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The relationship between performance measurement and sustainability reporting: a literature review

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Abstract

This paper presents results of scientific literature highlighting how PMS and CSR have progressively increased their importance within organizations, expanding their areas of impact and measurement tools. The scoping literature review has also shown a relationship between PMS and CSR in terms of integrated ownership and in supporting the decision-making process at different stages: planning, control, and reporting and also further directions for researches are indicated.

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1. Introduction

In the last three decades and more rapidly in the recent years, the rules of traditional business have changed. The emergence of a new business environment has determined major changes in the organizations strategies, structures, systems, and tools. For today's organizations is very important to manage their social responsibility, a theme which is becoming an unavoidable subject for organizations in response to internal and external pressures. It was the Green Paper by the European Commission (2001) that introduced the world to the concept of Corporate Social Responsibility (CSR), "a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis. Being socially responsible means not

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only fulfilling legal expectations, but also going beyond compliance and investing ‘more’ into human capital, the environment and the relations with stakeholders” (European Commission, 2001). In response to such escalating pressures, over the last 20 years several thousand companies have started to disclose information about their social and environmental performance and the number of published CSR or sustainability reports has rapidly grown (KPMG, 2011).

Sustainability reporting has become an increasingly common practice in companies’ attempts to respond to expectations and criticisms from the stakeholders who want to be better informed about the social and environmental impacts of business activities (Boiral, 2013). Since the 1950s, the theories of CSR have been developed, gradually moving from a macro-social view to an organizational-level analysis and from ethics-oriented to performance-oriented studies (Lee, 2008). Accounting research on the topic has also flourished (Durden, 2008). To date, this literature has provided valuable insights on the determinants and managerial motivations underpinning social and environmental reporting initiatives (Gray, Kouhy, and Lavers, 1995; Gray, 2000; Adams, 2002; Paine, 2003; Owen, 2008).

Many companies operate in a highly competitive environment and acknowledge that their competitive advantages are no longer sustainable. The challenge for performance measurement systems (PMS) is to supplement operational and strategic levels with useful tools and sustainability can play the role of “trigger” for change in PMS (Leite, Van Aken, and Martins, 2012). Several conceptual frameworks have been proposed for the integration of social and environmental responsibility concerns into performance measurement systems (Bonacchi and Rinaldi, 2007; Searcy, 2012; Goyal, Rahman, and Kazmi, 2013; Avram, Avasilcai, 2014). However, the academic literature is still poor of contributions specifically investigating the relationship between PMS and CSR.

In this context, our paper aimed at analyzing this relationship through a general literature review. In particular, the research question addressed by this paper is the following: how could PMS help to ensure an effective sustainability reporting? In order to answer the research question, we used a scoping review to analyze how recent literature addressed the relationship between PMS and CSR.

This study contributes to theory formation in management accounting literature, in particular by enriching the knowledge of the relationship between performance measurement and sustainability reporting, by identifying where and how they show similarities and linkages.

2. Method

To indicate possible points of relationship between PMS and CSR we performed a scoping literature review (Arksey and O’Malley, 2005). We selected this approach because of several reasons: (1) the aim of the literature review was to examine the extent, range and nature of research activity that cannot be closely defined, and identify gaps where further research is required; (2) we aimed to focus on broader topics where many different study designs might be applicable, but not on a relatively narrow range of quality assessed studies (Arksey and O’Malley, 2005).

To guide the review, we first identified a set of elements that could be used to characterize both CSR and PMS. However, since the aim of the literature review is to map possible points of relationship between CSR and PMS, we decided to refer to a general framework that could be easily applied to both concepts, in order to capture their “core common elements”. In particular, we looked at CSR and PMS from a socio-technical view (Trist et al., 1963) that can be characterized by technical and social components: scope/goals, technologies and actors/ownership (Arena and Arnaboldi, 2014). The scope/goal of the concept, which would be called purpose, refers to the focus of CSR and PMS in terms of “decisional areas” that are supported by these tools. The second component, technologies, which refers to the approaches, tools and indicators used to evaluate and quantify performances and sustainability, would be called measurements. Finally, the third component, actors/ownership, refers to the actors that manage the systems and that own responsibility of them (Arena and Arnaboldi, 2014). Then, the scoping review was performed following the steps suggested by Arksey and O’Malley (2005):

- (1) identifying questions;
- (2) identifying relevant literature;
- (3) selecting the literature;
- (4) charting the data and
- (5) collating, summarizing and reporting the results.

3. Results

The first component of analysis refers to the purpose of PMS and CSR. With reference to performance measurement systems, some authors (Franco-Santos et al., 2007; Micheli and Manzoni, 2010) highlight the importance to differentiate between strategic and operational purpose, because it is fundamental to design and implement each system in a different way in order to fulfill a set of specific needs. According to Simons (1995), strategic performance measurement systems (SPMS) have four key roles:

- 1) Implementation and monitoring of strategy (diagnostic);
- 2) Organizational alignment, communication within the organization and between the organization and its external stakeholders, and support to the emergence of new strategies (interactive);
- 3) Communication of mission, vision and core values (belief system);
- 4) Restrain employee behavior and define limits of freedom within the organizational context (boundary system).

Adopting this framework, we can observe that a performance measurement system is balanced and dynamic system that enables support of decision-making processes by gathering, elaborating and analyzing information (Neely et al., 2002). Parker (2000) and Kuwaiti (2004) analyzed performance measurement as a main management tool for decision making, control and ensuring useful information for effective resource allocation. Marchand and Raymond (2008) researched performance measurement as a system for information integration, useful for implementation of objectives in organization and combined inside. Kumar et al. (2008) stated that performance measurement helps to form strategy of organization, manage and change performance, resources allocation, motivation of employees and ensure permanent success. Gunawan, Ellis-Chadwick and King (2008) analyzed performance measurement as a tool for a performance improvement and strategic planning. Tucker and Pitt (2009) researched that performance measurement helps to evaluate and change performance goals and increase value creation.

On the other hand, Corporate Social Responsibility could be understood as an evolving concept (Carroll, 1999), by which organizations integrate social, environmental and economic concerns into their strategy and decision-making (Garcia-Benau, Sierra-Garcia, and Zorio, 2013). Wilson (2003) entitled corporate sustainability as corporate management paradigm and Fernandez and Souto (2009) stated that CSR is an effective management tool, which offers confidence to stakeholders as the organization is perceived as responsible and trustworthy. According to this, organizations have led to disclose CSR reports that extend the traditional financial information provided to shareholders to a wider range of stakeholders. As a consequence, organizations have had to redefine its objectives in response to social expectations (Garcia-Benau, Sierra-Garcia, and Zorio, 2013). Similarly, Lozano and Huisinigh (2011) describe SR as a means to assess an organization's performance against social, environmental and economic issues and communicate its efforts and progress to stakeholders.

In summary, literature review shows that PMS and CSR reporting have evolved separately but with relevant similarities, especially in terms of orientation to the strategic level in order to better support managers in decision-making activities and contribute to value creation.

The second component of analysis refers to the measurements of PMS and CSR. At a general extent, we can distinguish between financial and non-financial measures and also between leading and lagging indicators (Arena and Arnaboldi, 2014). Accounting measures are the "core" basis of performance reporting. Non-financial measures are aimed at monitoring companies' long-term success factors such as customer satisfaction, efficiency, human resources, innovation. As Arena and Arnaboldi (2014) stated, non-financial measures, if properly designed, detect weak signals, from both the external environment and internal processes, and provide a more timely view of the business. Also different models were created involving both financial and non-financial measures (De Toni and Tonchia, 2001; Taticchi, Tonelli, and Cagnazzo, 2010; Nudurupati et al., 2011; Franco-Santos, Lucianetti and Bourne, 2012; Choong, 2013), such as Balanced Scorecard (Kaplan and Norton, 1992) and Value Based Costing (Gupta and Gunasekaran, 2005). The selection of the measures is meant to be driven by the critical success factors of the organization that in turn are related to the strategy (De Waal, 2007). More recent developments highlight the introduction of sustainability and network indicators in this type of integrated performance measurement tools (Bonacchi and Rinaldi, 2007; Searcy, 2012; Goyal, Rahman, and Kazmi, 2013; Avram, Avasilcai, 2014). On the

other hand, Global Reporting Initiative (GRI) G3.1 Guidelines (GRI, 2011) offers a number of recommendations for CSR reports which include proper reference to external assurance if applicable (Garcia-Benau, Sierra-Garcia, and Zorio, 2013). The GRI report covers disclosure of the organization's profile, governance, and performance (GRI, 2011), where performance disclosure indicators could be organized into economic/financial, environmental, social disclosure (Christofi, Christofi, and Sisaye, 2012). Also AA1000AS issued by AccountAbility – a British Institute that monitors the verification of information related to sustainability and social responsibility – (AccountAbility, 2003, 2008) offers a set of principles focused on stakeholders' accountability. The other international standard, which is also a global reference for assurance, is ISAE 3000 – a standard set by the International Auditing and Assurance Standards Board (IAASB, 2003) which belongs to the International Federation of Accountants (IFAC) (IAASB, 2011). This standard provides basic principles and procedures for professionals on how to conduct non-financial assurance engagements (Garcia-Benau, Sierra-Garcia, and Zorio, 2013).

In summary, the integration of financial and non-financial measures is quite similar in PMS and CSR reporting. The main aim in both fields is to identify measures that allow understanding the key information of organization internal and external processes, to use it for decision-making activities.

The third component of analysis refers to the ownership of CSR and PMS, identifying the actors who manage the systems and who own responsibility of them. PMS has been traditionally a responsibility of management accountants (Arena and Arnaboldi, 2014). Nowadays, accountants have become a part of strategic, visionary and creative staff who takes part in decision-making with the organization's management body (Radneatu, Gabroveanu, and Stan, 2010). On the other hand, the enlargement of PMS focus, open up to the possibility for other professionals to increase their ownership in the PMS (Reefke and Trocchi, 2013). According to these changes, some organizations integrate their financial, environmental, social and governance performance in a single document (Glass, 2012). Some authors observe that CSR could be under the responsibility of separate department (Rimmel and Jonall, 2013). In summary, management accountants, who are traditionally responsible for PMS, are trying to play a more active role in CSR reporting.

4. Discussion/Conclusions

The results of scientific literature highlighted how PMS and CSR have progressively increased their importance within organizations, expanding their areas of impact and measurement tools. They have also shown a relationship both in terms of integrated ownership and in supporting the decision-making process at different stages: planning, control, and reporting. Moreover, the integration of PMS and CSR could have a potentially positive effect on the achievement of corporate objectives, helping organizations to continuously ensure corporate social responsibility reporting and achievements against strategy. Therefore, this analysis provides managers with useful insights on disclosing that performance measurement system could help to ensure an effective CSR reporting process.

This study contributes to theory formation in management accounting literature, in particular by enriching the knowledge of the relationship between performance measurement and sustainability reporting, by identifying where and how they show similarities and linkages.

Further research on the convergence between PMS and CRS could focus on the following issues:

- Development of measures to compare the sustainable performance of different companies;
- PMS and CRS for small and medium enterprises (SMEs) and firms with a different ownership structure;
- Comparative case studies in diverse institutional contexts.

Lastly, according to theoretical literature, researchers have adopted interpretive, critical and post-modern perspectives to examine the development, maintenance and change in management practices (Covaleski et al., 1996). Within the interpretive perspectives, institutional theory has been used extensively in the accounting literature to study management accounting change and issues of sustainability reporting. (Kauppi, 2013). According to this aspect, institutional theory can contribute to a richer understanding of performance measurement and CSR reporting. It could be important for managers to be able to identify institutional processes and their impact, to understand the implications of the institutional environment in terms of opportunities and constraints. The applications of institutional theory in PM and CSR could be mainly focused on applying institutional theory to see how organizations conform to institutional pressures.

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