What is the stock of the situation? A bibliometric analysis on social and environmental accounting research in public sector

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Purpose: The study aims to take stock of the situation in social and environmental accounting research in public sector, highlighting specific branches and main gaps in the extant literature and providing input for future researches.

Design/methodology/approach: A bibliometric method was used to analyse characteristics, citation patterns and contents of 38 papers published in international academic journals.

Findings: The findings show that the research on social and environmental reporting in public sector is in an early state. The current investigations, although they are slowly increasing, are still very few and localized. Most papers are related to the reasons why public organisations report and to what and how they report, but there are so many aspects that need to be investigated more deeply or who require extra validation and making up important directions for future research.

Research limitations: The study has some limitations, mainly related to bibliometric method. Indeed, it does not take into account books and chapter but only papers

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published on international and academic journal. This leads to exclude a significant part of the existing literature and also relevant contributions on the field.

**Originality/value:** The social and environmental reporting practices are quickly spreading in public sector. The field is particularly interesting given that the specific connotations of these kind of organisations, however, the literature is not rich and there is not a comprehensive and systematic review on the knowledge so far achieved.

**Article Classification:** Literature Review

**Keywords:** public sector, social and environmental reporting, sustainability reporting, bibliometric analysis.

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<td>SER - Social and environmental reporting</td>
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<td>PSOs – Public Sector Organizations</td>
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<td>CSR – Corporate Social Responsibility</td>
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1. **Introduction**

International literature has long highlighted how the demand for greater accountability involves not only companies, but also politics, non-profit organizations and public administrations, and their relationship with stakeholders and society as a
whole. In particular, it has been shown that the increase in the demand for accountability and transparency mainly concerns social and environmental issues. This has led to an increasing interest in non-traditional and non-financial reporting practices that are able to account for the social and environmental impact of organizations and their contribution to sustainable development and which are also useful tools in the management, planning and control of these activities (Unerman et al., 2007). The locution used to identify these tools have been many – i.e. Social report, Social and Environmental Report, Social Responsibility Report, Corporate Social Responsibility Report and Sustainability Report. Despite some initial differences, these terms have become interchangeable; in fact, in the present study, we use either “Sustainability Report” (SR) and “Social and Environmental Report” (SER).

Despite the social and environmental accounting research (SEAR) traditionally focused on the private sector, recently it also turned its attention on the public sector. The same can be said about the practices, that are quickly spreading thanks also to encouragement of different international (see GRI3) and national (see GBS in Italy) frameworks. Nevertheless the “public agency sustainability reporting is undeniably still in its infancy” (Dickinson et al., 2005, p. 5) and its potential is overlooked (Ball and Grubnic, 2007), also due to doubts about its applicability in public organizations. Instead, it is not only possible but also necessary to apply these kind of reporting. Obviously, it would not be unsuitable to replicate unconditionally patterns and models of the private sector, but it is necessary a research and practices distinctive agenda (Ball and Grubnic, 2007; Ball and Bebbington, 2008), which takes into account the typical nature of the public sector.

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3 The Global Reporting Initiative (GRI) is a non-profit organization founded in 1997, with the aim of developing and promoting globally applicable guidelines for drafting a Sustainability Report. Internationally, its guidelines constitutes the most prominent and used standards for sustainability reporting. The structure and contents are identified through 3 sections: strategy and profile; management mode; performance indicators. Although there is no specific standard for the public sector, in 2006, a Sector Supplement for Public Agencies - which integrates the overall guidelines - has been published.
First of all, the public nature of the subjects analysed means that social responsibility and therefore social and environmental reporting cannot be an ethical and residual option. This is even clearer for those entities whose specific mission is inherent to social, sustainability or environmental conservation issues. As the institutional purpose of all public organisations is a social one, it can be inferred that also their reports, which are about the use of common resources to generate benefits for the community, must be social by definition. Indeed, this characteristic means that social and environmental (or sustainability) reports sometimes constitute the only effective communication tool regarding the activities carried out, given the strong informative limits of an exclusively economic and financial reporting. It should also be taken into account the nature and relationships with stakeholders are much more complex and layered, an example of that being the relationship with citizens/voters/taxpayers who are often also consumers (Ricci, 2016).

Moreover, the role played by public sector must be double: on the one hand, it encourages the adoption of instruments and socially responsible behaviours by private entities, as part of the functions of regulation and control of economic and social activities; on the other hand, it inevitably strengthens the determination to adopt social responsibility principles in the management, production and provision of public goods and services, as well as the reporting on these aspects (Albareda et al., 2007). In other words, the public sector is both the regulator and/or driver of SER, and an entity falling under these requirements (Guthrie and Farneti, 2008; Lodhia and Jacobs; 2013). In this regard, many authors (for instance, Osborne and Ball, 2010) argued that, since the ‘90s, the public sector has been pushed towards focusing on economic and financial targets and responsibilities, on efficiency rather than on effectiveness and – above all – equity. The global financial crisis whose aftermath still grips the West has increased the pressure in this direction, which will end up to aggravate the fragility of the public sphere. However, a long-lasting global economic recovery will necessarily require a more sustainable approach, not only from a financial point of view, but especially from a social one. Adding the inability
of mere accrual or financial accounting to explain and manage “the sophistication of the public governance of the fragmented state” (Osborne and Ball, 2010, p. 4), it will be possible to imagine what is needed in terms of ”new directions in the theory and practice of accountability” for the public sector which are, of course, those of social and environmental reporting (Osborne and Ball, 2010; Guthrie et al., 2010).

Agreeing with this opinion, the present study aims to carry out a bibliometric analysis of current literature on SEAR in the public sector, to check to what extent is the knowledge on the topic and provide insights for future developments, starting from the main current findings and gaps. The need to take the stock of situation comes not only from the willingness to shine the spotlight on an important, interesting but overlooked issue, but also - and above all - as it is a privileged way to draw the direction for future developments. In this regard, wondering what the future may have SEAR in public sector will also mean taking into account new and emerging trends in non-financial reporting, such as Intellectual Capital disclosure (Guthrie et al., 2012; Cuozzo et al., 2017) and Integrated Reporting (Jensen and Berg, 2012; Abeysekera, 2013; de Villiers et al., 2014; Cohen and Karatzimas, 2015; Beck et al., 2016; Dumay et al. 2016). Although in a pioneering phase, the academic, professional (i.e. IIRC, GRI), and regulatory (see, for instance, the Directive of European Commission 2014/95/EU) interest in Integrated Reporting is increasingly growing.

Differently to other disclosure tools, the “one report” (Eccles and Krzus, 2010) encompasses both financial and non-financial issues, in order to provide a more holistic and clear picture of organization. Surely, on the opportunities, the criticalities, the differences and the relationship between these types of disclosure and an appropriate framework for the public sector will need to be investigated in the next few years.

Finally, it is necessary to define what we mean by public sector. Broadbent and Guthrie (1992, p. 3), while focusing on the ownership and control on the one hand and on the provision of essential services to the community on the other hand, define the public sector as “…that part of a nation’s economic activity which is traditionally
owned and controlled by government [...] composed of public organizations which provide utilities and services to the community and which have traditionally been seen as essential to the fabric of our society.” Although this definition was extended by the same authors in 2008, in order to include all organisations that provide public services, (Broadbent and Guthrie, 2008), following previous studies (Ball and Grubnic, 2007; Ball et al., 2014), the present one uses the 1992 definition. Consequently, although a clear and exact identification is difficult, if not almost impossible, especially moving from one context to another, we include in the public sector:

- Central government;
- Local government authorities;
- Public Institutions (i.e. health and educations)
- Public corporations (i.e. water or energy industry).

The article is organized as follows: the first section contains a brief description of the theoretical background; the second describes the methodology, i.e. data collection and method of analysis; the results are presented and discussed in the third section. Finally, there are recommendations for further research and some concluding remarks.

2. Theoretical background

Research on social and environmental reporting has grown exponentially for the past few decades, particularly since the mid-1990s. Despite the name, there have been (and maybe there are still) doubts about whether it should belong at all to the area of accounting and, even when so, no one can fail to notice how it has been considered a not-so-relevant issue for a long time (Gray et al., 1987, 1995; Mathews, 1997; Deegan, 2002). The predominant view (Gray et al., 1995) consider SER as a part of the study of the role of information in organisation and social relations. Within this framework, the SER phenomenon is mainly explained through the accountability concept (i.e. Ricci, 2013; Ricci and Fusco, 2016), the stakeholder theory (i.e. Roberts, 1992; Neu
et al., 1998), the legitimacy theory (i.e. Deegan, 2002; Deegan et al., 2002; Nurhayati, 2016) and the institutional theory (i.e. Marquis and Qian, 2013; Shabana et al. 2016). As will be noted in the next subparagraphs, different are the points of contact between these theories and all can provide useful and plausible explanations on social and environmental reporting tendency; therefore, according to some leadings scholars (Gray et al., 1995), it is believed to be far more useful if they have used overlapped and jointly, rather than in opposition.

It must be emphasized that, even if to a lesser extent, other approaches have also been used to explain the socio-environmental reporting phenomenon, including, for example, the regime theory (Bebbington et al., 2008), the structuration theory (Buhr, 2002), the contingency theory (Adams and Larrinaga, 2007).

### 2.1 The concept of accountability

The issue of CSR reporting in the public sector is often linked to the concept of accountability. Despite the widespread use and the numerous and not precise definitions (Sinclair, 1995), generally, it implies the explication and the justification on what it is done or not (Bovens, 2007; Messner, 2009). Ricci (2016) defines it as “the duty to act in a responsible way and to be accountable to others for one’s actions, in order to maintain effective and logical links between planning, deciding, action, and verification.” (Ricci, 2016, p. 1).

The largest use of this term rather than the past has implied the expansion of the concept itself and of its categorization. Specifically, the demand for accountability does not involve more just public administrations, politic bodies and their relation with citizen, but also corporations, NGOs, their stakeholder and the society as a whole. Here, it is the link with the social and environmental accounting literature. In fact, the increasing interest on social, ethical and ecological issues and the impact on these fields of private and public organisations has produced the growing demand from society for greater accountability and transparency regarding social and environmental questions.
2.2 The stakeholder theory

The concept of stakeholder dates back to 1963, but only by the late 1970’s and early 1980’s scholars and practitioners began to develop a management theory, in order to attempt to solve the three main problems relating to business: the problem of value creation and trade, the problem of the ethics of capitalism, the problem of managerial mind-set. In fact stakeholder theory proposes that these problem can be effectively dealt if the relation between a business and the groups and individuals “who can affect or are affected by (Freeman, 1984, p. 46) is placed on heart of analysis. So, the continuity and the success of a corporation depend on its stakeholders and on the relation is established with them (Freeman, 1984; Donaldson and Preston, 1995; Freeman et al., 2010). Stakeholders can have different and conflicting interests and different power. More influence has the stakeholder, more important is managing the relationship with it, more the company must adapt to its demands (Ullmann, 1985). In this perspective, the social and environmental report is seen as part of this dialogue. Roberts (1992) argues that stakeholder theory constitutes a valid theoretical foundation to analyse social disclosure. Specifically, he tests that the prior economic performance, the strategic posture and the stakeholder power affect the level of corporate social disclosure. In this regard, Neu et al. (1998) asserts that the view and the power of specific groups can encourage the adoption of this type of report. Based on stakeholder theory, social disclosure is adopted for strategic reason, regardless of ethical motivations and assumptions of responsibilities, even though there may be.

2.3 The legitimacy theory

As stakeholder theory, legitimacy theory starts from the assumption (common to all the system-oriented theories) that each entity affects and is in turn affected by the society. However, differently from the former, the latter attempts to treat the systemic issue that initially construct the relation. Legitimacy theory states that an organisation can exist if the society confers it a state of legitimacy. Lindblom (1994, p. 2) defines legitimacy as “…a condition or status which exists when an entity’s value system is congruent with
the value system of the larger social system of which the entity is a part. When a disparity, actual or potential, exists between the two value systems, there is a threat to the entity’s legitimacy.”

At the base of the relationship between organisation and society, therefore, there is what is called “social contract” (Mathews, 1997; Deegan, 2002). The concept of legitimacy changes in time and in space and there may be several reasons why an organisation is no longer perceived as legitimate. When it happens, there may be different strategies that organisation can adopt to bridge this actual or potential gap (Dowling and Pfeffer, 1975; Lindblom, 1994). For any strategy, because it is mostly based on perceptions, the information to society becomes essential. In this perspective, social disclosure can be employed to implement each of these strategies, for example, it could be used to reinforce the community perceptions of management responsibility and responsiveness on social and environmental issues or to distract them from some “illegitimate” behaviour by focusing on others. Although one of the prior and most influential research did not find evidence to link SER with legitimacy theory (Guthrie and Parker, 1989), others have obtain good results in this direction (Gray et al., 1995; O'Donovan, 1999, 2002; Wilmshurst and Frost, 2000; Deegan et al., 2002; Nurhayati et al., 2016). Anyway, despite the big contribution of the theory to the explanation of the proliferation of social and environmental reports, it is not without its critics and limitations, that even some of his most ardent supporters do not fail to highlight (Deegan, 2002; Parker, 2005; Bebbington et al., 2008).

2.4 The institutional theory

The institutional theory suggests that organisations are strongly affected by institutional environment, so that they tend to adapt their structure, processes, and practices to this pressure (Meyer and Rowan, 1977). DiMaggio and Powell (1983) argue that organizations are subjected to three types of pressures: (1) coercive; (2) mimetic; (3) normative. The effect of these institutional pressures is a homogeneity increase between organizational structures. This process is also called “isomorphism”. Compared to legitimacy theory, they have in common the centrality of the concept of
legitimacy (Suchman, 1995), and the reference to the social contract, changing only the responsivenes and influence that assign organisations, not considered capable of affecting the perceptions and expectations of the environment. There is a growing interest in examining the CSR global diffusion and so CSR reporting (e.g. Marquis and Qian, 2013; Shabana et al. 2016) from the institutional theory perspective. Shabana et al. (2016) provide an explanation for the institutionalization of social and environmental reporting through a three-stage process. In the first step, “defensive reporting”, the adoption is caused by a coercive isomorphism, in the second “proactive reporting”, it is due to normative isomorphism and in the third, “imitative diffusion”, it is associate with mimetic isomorphism. About the institutional theory applied to the public sector, interesting is report the study of Frumkin and Galaskiewicz (2004), according to which the governmental organisations are more vulnerable to institutional forces than for-profits organisations and those institutional forces seemed to be working to cut the differences among for-profit, non-profit and governmental agencies and result in the adoption of hybrid structural patterns.

3. Methodology

A literature review serves different purposes, for instance to build a foundation and conceptualize a study, to provide a reference point for interpretation of findings or to get an overview on the state of the art regarding a given subject and assess how the studies have progressed and how they might move forward. A systematic and rigorous method to achieve the latter is the bibliometric analysis, increasingly used also in management and accounting studies (see, for instance, Ramos-Rodríguez and Ruíz-Navarro, 2004; de Bakker et al., 2005; Riviezzo et al., 2015).

3.1 Identification of papers

The present literature review was conducted by taking into account only papers published in international academic journals. Books and book chapters were,
therefore, excluded, even though they were by relevant authors and thus constituting an important contribution to the issue of social and environmental reporting in the public sector. Introductions to special issues were included in the dataset only if they were comparable to a paper.

In order to identify the papers, Scopus, Web Sciences and Google Scholar were examined for the entire period, hence no time limit has been established given that, as previously stressed, the topic considered is relatively new.

For searching purposes, the following key words were entered to verify their presence in titles, abstracts and keywords:

- public sector sustainability reporting
- public sector social reporting
- social and environmental reporting public sector
- CSR reporting public sector
- Social reporting
- Sustainability reporting

Then, the search was also carried out by replacing alternative words, for example public agencies and public services instead of public sector or disclosure and report instead of reporting, however particular attention was paid so that any change in meaning would not lead to deviations from the focus of the study. For example, articles on sustainable management and performance were not included, as well as those on the public sector role in strengthening CSR or those about accounting and accountability in general.

A further stage – aimed at not leaving behind relevant articles previously overlooked – was put in place by analysing the references of the articles already selected. This allowed the identification of six other papers. The final sample is made of 38 papers, one of which being a column.

3.2 Method
First of all, the analysis was aimed at verifying the fluctuation in publication activity (i.e. number of publication per year), the journals and the authors that have given greater contribution to the development of the research field in question (i.e. number of publication per journal and per author). In order to determine the most published authors, all of them – and not just the first ones – were taken into account. Then, the citation pattern was highlighted to identify the most influential papers and authors.

The next step moved to the contents of the articles-sample, that were codified according to the seven categories, whose selection has taken into account previous similar studies (i.e. Guthrie et al., 2012; Dumay et al., 2016; Cuozzo et al., 2017).

1. **Disclosure type**, namely what type of report is under analysis (environmental, social, socio-environmental, sustainability or other) and what aspects of management it embraces.

2. **Epistemological orientation**, meaning *theoretical* or *empirical*. For the purpose of this study, theoretical papers are those mainly characterized by the development of hypotheses, opinions, personal analysis and comparisons of theoretical positions (literature reviews fall therefore in this category). Conversely, papers belong to the second type when they are based on the empirical analysis of data, mainly for testing (refutation, confirmation) of existing models and theoretical frameworks. They use an inductive approach to provide an interpretation of what is seen. Case studies are included in this category.

3. **Methodology**, for the purposes of this study, only three macro-groups were identified (qualitative, qualitative, mixed approach), although more specific detail will be provided in the next analysis. The choice not to categorize further due to the difficulty of classifying exactly the papers considered in one research methods.
4. **Theoretical framework and models**, that is the theory and the models on which the studies are based. This is divided into three groups: no proposed, applies or considers previous, proposes a new.

5. **Sample**, aims to highlight the type of public organization analysed. Specifically, taking the definition of the public sector provided by Broadbent and Guthrie (1992) and the classification adopted by Ball and Grubnic (2007, 2014), specifically six macro-groups were identified: Central and local authorities, Research and educational institutions, Public listed companies, Utility sector, Healthcare sector, Other.

6. **Context**, that is the regional focus and jurisdiction of the study undertaken. The regional focus is divided into five regions: Europe (UK and Ireland, North, Continental, Mediterranean, Eastern), North America (USA and Canada), Australasia (Australia and New Zealand), Other, Not Applicable.

7. **Key aims and findings**, category that has the purpose of identifying research questions and the findings of each study in order to highlight recurring issues.

4. **Results and Findings**

4.1 **Publication pattern**

The identified articles cover a period ranging from 1997 to 2017, but they are rather scarce until 2008, when their publication starts to become systematic, although the number is still very small and the trend quite unsteady (Figure 1). The data confirm what was already mentioned above. This research field is still in its “infancy” and far from being sufficiently explored.

Among the twenty-one journals which published the articles considered, five – Public Management Review (7), Accounting Forum (3), Accounting, Auditing & Accountability Journal (3), Public Money & Management (3) and Sustainability Accounting, Management and Policy Journal (3) – show a greater number of
publications, which amount to about half of the whole sample. As it can be seen (Table 1), journals with focus on public sector or on issues of accounting (and thus accountability) are predominant, while specialized journals on issues of CSR and business ethics area are almost absent, as they are mainly oriented towards investigating corporate issues.

According to the sample, 65 authors gave their contribution to the field (1.8 author per paper). The most productive have so far been Farneti (6), Guthrie (5), Sciulli (4), Lodhia (3), Lozano (3) and Siboni (3), who have all published more than two papers each. Checking the affiliation of the authors at the time of publication, some interesting results come up. The countries most represented are Italy, Australia and Spain, indeed sixteen authors are affiliated with Italian universities, fourteen with Australian universities (one author shows an Italian affiliation in one paper and an Australian affiliation in another one), ten authors have an affiliation with Spanish universities (one author has changed his affiliation during the period). Most of the papers (34 out of 38) were the product of a co-authorship, but only in 10 papers the authors are from different countries. It is interesting to notice that 8 out of 10 “multi-national” papers have an author affiliated to an Italian university; collaborations between authors with Italian and Australian affiliation is prevalent. It appears there is not a high degree of diversity when it comes to the authors' nationality and that public sector SEAR is concentrated in a few countries and among a few authors. The research field analysed seems therefore quite closed.

4.2 Citation Patterns

Citation patterns are relevant to see which publications have been most influential within the research field being studied, as well as to identify the leading papers in the sample and therefore the degree of openness or closure of the existent literature.
In keeping with other authors (Guthrie et al., 2012; Dumay et al., 2016; Cuozzo et al. 2017), we have used Google Scholar to get the citation data (Table 2). The choice is due to a more comprehensive coverage of journals and publications rather than Scopus and WoS., as well as the possibility of comparisons, given the wider use of this tool (Harzing and van der Wal, 2008; Cuozzo et al., 2017). In this case, Scopus covered 83.8% of the articles and WoS 51.4%. Nevertheless, Google Scholar is considered as a “new source for citation analysis” (Harzing and van der Wal, 2008), some weaknesses remain (i.e. the inclusion of self-citations), for these reason we have reported the citations available in Scopus and WoS in appendix B. The collection of the citation data accesses were made on March 30th 2017 in all three systems.

In the most cited papers, there is not a predominance of one journal publishing them; for example, the first five most cited papers are published by five different journals. So, the journals with a greater number of papers in the field do not necessarily publish the most cited ones. Indeed, only two of the five most cited journals have more than two papers published – Public Management Review and Accounting Forum (Table 3).

Table 4 shows the ten most cited authors, who are either the authors of a greater number of articles – i.e. Farneti and Guthrie – or the authors of the most cited papers, for instance Rahaman, Lawrence and Roper.

Regarding the in-text citation pattern – namely the citations includes in the papers analysed -, Table 5 highlights the most cited references. The starred papers are also in the sample considered for the current study, so it is possible to see them as leading papers in the specific field of public sector, while the others constitute part of the theoretical foundation of SEAR. However, it is important to emphasize that the most repeated reference is a chapter, i.e. “Ball, A. and Grubnic, S. (2007) ‘Sustainability Accounting and Accountability in the Public Sector’ in J. Unerman, J. Bebbington and B. O’Dwyer (eds) Sustainability Accounting and Accountability, Oxon & New York: Routledge.” This means one of the most important manuscripts in
the field is not included in the research, and this undoubtedly constitutes a limitation of the method adopted.

The most cited authors in the sample are listed in Table 6. It is interesting to notice how all belong to the accounting stream: this is quite peculiar considering how unabashedly traditional accounting researchers look to the SEAR field.

Despite the small number of studies, there is not a high incidence of reciprocal citations. 30 articles out of 38 contain at least one citation of a paper from the sample considered and among those, 18 include three or more citations. Certainly, the fact is also affected by the time factor (pioneering contributions present no references at all, or very few), affiliation and research objectives.

4.3 In-depth analysis and meta-synthesis

The sequent analysis aims to interpret and synthesize the focus and main findings of the selected articles, in order to provide insights and critique of social and environmental accounting research in public sector. As mentioned in methodology section, to this end the authors have identified seven categories. A summary of results is in the Table 7.

4.3.1 Disclosure type

As to the disclosure type (environmental, social, socio-environmental or sustainability), in most cases the reference is to sustainability reporting (55.3%); six papers (15.8%), including pioneering ones, focus on purely environmental reporting; three papers (7.9%) are about socio-environmental disclosure, seven are related to social reporting (18.4%), only one article is on CSR reporting (2.6%). Beside any difference in terminology, it must be pointed out that, while environmental disclosure research focuses – as the reports themselves – only on environmental aspects, CSR,
socio-environmental, social and sustainability disclosure research tends to investigate the same aspects of reporting, above all social and environmental and then economic ones. So, these designations are usually used interchangeably, in literature as in practice and, as said, also like in this study. Another consideration that must be made is on temporal dynamics. As was expected, the first studies exclusively deal with the environmental aspect. The use of the term sustainability, now completely overwhelming, is only from 2008, after the establishment of the framework of the triple bottom line and the GRI.

4.3.2 Epistemological orientation

Papers are mostly empirical (34), in fact only four (representing 10.5% of total) are classifiable as theoretical, and consist in critical review, commentary and normative studies. Three of the four conceptual articles were published in Public Management Review and one in Accounting, Auditing & Accountability Journal.

4.3.3 Methodology

By omitting the conceptual studies mentioned above, almost all the empirical studies adopt a qualitative approach (27 out of 38, that is 71% of total). Specifically, content analysis is, as widely expected, the most adopted method in the articles investigated; this is consistent with previous literature stressing the widespread use of content analysis in the field of social and environmental accounting research (Milne and Adler, 1999; Unerman, 2000; Guthrie and Abeysekera, 2006). Data collection mainly takes place through interviews or documentary analysis. A mixed approach (quali-quantitative) is used in 13.2% of papers (five papers) and only two papers (5.3%) are purely quantitative.

4.3.4 Theoretical framework and models

It was not always possible to ascribe the studies to a theoretical framework more specific than SEAR. In particular, thirteen (34.2%) were the papers that neither explicitly nor implicitly are linked to specific theories and therefore focus solely on
the description of empirical analysis or the elaboration of a conceptual point of view. Only one, despite the adoption of previous theories (i.e. accountability and stakeholder theory), sets as a goal the elaboration of a new framework for the environmental performance accountability. In the other twenty-four papers (63.2%), a certain plurality was found. Beside those studies (the purist ones, one might say) that focus exclusively on the duty of accountability, the reference to the legitimacy theory and the institutional theory is predominant. Although to a lesser extent compared to the previous ones, the well-known stakeholder theory is used too when studying sustainability reporting in public sector. Albeit less popular, it is interesting to notice the emergence of other theories, such as the theory of management fashion, the theory of practice, the contingency theory and the public relation crisis management theory, the cultural framework by Hofstede. Despite the field being investigated, only one paper cited the New Public Management as a theoretical framework, but the same paper found a little connection. It should be emphasized that many articles used more than one theory to analyse the phenomenon. In this sense, it is useful to mention – and one might agree with them – Bebbington et al., 2008, who argue there are so many theories that can give a major contribution to the understanding of the social and environmental reporting phenomenon. Also, the initial stage of the investigation inevitably implies such multiplicity.

4.3.5 Sample

In the sample considered the main focus has been on public administration in the narrow sense, indeed sixteen articles (42.1%) studied central and especially local authorities. Six articles (15.8%) were published on universities, two papers (5.3%) on public listed companies, three (7.9%) on utility sector and one (2.6%) on the healthcare sector. The criterion “general/other” groups ten papers, that are not attributable to the previous classes.

4.3.6 Context
The most investigated regions are Europe - UK and Ireland, North, Continental, Mediterranean, Eastern – with sixteen papers (42.1%) and Australasia - Australia and New Zealand – with twelve (31.6%) papers. Specifically, the Countries more involved were Australia and Italy (19 paper at all), but a growing interest in North-European countries and Spain can be noticed. An additional important aspect is, on the one hand the presence of some studies regarding African or Asian countries (Ghana, Malaysia and China), that are included in “Other”, and on the other hand an almost total absence of studies focusing on the US. In fact there is only one paper that concerns North America, but is on Canadian Universities. That could be adduced to two orders of reasons: 1) there is not an academic interest in social and environmental or sustainability reporting in the public sector, probably because the different (and low) relevance that it has; 2) there are no existing reporting practices in the public sector and therefore there is no push to investigate a non-existent phenomenon. On the contrary, the studies focused on the countries where the relevance or academic and public opinion awareness on the public sector is higher and therefore where such practices are encouraged, developed and analysed. The criterion “Not applicable” regards the studies with a general/international approach. It is interesting to note that most of the papers (76.6%) focused on one country, while only seven (20.6%) developed a cross-country analysis.

4.3.7 Key aims and findings

The content analysis allowed to identify some relevant and recurring issues, specifically:

a) Why do public sector organisations engage in sustainability reporting?

b) What and how do public organisations report?

c) Which public sector organisations (and in which countries) are more likely to engage in CSR reporting and why?
a) Much of the current literature has tried to investigate the reasons that push organisations to undertake an extended reporting that is also voluntary. From a theoretical perspective, many authors doubt that a similar pattern may be reflected only in the ethical desire to be accountable for one’s own responsibilities towards those who have a natural right to receive that account. Therefore, legitimacy and institutional theories have been mainly used to explain the adoption of SER, while the stakeholder theory has been applied only recently (e.g. Alcaraz-Quiles et al., 2015). However, the results are not consistent and one-directional. For example, Monfardini et al. (2013) highlighted a sort of two-party as to the reasons given by managers and those implied: the former party stressed the desire to answer the demand of accountability, while the latter to act on the perception of stakeholders, this way increasing reputation and legitimacy. Findings in support of the legitimacy theory can be also found in Greco et al. (2012, 2015). Through a case study regarding a public utility company operating in the energy field in Ghana, Rahaman et al. (2014) found arguments linking the phenomenon to a strong institutional pressure, similarly to Greiling et al. (2015). On the one hand, they stressed the high adherence and compliance to GRI guidelines, despite the voluntary adoption of the tool, this way showing that societal expectations lead to coercive isomorphism. On the other hand, they noticed a large imbalance among the three dimensions of reporting (to the benefit of the economic one) and that seems to go in the direction of a mimetic isomorphism of private companies. In this regard, it could be useful to underline that in recent years there is a growing attention from communities towards a more transparent and efficient use of financial resources, so that even the greatest emphasis on the economic dimension (see also Lozano, 2011) of activities is not believed to be in contrast with coercive isomorphism. Findings consistent with the institutional theory are also present in Mussari and Monfardini (2010), Lodhia et al. (2012) and Zhao et al. (2016). Marcuccio and Steccolini (2005) try to read the increased adoption of SER among Italian Local Authorities (LAs) in the light of the Abrahamson approach. They argue that a managerial fashion is currently in place
among LAs under analysis and it is difficult to distinguish here between the search for efficiency and the need for legitimacy. Similar results are shown by Vinnari and Laine (2013), when explaining the reasons why Finnish water utilities engaged in CSR reporting. They also investigate the reasons behind the decline mainly affected by internal organisational factors, such as a lack of connection to management control systems, and a lack of outside pressure. The importance of internal factors (i.e. internal environmental management practices) and of internal stakeholders (i.e. general management or key person), in promoting SER practices is stressed by many authors (for example, Burritt and Welch, 1997b; Frost and Seamer, 2002; Farneti and Guthrie, 2009; Bellringer et al., 2011; Monfardini et al., 2013). On the one hand, it seems that different factors (and kinds of pressure) – both internal and external – are able to influence the decision to adopt SERs and the incidence of one or the other factor depends on the individual case. On the other hand, it is possible to say that the will to be accountable, even when present and declared by the organisations examined, is hardly the only reason behind the adoption of CSR reporting practices.

b) The literature shows that most of PSO claim to follow GRI guidelines or other national guidelines. The choice of a known standard can give quality, consistency, comparability and therefore enhance the legitimacy of the report (Lodhia et al., 2012). There may also be regulatory pressure to produce reports following specific local and or international guidelines (Dumay et al., 2010). Many scholars have decided to consider only reports drafted according to GRI or choose them as a comparative standard (see e.g. Guthrie and Farneti, 2008; Farneti et al., 2009; Lozano, 2011; Lodhia et al., 2012; Greiling et al., 2015). Surely, GRI can become the main standard also for the public sector (Dumay et al., 2010); however, its inadequacy has been highlighted in some cases. Specifically, GRI does not provide specific standard to public sector entities, but it has published a pilot version supplement. Its content comes from an approach to sustainability which appears to be too managerial. For these reasons, there are critical analyses on the “usefulness” of GRI guidelines for the public sector and the need to rethink their approach to sustainability (Dumay et al.,
Generally, authors have found several difficulties associated with using the GRI framework and a low level of compliance with any standard or guideline (Guthrie and Farneti, 2008, Farneti and Guthrie, 2009; Sciulli, 2009; Farneti et al., 2010; Farneti and Siboni, 2011; Ricci, 2013; Ricci and Fusco 2016). As to the content, the evidence is not always consistent. Guthrie and Farneti (2008), while examining seven Australian public agencies chosen as examples of “better sustainability reporting practice”, found that the content has mainly non-monetary and declarative nature and concerns for the most part labour practices and environmental issues, while the presence of human rights and social issues is low. The reports do not include most of the elements outlined by the GRI framework and focus on administrative and managerial matters. The qualitative nature of disclosure was also stressed by Burrit and Welch (1997a). Del Sordo et al. (2016) argued that no environmental aspects were communicated and the social report was mainly used to describe managerial performance rather than to disclose social and environmental information. Williams et al. (2011) indicated that local authorities were mainly reporting in the area of social issues. The need to emphasize eco-efficiency was noticed by Fonseca et al. (2011) across Canadian universities. Other authors, such as Lozano (2011), Goswami and Lodhia 2014, and Greiling et al. (2015), also underlined a strong imbalance in the reporting between the three dimensions – at the expense of social and/or environmental issues. Interesting were the results found by Larrinaga-Gonzalez and Perez-Chamorro (2008). They investigated sustainability reporting practices in nine public water companies in Andalucía, southern Spain, and found that formal sustainability reporting was usually rare, apart from a couple of the largest organisations. However, they noticed those companies were simultaneously conducting significant informal reporting that was linked to real operational issues and, in particular, to the targeting of consumers. The use of other tools or of the annual report to present some sustainability indicators was also testified by Goswami and Lodhia (2014).
c) Following the many ways public organisations view sustainability reporting, the analysed papers have focused on the diffusion of reporting in a specific PSO, or on the factors affecting the decision to pursue sustainability reporting. As already said, most papers take into account public administration, at different levels and in different countries, while others focus on universities or public utilities. It is difficult to understand, however, if those choices were guided by personal decisions of the authors or by the more intense use the bodies in question make of such tool. Even in the latter case, the question of why is rarely examined. Most of the studies (i.e. Lozano, 2011; Farneti and Siboni, 2011; Fonseca et al., 2011; Ricci, 2013; Del Sordo et al., 2016) showed a low diffusion of social and environmental reporting, regardless of the specific context of investigation (type of organisation and country). Evidence showed that size (and therefore policy visibility) and mission of the organisations do not entail significant difference between different SR practices (e.g. Lodhia et al., 2012; Lodhia and Jacobs, 2013; Siboni et al., 2013; Greiling et al., 2015). Other studies found that the level of reporting is positively related to the demographic characteristics of the population and to financial autonomy, and inversely related to the degree of fiscal pressure (Alcaraz-Quiles et al., 2015). Ricci (2013) underlined that there seems to be no connection whatsoever between social reporting practices and geographic location in Italian universities. Said et al. (2009) found a positive correlation between government ownership and audit committee and the extent of corporate social responsibility disclosures. As to the countries examined, it is interesting to mentioned the study of Greco et al. (2012) that aimed to analyse the effect of culture on SR practices. They argued that the two different cultural settings (Italian and Australian) appear to influence the SR disclosures adopted. Galera et al. (2014) investigated 33 local governments from two Anglo-Saxon countries and five Nordic countries and showed that the level of development of a country and/or its quality of governance do not necessarily imply more transparent behaviour with regard to sustainability. At the same time, the level of government debt and deficit do not appear to affect the engagement of local governments towards transparency or
sustainability. From what has just been said, therefore, there is apparently no theoretical or practical specific address regarding the organisations that are more involved in CSR reporting, while on the other hand such question can be at least in part answered by analysing the reasons why they undertake this path. For example, the presence of a key member of staff.

5. Conclusion and research agenda

Despite twenty years were elapsed from first pioneering studies, the present study shows that research on social and environmental reporting is still at an early stage. Current investigations, although a slow and fluctuating increase, are still very few and very localized. The shortage of theoretical papers certainly constitutes a brake on the full development of the potentiality of this research field. Firstly, because the public sector peculiarity is underestimated; there is, therefore, no clear and distinct research agenda. Secondly, if, on the one hand, difficulties in implementing existing standards are raised, on the other there are few attempts to provide concrete contributions to the practices.

Most findings are related to why, how and to whom public organisations report. There are only a few papers focusing on the factors that may influence the adoption of this practice and trying to explain why a certain type of institution is more or less inclined to do that. It would be also useful to investigate the link between traditional accounting systems and the need to implement and integrate them. In this regard, Frost and Seamer (2002) showed that the level of development of environmental reporting is mainly associated with the presence of internal environmental management systems, while it seems poorly related to the adoption of traditional accounting systems. Another interesting study related to this issue was published by Thomson, Grubnic and Georgakopoulos (2014), that stressed the role of accounting in shaping sustainability practices and so the need of their hybridisation. According to authors, hybridization between sustainability and accounting can contribute positively to improving eco-efficiency and eco-effectiveness, as well as to broaden the
possibilities for sustainable interventions in bodies, although some factors (weak local programming, growing expectations of delivering services over a period of tight constraints of resources, etc) may reduce or eliminate this positive effect. However, this study does not analyse the role of sustainability disclosure, that remains a critical gap of the field.

Other neglected or almost entirely unexplored and crucial matter is surely the identification of the main audience of a sustainability report. The question is far from irrelevant. Suffice it to say the traditional principal-agent relationship in the public sector is much more complex. Citizens are at the same time taxpayers, and therefore the principal, the general public and even customers. Furthermore, the over-ordered bodies from which an organisation depends cannot be considered as key stakeholders to give account to. Generally, it seems that CSR disclosure refers to the community, to citizens; however some authors showed the 'privileged' audience is often that of internal stakeholders (Farneti and Guthrie, 2009). Besides being a research gap, there is often the question of who prepares the sustainability report, and this lack of clarity can undermine the usefulness and effectiveness of the report itself (Monfardini et al., 2013). Another research direction that might be explored is about the effects of the adoption of social reporting in the public sector, both on organisation and on stakeholders. Marcuccio and Steccolini (2005) gave a contribution to the debate on the capacity of social and environmental reporting in reducing some technical deficiencies in Italian local authorities. They claimed that the introduction of these practices is perceived as useful, if not decisive. In particular, the survey showed they represent an incentive to the improvement of efficiency, effectiveness and accountability levels, as well as a way of bringing social and environmental issues to the public opinion. Domingues et al. (2017) have argued that it is a valuable tool to improve and change the organisational performance towards sustainability. Organizational benefits, mainly regarding an increase in staff motivation levels and data management capacities, are testified by Niemann and Hoppe (2017). However other papers (Rahaman et al., 2004; Monfardini et al., 2013;
Vinnari and Laine, 2013) in the sample taken into account detected a deep cynicism shown by audiences, that considered the tool in question unnecessary, pointless or even harmful in terms not only of its informative capacity, but also of image and legitimacy. According to such interpretations, this is a tool that rather than legitimating ends up delegitimising.

Future research directions will also have to consider the relationship with and the differences between other non-financial type of reporting, who are receiving great attention from the researchers and practitioners communities, that is ICR and IR. Especially, the second is suitable to replace or incorporate sustainability reporting, given that “an integrated report aims to provide insights about: the external environment that affects an organization, there sources and the relationships used and affected by the organization, which are referred to collectively in the Framework as the capital and are categorized as financial, manufactured, intellectual, human, social and relationship, and natural and how the organization interacts with the external environment and the capitals to create value over the short, medium and long term” (IIRC, 2013, p.10). From this point of view, the IR constitutes the next step in the evolution of CSR reporting, and therefore more than wondering what the future of the sector is, one must wonder whether this future exists. Surely this is an extreme non-short-term consequence, furthermore, the research and practice of the IR is still young and the criticisms raised are manifold (de Villiers et al., 2014; Dumay et al., 2016; de Villiers and Sharma, 2017). The research on IR in the public sector is an embryonal stage, although there is enough encouragement for its use (Adams and Simnett, 2011; Bartocci and Picciaia, 2013; Cohen and Karatzimas, 2015). Interesting is the proposal of Cohen and Karatzimas (2015), who suggest a hybrid model, the “integrated popular reporting”, which reconciles the need for comprehensiveness with that comprehensibility to a vast audience.

The study has some limitations, mainly related to the bibliometric method adopted. Indeed, it does not take into account books and chapters but only papers published in international and academic journals. This leads to exclude a significant part of the existing literature and other relevant contributions on the field. However, this method
of selection usually implies greater accuracy and a lower degree of subjectivity. Another shortcoming is due to the use of Google Scholar for citation analysis. This choice has been justified in previous section, however, as known, this tool also includes self-citations and citations in non-published papers. Anyway to reduce the impact of these problems, the study also put besides the citations reported on Scopus and Web of Science, if available.

The aim of the present work was not to provide an overall understanding of sustainability reporting in the public sector, but a broad and systematic review of the prevalent literature. To this purpose, a thorough analysis of all papers in the sample was carried out and this can be considered a strength of the study. Moreover, the choice of method and the extent of the review is an element of originality in social and environmental accounting research.

References


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Table 3 – Most cited journals

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Table 5 – Most cited paper in references

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*Papers are covered in the bibliometric study

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**Table 7 - Epistemological orientation and methodology**

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