the core GRI guidelines, but also provide lists of new indicators. Academic literature also focused on the sector level and emphasised that each sector needs its specific indicators (Staniskis and Arbaciauskas, 2009; Veleva and Ellenbecker, 2001). La Rovere et al. (2010) used data envelopment analysis (DEA) as an evaluation tool to develop a set of indicators (economic, environmental, social and technological) to analyse the sustainability issues of the electric sector, while Narodoslawsky and Krotscheck (2004) applied the Sustainable Process Index (SPI) to the energy production system.

The generic indicators developed by GRI have been criticised on several grounds, including for being overly general and too many (Moneva *et al.*, 2006).

However many criticisms derive from the analysis of specific sectors, while comparisons between different countries require standardised indicators such as those of GRI (Verschoor, 2011).

Given the above, if we want to measure the quality of information of utilities sector social reporting, we can refer to GRI indicators defined in Framework as Application Levels A, B, or C, depending on the number and set of disclosures addressed by the organisations (Romolini *et al.*, 2014).

On the basis of our analysis of the literature, we believe it is possible to assess the maturity level of social reporting and to measure the quality of annual social reports by evaluating the GRI indicators.

3. Method

Research was carried out using the inductive method. As GRI is the model principally adopted at international level for social reporting, we consulted its database to find Italian, Chinese and American companies using this model. We analysed the 2011 reports. The investigation was further limited to the energy and utilities sector, among the most active in social reporting (Mio, 2010; Romolini *et al.*, 2014), to obtain a more homogeneous population for analysis, both for company size & for type of report drawn up.

Reporting quality was evaluated by analysis of indicators in the 2011 reports, according to GRI guidelines 3.1. This approach is similar to that of Graves and Waddoch (2000), Callan and Thomas (2009), Romolini *et al.* (2014).

Information about social reporting was gathered from websites as previous research has found that the corporate website is the most popular avenue for disseminating CSR disclosures, followed by press releases and by mandatory filings (Holder-Webb *et al.*, 2009; IE School of communication, 2010).

The analysis was carried out in two phases.

Firstly, the presence of indicators was verified according to the GRI standard table. To do this, we noted the use of each indicator from the model and then calculated the average value of all the indicators based on reporting issues laid down by GRI. Because the groups of companies from the three countries differed numerically, it was necessary to use an average value in order to have homogeneous and comparable results.

Then, to evaluate the maturity achieved by the practice of social reporting, another quantitative analysis was carried out, attributing a weight to each of the indicators present in the reports. The GRI standard includes compulsory (core) and voluntary (additional) indicators. We assigned a different weight to the two types, since the former represents a binding element for the model application, while the second is additional information that improves the disclosure.

In general, we assigned a weight of 1 to core indicators and 0.5 to the additional ones for the waste management & water utilities. Moreover, the GRI provides sector guidance for the energy utilities that envisages indicators over & above the general model.

For example, for the Economic Area, the general standard envisages 7 core indicators and 2 additional ones, with 3 more core indicators recommended by sector guidance for energy utilities, for a total of 10. We took this greater number of indicators for energy utilities into consideration, to ensure comparability when assigning weights, assigning a weight of 1 to core indicators for waste management and water utilities and 0.7 to energy utilities. Consequently, weights of indicators were specified for each area from the GRI model – economic, environmental and social (the latter was divided into labour practices and decent work, human rights, society and product responsibility) (Table 1).

Table 1. Assessment of GRI index

	Energy utilities	Waste management and water utilities
	Econe	omic area
Core	0.7	1
Additional	0.5	0.5
	Environ	mental area
Core	0.95	1
Additional	0.542	0.5
	Soc	ial area
	Labour practic	res and decent work
Core	0.82	1
Additional	0.5	0.5
	Нит	an Rights
Core	1	1
Additional	0.5	0.5
	S	ociety
Core	0.86	1
Additional	0.5	0.5
	Product	responsibility
Core	0.4	1
Additional	0.5	0.5

To take into account numerical differences in companies in the three countries studied, absolute values for each area were calculated dividing results by the number of companies in each country. The population of the research is represented by the companies classified as "energy utilities" "waste management" and "water utilities" in the GRI database. The database was consulted for the last time on 7th December 2013 (Table 2).

China	Italy	USA				
China Petrochemical Corporation	A2A Spa	American Electric Power				
China Southern Power Grid	Acea Spa	Avista Utilities				
Power Assets	AcegasAps Spa	Chevron Corporation				
Suntech	Comieco	Duke Energy				
The Macao Water Supply Co. Ltd.	Edipower Spa	Exxon Mobil				
Taiwan Power Company	Edison Spa	Hallinburton				
China Huaneng Group	Enel Spa	Nevada Energy				
China Shenhua Energy Co. Ltd.	Eni Spa	Nextera Energy				
China Datang Corporation	Erg Spa	Nisource				
HK Electric	Hera Spa	NRG Energy				
Sinochem Group	Gruppo Iren Spa	PG&E				
CLP Group	GSE Spa	Pinnacle West Capital Corporation				
	Raffineria di Gela-Eni Spa	Progress Energy				
	Snam Spa	PSEG				
	Sorgenia Spa	San Francisco				
	Pavoni Rossano Srl	The Southern Company				
	Terna Spa	Waste Management				

Table 2. The population of the research

The GRI database includes 17 Italian firms, 15 of which operate in the energy utilities sub-category and 2 in waste management. There are 22 American companies listed, 20 of which operate in the energy sub-category, 1 in waste management and 1 in water. We did not include 5 companies whose reports were not available online or who did not show GRI indicators.

In the GRI database, we found a list of 22 companies operating in the energy utilities sector and 2 in the water sector. The Chinese documentation was particularly difficult to analyse, as some documents were only available in Chinese; other reports were not available on company websites. In the end we included 12 Chinese companies.

Finally, in order to investigate whether any improvements had taken place in the quality of sustainability reporting by the companies studied, we extended our analysis to the 2009 and 2010 reports.

4. Results and discussion

The analysis of indicators in the 2011 reports shows the results summarised in Table 3. In particular, the following table illustrates the average number of indicators for each of the reporting areas.

Under "Economic Performance Indicators", Italy has the highest results for the "Economic performance" area, followed by China. The Chinese

enterprises perform better in the "Indirect economic impacts".

In the environmental category, apart from "Raw materials", "Biodiversity" and "Products and services", Italian companies register the best results. The highest average values, for all companies, were found for "Direct and indirect emissions", followed by "Energy" and "Biodiversity". The considerable attention paid to the environmental macro-area can probably be partially linked to agreements contained in the Kyoto Protocol and the attempt to safeguard the world's ecosystem.

Other particularly relevant issues concern evaluation of the corporate activity's social impact, with special reference to working conditions reported under "Labour practices and decent work". More specifically, the highest values were registered for "Health and safety at work", followed by "Employment" and "Training and education". Here too, European practice as represented by Italy is the benchmark while results from Chinese companies show the best performance in "Training and education".

As far as "Human Rights" are concerned, overall less attention was paid to this area because of the questionable belief that safeguarding human rights is the responsibility of national legislation rather than of corporate social responsibility. Also in this area, the best performance is registered by Italian companies, followed by Chinese and American firms.

Table 3. GRI indicators in Chinese, Italian and US companies, 2011 reports

	China	Italy	USA
Economic perfomance indicators			
Economic performance (EC1-EC4)	2,67	3,18	2,65
Market presence (EC5-EC7)	1,67	1,76	1,29
Indirect economic impacts (EC8-EC9)	1,42	1,12	1,41
Environmental performance indicators			
Raw materials (EN1-EN2)	1,25	1,24	0,76
Energy (EN3-EN7)	3,50	3,71	3,35
Water (EN8-EN10)	1,92	1,94	1,53
Biodiversity (EN11-EN15)	2,50	2,82	3,71
Direct and indirect emissions (EN16-EN25)	5,67	7,41	6,18
Products and services (EN26-EN27)	1,00	0,88	1,00
Conformity (EN28)	0,25	0,88	0,82
Transport (EN29)	0,34	0,65	0,47
General (EN30)	0,50	0,53	0,41
Social performance indicators			
Labour practices and decent work			
Employment (LA1-LA3)	1,75	2,47	1,59
Industrial relations (LA4-LA5)	0,84	1,88	0,71
Health and safety at work (LA6-LA9)	2,50	3,12	2,24
Training and education (LA10-LA12)	2,25	2,12	1,82
Diversity and equal opportunity (LA13-LA14)	1,34	1,53	0,88
Human rights			
Investment and procurement practices (HR1-HR3)	1,09	1,71	1,00
Non discrimination (HR4)	0,50	0,76	0,18
Freedom of association and collective bargaining (HR5)	0,42	0,53	0,24
Child labour (HR6)	0,50	0,65	0,35
Forced and compulsory labour (HR7)	0,59	0,65	0,29
Security practices (HR8)	0,08	0,24	0,29
Indigenous rights (HR9)	0,08	0,41	0,18
Society			
Community (S01)	0,67	0,71	0,65
Corruption (S02-S04)	2,17	2,35	1,29
Public policy (approach to political parties/institutions) (S05-S06)	0,58	1,41	1,47
Anti-competitive behaviour (S07)	0,17	0,59	0,12
Compliance (S08)	0,34	0,82	0,35
Product responsibility			
Customer health and safety (PR1-PR2)	0,92	1,00	0,65
Product and service labelling (PR3-PR5)	1,42	1,53	1,18
Marketing communications (PR6-PR7)	0,42	0,71	0,59
Customer privacy (PR8)	0,08	0,59	0,18
Compliance (PR9)	0,25	0,76	0,24

In the remaining reporting areas, Italy continues to be the benchmark. Chinese and US enterprises show similar attention in the area "Society" and "Product responsibility". Especially for China, this attention towards product responsibility derives from its special role as a manufacturing and exporting country, whose products are often perceived on the world market as low cost and poor quality. Chinese companies therefore use social reporting to obtain

accreditation as producers of goods and services equal in quality to those of older industrialised nations.

Quality analysis of the sustainability reports was done by evaluating use of GRI indicators in the three macro-areas to be reported (economic, environmental and social). Results are shown in Table 4.

From a quality point-of-view, too, Italian companies demonstrate best practices compared with Chinese and American firms, thereby confirming previous studies (Krumwiede *et al.*, 2012).

Table 4. Qualitative analysis of social reporting in China, Italy and the USA, 2011 reports

	China	Italy	USA
Economic perfomance indicators		Ť	
Economic performance (EC1-EC4)	1,89	2,31	1,92
Market presence (EC5-EC7)	1,13	1,21	0,89
Indirect economic impacts (EC8-EC9)	0,88	0,74	0,93
Environmental performance indicators			
Raw materials (EN1-EN2)	1,19	1,18	0,73
Energy (EN3-EN7)	2,44	2,76	2,22
Water (EN8-EN10)	1,34	1,42	1,07
Biodiversity (EN11-EN15)	1,79	2,08	2,61
Direct and indirect emissions (EN16-EN25)	4,84	6,41	5,29
Products and services (EN26-EN27)	0,95	0,84	0,96
Conformity (EN28)	0,24	0,84	0,79
Transport (EN29)	0,18	0,35	0,25
General (EN30)	0,27	0,28	0,22
Social performance indicators			
Labour practices and decent work			
Employment (LA1-LA3)	1,33	1,85	1,17
Industrial relations (LA4-LA5)	0,68	1,58	0,60
Health and safety at work (LA6-LA9)	1,81	2,24	1,66
Training and education (LA10-LA12)	1,41	1,61	1,08
Diversity and equal opportunity (LA13-LA14)	1,11	1,28	0,73
Human rights			
Investment and procurement practices (HR1-HR3)	0,92	1,53	0,74
Non discrimination (HR4)	0,50	0,76	0,18
Freedom of association and collective bargaining (HR5)	0,42	0,53	0,24
Child labour (HR6)	0,50	0,65	0,35
Forced and compulsory labour (HR7)	0,58	0,65	0,29
Security practices (HR8)	0,04	0,12	0,15
Indigenous rights (HR9)	0,04	0,21	0,09
Society			
Community (S01)		0,62	0,57
Corruption (S02-S04)	1,86	2,05	1,14
Public policy (approach to political parties/institutions) (S05-S06)	0,50	1,03	1,09
Anti-competitive behaviour (S07)	0,08	0,29	0,06
Compliance (S08)	0,30	0,72	0,32
Product responsibility			
Customer health and safety (PR1-PR2)		0,48	0,31
Product and service labelling (PR3-PR5)		0,74	0,61
Marketing communications (PR6-PR7)		0,31	0,28
Customer privacy (PR8)	0,04	0,29	0,09
Compliance (PR9)	0,13	0,34	0,11

For all companies analysed, in absolute terms, the area where the greatest use was made of indicators was "Direct and indirect emissions".

In general, the macro-areas of social reporting that arouse the most interest are those with economic and environmental impact. In the macro-area of social impact, in particular, we see companies concentrating mainly on health and safety at work, employment, training and education. Crane and Matten (2007) suggest that ethical responsibilities enjoy a much higher priority in Europe than in the United States. In developing countries, however, ethics seems to have the least influence on the CSR issues. Reporting attention diminishes, on the other hand, for other

"social" issues ("Human rights", "Society and product responsibility"). In fact, it seems that further "investment" in these areas might improve relations between companies and consumers, raising the level of social reporting disclosure. This greater attention to environmental performance is characteristic of the energy sector, which pays less attention to product responsibility.

The general trends observed are further confirmed by analysis of each separate country. Nonetheless, some variations in detail can be observed.

Italian companies show more attention to indicators for "Corruption". This may probably be

connected with the high perception, at international level, of widespread corruption in Italy. Companies consequently respond to this "accusation" by using indicators to prove their commitment to addressing the phenomenon and they show high levels of disclosure regarding this possible threat to their image. Results in this area are very similar to those of Chinese companies, probably for the same reasons discussed above.

China is the second of the countries analysed in terms of quality of social reporting with performance similar to the USA. Overall it does not show characteristics typical of a nation where social accountability is developing, especially if compared with benchmark countries like Italy. The Chinese

companies studied already show a level of quality that, in the short term, might lead to results similar to those of benchmarking countries. In particular, social issues are frequently addressed by Chinese companies as they are "political slogans" proposed by the central government in recent years (Gao, 2011), while if we consider social reporting quality in the USA, social issues have a lower score. This confirms the Holder-Webb *et al.* (2009) study highlighting a lack of disclosure concerning these issues even if shareholders express a clear desire for this information.

Figure 1 is a graphic summary of points discussed above.

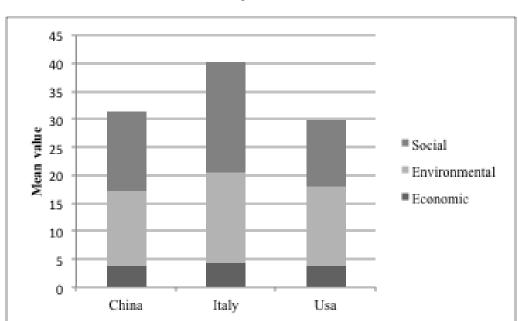


Figure 1. Mean values for economic, environmental and social macro-areas from Chinese, Italian and US companies

Our analysis was then extended to the previous two years (2009-2010) in order to evaluate qualitative trends in social reporting for the three countries (Table 5).

Firstly, it should be noted that numbers of companies studied over the three years vary for each of the countries involved. For China, 2009 reports were not available for 2 energy utilities companies. For Italy, reports were not available for 5 both in 2009 and 2010, while for the USA 7 companies had no reports in 2009 and 5 had none in 2010. Generally speaking, variability can still be observed in the application of social reporting, which is not always fully integrated into the reporting system.

China showed a decline in social reporting quality between 2009 and 2011 for "Environmental performance indicators" and a substantial stability in

the Economic performance area. It should be noted that these same sections showed more use of impact indicators. On the other hand, their social performance indicators do not reveal a single trend, with overall improvement in "Society" and "Product responsibility".

Italy showed an overall positive trend in social reporting quality level between 2009 and 2011, especially for "Economic performance indicators" and "Social performance indicators". Instead, Environmental performance indicators showed an inverse trend like that of Chinese companies.

Reporting quality by American companies returned variable results. Two clear trends can be observed in the better performance of "Product responsibility" and the decline of "Labour practice and decent work".

Table 5. Analysis of social reporting quality over a three-year period. 2009, 2010 and 2011 reports

	China			Italy			USA		
	2009	2010	2011	2009	2010	2011	2009	2010	2011
Economic perfomance indicators									
Economic performance (EC1-EC4)	1,74	1,81	1,89	2,10	2,31	2,31	1,86	2,09	1,92
Market presence (EC5-EC7)	1,13	1,07	1,13	1,10	1,27	1,21	0,99	1,03	0,89
Indirect economic impacts (EC8-EC9)	0,88	0,85	0,88	0,75	0,76	0,74	0,86	0,93	0,93
Environmental performance indicators									
Raw materials (EN1-EN2)	1,27	1,30	1,19	1,27	1,15	1,18	0,43	0,64	0,73
Energy (EN3-EN7)	2,64	2,39	2,44	2,89	2,97	2,76	2,16	2,57	2,22
Water (EN8-EN10)	1,38	1,22	1,34	1,67	1,50	1,42	1,22	0,96	1,07
Biodiversity (EN11-EN15)	2,04	1,90	1,79	2,41	2,32	2,08	2,20	1,94	2,61
Direct and indirect emissions (EN16-EN25)	5,18	4,98	4,84	6,37	6,61	6,41	5,01	5,41	5,29
Products and services (EN26-EN27)	1,06	1,04	0,95	1,03	0,95	0,84	1,06	0,95	0,96
Conformity (EN28)	0,42	0,35	0,24	0,87	0,82	0,84	0,74	0,71	0,79
Transport (EN29)	0,12	0,10	0,18	0,32	0,31	0,35	0,30	0,27	0,25
General (EN30)	0,36	0,30	0,27	0,45	0,42	0,28	0,30	0,27	0,22
Social performance indicators					,		,		
Labour practices and decent work									
Employment (LA1-LA3)	1,50	1,38	1,33	1,64	1,70	1,85	1,17	1,20	1,17
Industrial relations (LA4-LA5)	0,64	0,75	0,68	1,37	1,43	1,58	0,77	0,85	0,60
Health and safety at work (LA6-LA9)	1,94	1,90	1,81	2,09	2,08	2,24	1,78	1,77	1,66
Training and education (LA10-LA12)	1,62	1,58	1,41	1,34	1,63	1,61	1,18	1,22	1,08
Diversity and equal opportunity (LA13-LA14)	0.93	1.06	1.11	1,16	1.43	1.28	0.84	0,63	0,73
Human rights	- ,	, , , ,	,	, -	, -	, -	- , -	, , , ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Investment and procurement practices (HR1-	0,78	0,95	0,92	1,25	1,46	1,53	0,67	0,75	0,74
HR3)			,	,			,		,
Non discrimination (HR4)	0,44	0,55	0,50	0,67	0,64	0,76	0,11	0,17	0,18
Freedom of association and collective bargaining	0,44	0,45	0,42	0,42	0,50	0,53	0,33	0,33	0,24
(HR5)								1	
Child labour (HR6)	0,56	0,55	0,50	0,50	0,64	0,65	0,33	0,38	0,35
Forced and compulsory labour (HR7)	0,56	0,55	0,58	0,50	0,64	0,65	0,33	0,50	0,29
Security practices (HR8)	0,06	0,05	0,04	0,08	0,07	0,12	0,17	0,25	0,15
Indigenous rights (HR9)	0,06	0,55	0,04	0,17	0,21	0,21	0,00	0,17	0,09
Society									
Community (S01)	0,57	0,80	0,57	0,65	0,69	0,62	0,59	0,66	0,57
Corruption (S02-S04)	1,62	0,55	1,86	2,15	2,22	2,05	0,78	1,02	1,14
Public policy (approach to political	0,48	0,05	0,50	0,78	0,96	1,03	0,87	1,05	1,09
parties/institutions) (S05-S06)								1	
Anti-competitive behaviour (S07)	0,06	0,33	0,08	0,29	0,36	0,29	0,06	0,08	0,06
Compliance (S08)	0,40	0,44	0,30	0,72	0,75	0,72	0,30	0,22	0,32
Product responsibility									
Customer health and safety (PR1-PR2)	0,49	0,44	0,43	0,40	0,45	0,48	0,44	0,41	0,31
Product and service labelling (PR3-PR5)	0,42	0,58	0,66	0,51	0,66	0,74	0,63	0,58	0,61
Marketing communications (PR6-PR7)	0,16	0,20	0,22	0,28	0,31	0,31	0,09	0,25	0,28
Customer privacy (PR8)	0,00	0,00	0,04	0,33	0,32	0,29	0.00	0,08	0,09
Customer privacy (PR8)	0,00	0,00	0,04	0,55	0,52	0,27	0,00	0,00	0,02

5. Conclusions

Despite this growing interest in social reporting, descriptive studies examining how companies build their reports are, to date, extremely scarce. Moreover, notwithstanding the proliferation of these reports, questions remain on the information they should contain and on how they should be structured (Davis and Searcy, 2010). This paper provides one of the first in-depth studies of social reporting quality between Italy, China and the US and it reveals the differences in quality levels of annual reports. Moreover, it provides a certain degrees of the situation about social reporting in these three countries and it is a response

to the need for more CSR research in the context of developing countries compared with developed ones (Visser, 2009; Yang and Yaacob, 2012).

Another contribution of this study worth mentioning relates to the methodology used to assess social reporting quality. This research goes beyond previous studies by adding a proposal to evaluate social reporting quality using GRI indicators.

Our research examines the GRI indicators and evaluates the quality of social reporting according to these indicators. Italy confirms its benchmark position as its level of social reporting quality is higher than that of the US and China. Despite growing interest in social reporting, quality does not show an increasing

trend - China, Italy and the USA peaked in 2010, but in 2011 frequently did not reach the same levels, occasionally showing performance levels below those of 2009.

Even more surprising data on social reporting quality in China, show an inverse trend with quality levels dropping notably between 2009 and 2011.

In actual fact, Chinese utility service companies appear to pay attention only to certain aspects of social performance. So, while many companies report a lot of CSR information on many topics without having any major emphasis and direction, some companies pay too much attention to the key dimensions related to their business operations and touch on other CSR topics very lightly (Li and Xiang, 2007). According to stakeholder theory, these differences may be explained by the difficulty in identifying and balancing different interests of the various stakeholders, as sometimes some stakeholder groups take precedence over others (Dunfee, 2009).

The results show that there are numerous possibilities for future research in this area that might be developed, arising out of the very limits of this paper.

The main limitations of this study concern the companies analysed, as the population comes from a small group of utilities companies and therefore results cannot be assumed to apply generally. Secondly, many companies do not have their social reports certified by a third party. A recent research highlights differences in external verification of social reports, with 45% of European reports being externally verified, as opposed to 24% of Japanese reports and only 3% of American reports (Kolk, 2008). As a result, the possibility remains that companies may overstate their performance when disclosing social responsibilities.

We might also mention the difficulties in collecting data for social reporting linked to the Chinese language and the scarcity of diffusion of social reporting in general (Stray, 2008). According to a recent study, this may be explained by the fact that Chinese companies do not have good records on CSR, so prefer not to publish them (Gao, 2011). Moreover the Chinese media have not yet been able to develop a critical view toward business (ORSE, 2006), so many companies feel no pressure to publish their social reports. We believe it would be useful to carry out content analysis into the quality of what has been reported in CSR communications.

Lastly, it would be interesting to verify our results, extending analysis to other sectors, as information contained in CSR reporting has been shown to be very different from one sector to another.

References:

 Adams, C.A. and Frost, G.R. (2006), "Accessibility and functionality of the corporate website: implications for sustainability reporting", *Business Strategy and the Environment*, Vol. 15, No. 4, pp. 275-287.

- 2. Beloe, S., Elkington, J., Hester, K.F., Loose, M. and Zollinger, P. (2006), *Tomorrow's value. The global reporters 2006 survey of corporate sustainability reporting*, SustainAbility, London.
- 3. Callan, S.J. and Thomas, J.M. (2009), "Corporate financial performance and corporate social performance: an update and reinvestigation", *Corporate Social Responsibility and Environmental Management*, Vol. 16, No. 2, pp. 61-78.
- 4. Costa, R., and Menichini, R. (2013), A multidimensional approach for CSR assessment: the importance of the stakeholder perception, *Expert Systems with Application*, Vol. 40, pp. 150-161.
- 5. Crane, A. and Matten, D. (2007), *Business ethics*, Oxford University Press, Oxford.
- 6. Daub, C.H. (2007), "Assessing the quality of sustainability reporting: an alternative methodological approach", *Journal of Cleaner Production*, Vol. 15, No. 1, pp. 75-85.
- 7. Davis, G. and Searcy, C. (2010), "A review of Canadian corporate sustainable development reports", *Journal of Global Responsibility*, Vol. 1, No. 2, pp. 316-329.
- 8. Dunfee, T.W. (2009), "Stakeholder theory. Managing corporate social responsibility in a multiple actor context", in Crane, A., McWiliams, A., Matten, D., Moon, J. and Siegel, D.S. (Eds.), *The Oxford handbook of corporate social responsibility*, Oxford University Press, Oxford.
- 9. Egri, C.P. and Ralston, D.A. (2008), "Corporate responsibility: a review of international management research from 1998 to 2007", *Journal of International Management*, Vol. 14, No. 4, pp. 319-339.
- 10. Freeman, R.E. (1984), Strategic management: a stakeholder approach, Pitman, Boston.
- 11. Gamerschlag, R., Möller, K. and Verbeeten, F. (2011), "Determinants of voluntary CSR disclosure: empirical evidence from Germany", *Review of Managerial Science*, Vol. 4, pp. 233-262.
- 12. Gao, Y. (2011), CSR in emerging country: a content analysis of CSR reports of listed companies, Baltic Journal of Management, Vol. 6, No. 2, pp. 263-291.
- 13. Graves, S.B. and Waddock, S.A. (2000), "Beyond built to last...Stakeholder relations in "Built-To-last" companies", *Business and Society Review*, Vol. 105, No. 4, pp. 393-418.
- 14. GRI (2010a), *GRI portal- sector supplement*, available at: http://www.globalreporting.org.
- 15. GRI (2010b), *GRI reports list*, available at: http://www.globalreporting.org.
- 16. Habisch, A., Patelli, L., Pedrini M., Schwartz, C. (2011), Different talks with different folks: a comparative survey of stakeholder dialog in Germany, Italy, and the U.S., *Journal of Business Ethics*, Vol. 100, pp. 381-404.
- 17. Hahn, R. and Kühnen, M. (2013), "Determinants of sustainability reporting: a review of results, trends, theory, and opportunities in an expanding field of research", *Journal of Cleaner Production*, Vol. 59, pp. 5-21.
- 18. Hedberg, C.J. and von Malmborg, F. (2003), "The Global Reporting Initiative and corporate sustainability reporting in Swedish companies", *Corporate Social Responsibility and Environmental Management*, Vol. 10, No. 3, pp. 153-164.
- 19. Holder-Webb, L., Cohen, J.R., Nath, L., and Wood, D. (2009), "The supply of corporate social responsibility

- disclosures among U.S. firms", *Journal of Business Ethics*, Vol. 84, No. 4, pp. 497-527.
- 20. IIRC (International Integrated Reporting Committee) (2011), *Towards integrated reporting communicating value in the 21st century*, available at: www.theiirc.org.
- 21. IE School of communication (2010), Csr Communication Exploring European cross-national differences and tendencies, available at: www.ie.edu.
- 22. Ip, P.D. (2008), "Corporate social responsibility and crony capitalism in Taiwan", *Journal of Business Ethics*, Vol. 79, No. 1/2, pp. 67-177.
- Keeble, J., Topiol, S. and Berkeley, S. (2003), "Using indicators to measure sustainability performance at a corporate and project level", *Journal of Business Ethics*, Vol. 44, No. 2/3, pp. 149-158.
- 24. Kolk, A. (2008), "Sustainability, accountability and corporate governance: exploring multinationals' reporting practices". *Business Strategy and the Environment*, Vol. 17, No. 1, pp. 1-15.
- 25. KPMG (2011), KPMG international survey of corporate responsibility reporting 2011, available at: www.kpmg.com.
- 26. KPMG (2013), *The KPMG survey of corporate responsibility reporting 2013*, available at: www.kpmg.com.
- 27. Krumwiede, D., Hackert, A.M., Tokle, J. and Vokurka, R.J. (2012), "The practice of corporate social responsibility in different countries: a study firms in Canada, Hungary, Italy, Lebanon, Taiwan and the United States", *International Journal of Management*, Vol. 29, No. 1, pp. 289-402.
- La Rovere, E.L., Soares, J.B., Oliveira, L.B. and Lauria, T. (2010), "Sustainable expansion of electricity sector: sustainability indicators as an instrument to support decision-making". *Renewable and Sustainable Energy Reviews*, Vol. 14, No. 1, pp. 422-429.
- Lenzen, M., Dey, C.J., and Murray, S. (2004), "Historical accountability and cumulative impacts: the treatment of time in corporate sustainability reporting", *Ecological Economics*, Vol. 51, No. 3/4, pp. 237-250.
- Li, Z. and Xiang, R. (2007), "Study on content definition, measure methods and status quo of information disclosure on community responsibility in Chinese enterprises", *Accounting Research*, No. 7, pp. 3-11
- 31. McWilliams, A. and Siegel, D. (2000), Corporate social responsibility and financial performance: correlation or misspecification?, Strategic Management Journal, Vol. 21, No. 5, pp. 603-609.
- 32. Mio, C. (2010), Corporate social reporting in Italian multi-utility companies: an empirical analysis, *Corporate Social Responsibility and Environmental Management*, Vol. 17, pp. 247–271.
- 33. Moneva, J.M., Archel, P. and Correa, C. (2006), "GRI and the camouflaging of corporate unsustainability", *Accounting Forum*, Vol. 30, No. 2, pp. 121-127.
- 34. Morhardt, J.E., Boird, A. and Freeman, K. (2002), "Scoring corporate environmental and sustainability reports using GRI 2000, ISO 14031 and other criteria", Corporate Social Responsibility and Environmental Management, Vol. 9, No. 4, pp. 215-233.
- 35. Narodoslawsky, M. and Krotscheck, C. (2004), "What can we learn from ecological valuation processes with the sustainable process index (SPI)? The case study of energy production systems", *Journal of Cleaner Production*, Vol. 12, No. 2, pp. 111-115.

- 36. ORSE (Observatoire de la Respondabilité Sociétale des Entreprises) (2006), *Corporate social responsibility in China*, available at: www.orse.org.
- 37. Perrini, F., Pogutz, S. and Tencati, A. (2006), "Corporate social responsibility in Italy: state of the art", *Journal of Business Strategies*, Vol. 23, No. 1, pp. 65-91.
- 38. Ratanajongkol, S., Davey, H. and Low, M. (2006), "Corporate social reporting in Thailand: the news is all good and increasing", *Qualitative Research in Accounting and Management*, Vol. 3, No. 1, pp. 67-83.
- Roca, L.C. and Searcy, C. (2012), "An analysis of indicators disclosed in corporate sustainability reports", *Journal of Cleaner Production*, Vol. 20, No. 1, pp. 103-118
- Romolini, A., Fissi, S. and Gori, E. (2014), "Scoring CSR reporting in listed companies – Evidence from Italian best practices", *Corporate Social Responsibility* and Environmental Management, Vol. 21, No. 2, pp. 65-81.
- 41. Sá de Abreu, M.C., de Castro F., de Assis Soares, F. and da Silva Filho, J.C.L. (2012), A comparative understanding of corporate social responsibility of textile firms in Brazil and China, *Journal of Cleaner Production*, Vol. 20, pp. 119-126.
- 42. Searcy, C. (2012), "Corporate sustainability performance measurement systems: a review and research agenda", *Journal of Business Ethics*, Vol. 107, No. 3, pp. 239-253.
- 43. Secchi, D. (2006), "The Italian experience in social reporting: an empirical analysis", *Corporate Social Responsibility and Environmental Management*, Vol. 13, No. 3, pp. 133-149.
- 44. Skouloudis, A. and Evangelinos, K.I. (2009), "Sustainability reporting in Greece: are we there yet?", *Environmental Quality Management*, Vol. 19, No. 1, pp. 43-59.
- 45. Skouloudis, A., Evangelinos, K.I. and Kourmousis, F. (2010), "Assessing non-financial reports according to the global reporting initiative guidelines: evidence from Greece", *Journal of Cleaner Production*, Vol. 18, No. 5, pp. 426-438.
- 46. Sobhani, F.A., Amran, A. and Zainuddin, Y. (2009), "Revisiting the practices of corporate social and environmental disclosure in Bangladesh", *Corporate Social Responsibility and Environmental Management*, Vol. 16 No. 3, pp. 167-183.
- 47. Spangenberg, J.H. (2002), "Institutional sustainability indicators: an analysis of the institutions in Agenda 21 and a draft set of indicator for monitoring their effectivity", *Sustainable Development*, Vol. 10, No. 2, pp. 103-115.
- Staniskis, J.K., Arbaciauskas, V., (2009), "Sustainability performance indicators for industrial enterprise management", Environmental Research, Engineering and Management, Vol. 48, No. 2, pp. 42-50.
- 49. Stiller, Y. and Daub, C.H. (2007), "Paving the way for sustainable communication: evidence from a Swiss study", *Business Strategy and the Environment*, Vol. 16, No. 7, pp. 474-486.
- 50. Stray, S. (2008), "Environmental reporting: the U.K. water and energy industries: a research note", *Journal of Business Ethics*, Vol. 80, No. 4, pp. 697-710.
- 51. UNEP (United Nations Environment Programme), KPMG, GRI, Unit for Corporate Governance in Africa

- (2010), Carrots and sticks. Promoting transparency and sustainability, available at: www.globalreporting.org.
- 52. Veleva, V. and Ellenbecker, M. (2001), "Indicators of sustainable production: framework and methodology", *Journal of Cleaner Production*, Vol. 9, No. 6, pp. 519-549
- 53. Verschoor, C.C. (2011), "Should sustainability reporting be integrated?", *Strategic Finance*, Vol. 93, No. 6, pp. 12-14.
- 54. Visser, W. (2009), "Corporate social responsibility in developing countries", in Crane, A., McWiliams, A., Matten, D., Moon, J. and Siegel, D.S. (Eds.), *The Oxford handbook of corporate social responsibility*, Oxford University Press, Oxford.
- 55. Vormedal, I. and Ruud, A. (2009), "Sustainability reporting in Norway an assessment of performance in the context of legal demands and socio-political drivers", *Business Strategy and the Environment*, Vol. 18, No. 4, pp. 207-222.

- 56. Williams, C.A. and Aguilera, R.A. (2008), "Corporate social responsibility in a comparative perspective", in Crane, A., McWilliams, A., Matten, D., Moon, J. and Siegel, D.S. (Eds.), *The Oxford handbook of corporate social responsibility*, Oxford University Press, Oxford.
- 57. Yang, C. (2008), Corporate social responsibility and China's overseas extractive industry operations: achieving sustainable natural resource extraction, FESS Issue Brief, available at: www.fess-global.org.
- 58. Yang, L. and Yaacob, Z.B. (2012), "A Comparative Analysis of Corporate Social Disclosure of Top listed Companies in China and Malaysia", *World Review of Business Research*, Vol. 2, No. 2, pp. 45-61.
- Zhao, Z., Zhao, X., Davidson, K. and Zuo, J. (2012), A corporate social responsibility indicator system for construction enterprises, *Journal of Cleaner Production*, Vol. 29, No. 7, pp. 277-289.