## Management Control Systems for Sustainability and Sustainability of Management Control Systems

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Starting from the late 1990s, academics have explicitly considered sustainability as a research topic in management control literature (Otley et al., 1995), even if scholars' interest has grown remarkably in the last five years (see among others Marchi, 2019; 2020).

Interestingly, in management control studies, researchers approach sustainability under two different, but strictly interconnected, perspectives, which may both represent complementary avenues for research:

- management control for sustainability whose studies generally investigate how and to what extent management control systems can support companies in the achievement of sustainability strategies; and
- sustainability of management control systems that aims to deepen the
  analysis on the technical enhancement in management control systems,
  which are needed following to the adoption of sustainability as well as
  other forms of social strategies.

In the first research stream, it is worth mentioning Gond et al.'s (2012) study. In this study, Gond et al. use Simons' (1995) Levers of Control (LOC) framework to propose eight ideal configurations of management control systems (MCS) and sustainability control systems (SCS). These configurations are differentiated by weak/strong levels of integration, and also by diagnostic rather than interactive use. Each configuration produces different impacts on the triple bottom line performance, which is articulated in the economic, social, and environmental perspectives. Gond et al.'s (2012) study is interesting, since it describes the conditions that may enable or

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hinder the integration of sustainability within the overall corporate strategy, and most of all such study opens new research directions aiming to deepen the conditions and the process through which companies move from one ideal type to another.

Arialiès and Mundy (2013) extend the use of the LOC framework (Simons, 1995) to provide insights into how managers of the French CAC 40 companies use MCS to focus their attention on the achievement of corporate social responsibilities strategies. In order to extend the use of the LOC framework for that purpose, Arjaliès and Mundy consider four key processes (beliefs, boundaries, diagnostic, and interactive), which are combined into companies to enhance strategic focus and drive coherent decision making and subsequent behavior. The results show that beliefs systems, as well as interactive and boundary processes, are of great importance to communicate through the organization and create a shared vision about the importance of sustainability. Moreover, the results also show that beliefs systems and the above-mentioned processes are of great importance to stimulate a discussion between managers and/or external stakeholders in order to identify and take advantage of the relative opportunities, and to manage threats. The authors document a lower emphasis about the diagnostic use of MCS, since relatively few companies deployed corporate social responsibility (CSR) targets into budgets and compensation plans. Consequently, conflicts may occur between a long-term sustainability strategy and short-term financial targets. Such conflicts, incidentally, represent one of the challenges that inspires scholars, even in the more recent literature; this leads us to the second research stream that we named sustainability of MCS.

Osborn (1998) inspired the word pun in the title. He developed the idea that a new form of organization should require a new form of management control systems. In Osborn's definition, new forms of organizations operate in dynamic environments and pursue emergent strategies, which require constant adaptations and, accordingly, interactive involvement of managers in controls and decision making. The results show that semi-formal control systems enabled by information technology support interactive controls more effectively.

Particularly, semi-formal systems support unstructured decision making (Gorry and Scott Morton, 1971) by providing information about relevant real-world variables whose level of accuracy progressively increase as managers' knowledge about those figures increases.

Osborn's (1998) considerations about new forms of organizations and semi-formal systems may be reasonably suitable also for companies

adopting sustainability strategies. This is so, given the strong similarities in the need to adapt the organization to an ever-changing environment where customers as well as the general community of stakeholders show an increasing awareness of environmental and social issues.

Semi-formal information systems are particularly helpful to control for the information overload that can be a problem to deal with when both environmental complexity and organizational complexity increase, and managers need to widen the range of variables under control. This is the case for companies facing sustainability initiatives (Neumann et al., 2012).

Similarly, Corsi and Arru (2020) analyze sustainability management control tools' characteristics and find frequent use of informal control tools as a result of the difficulties in measuring non-financial sustainability figures.

In both the research streams, i.e. MCS for sustainability and sustainability of MCS, the motivations underlying the introduction of a sustainability strategy are worth considering. This is so because sustainability metrics' misalignment with the company strategy (Castellano, 2011), as well as the lack of integration of sustainability control tools into MCS, is more frequent when the company approaches a sustainability strategy mainly for legitimacy purposes (Cinquini et al., 2015; Fiorentino et al., 2016).

This special issue follows the "IX Online Workshop" of the *Management Control Journal* held in November 2020. The workshop took place within the Societa Italiana dei Docenti di Ragioneria e di Economia Aziendale (SIDREA) meeting titled "From Crisis to Sustainable Development: Principles and Solutions from the Perspective of Business Economics." The workshop and the meeting represented a fruitful opportunity to share and discuss research on sustainability, strategic management, and control.

All the articles collected in the special issue were presented during the conference. Moreover, somehow they provide valid contributions to both research streams, i.e. management control systems for sustainability and sustainability of management control systems.

Fadda, Pischedda, Marinò, and Corsi discuss how business models including a sustainability perspective may, in combination with coherent management control tools, effectively enable quick reactions to external threats originating from turbulent economic environments. They discuss a case study where sustainability is not only a fad: It significantly inspires its mission and represents a driver of competitive advantage that allows to sustain premium prices for the company's customers. In result of their analysis of the management control systems, they report that a company is dynamic in quickly adapting its strategic objectives to the external signals

detected. Conversely, they place a weaker emphasis on the diagnostic perspective of control, while, in line with a great part of extant literature, they find that a company is more keen in communicating the information about sustainability to external stakeholders for legitimacy purposes.

Molinari, Maraghini, and Riccaboni follow a similar research perspective. After the introduction of the EU Directive 2014/95 on financial disclosure, their analysis through a case study provides evidence about the management control systems' role in sustaining the implementation of sustainability strategies as well as the management control systems' role in supporting non-financial reporting. The investigated company is an energy provider that significantly pursues sustainability challenges and that effectively implements planning and control processes accordingly. The sustainability performance indicators are integrated into the overall company management control systems and effectively drive individual behavior in the achievement of the company targets. The management control function strengthened its position inside the company after the regulatory introduction of the EU directive on the disclosure of non-financial information, as the company decided at the outset to integrate the above-mentioned EU directive into the management control system. Consequently, over time, management has explicitly taken sustainability into account when setting the individual targets at intermediate and operating organizational levels, and also when comparing targets and results for monitoring purposes.

Cantele, Troisi, and Campedelli shed light to a certain extent on benefit companies. Introduced relatively recently, benefit companies represent a type of company whose mission, which is embedded in the benefit company's nature, is to share the profit resulting from an economic activity carried out in a socially responsible and sustainable manner. Particularly, the authors aim to describe the benefit companies' characteristics, their geographical distribution all over Italy, and the content of the mandatory reporting (introduced by law) through which the benefit companies provide information about the social value created. The results show that benefit companies in Italy represent an early-stage phenomenon. Benefit companies are generally small sized, they operate mainly in the field of services and consulting, and they are located in the bigger cities. In reporting social impacts, the management control function has generally no involvement. Benefit companies report the results achieved in very broad terms without any Key Performance Indicator (KPI) that can help the reader in assessing how the company improves its social performance over time.

Within the field of study referred to as sustainability of management control systems, Buscarini, Cerroni, and Scarnecchia describe in a case study

how the materiality matrix and the sustainability performance matrix can support companies in designing, implementing, and monitoring their sustainability strategies. Particularly, the materiality matrix provides managers with a graphic representation about the relevance of the multiple issues related to sustainability as perceived by the company stakeholders, while the sustainability performance matrix reports the stakeholders' perceptions about the improvements that the company achieves in managing those issues.

Oppi, Campanale, and Cinquini discuss the implications of ambiguity. The authors elaborate on extant studies and provide a framework of analysis that is suitable in the public sector context in which organizational and individual components of ambiguity are articulated together with their antecedents and consequences. Ambiguity may play a key role in the abovecited semi-formal control systems, which are effective in supporting managers when they need to take multiple variables into account and/or when the company needs to respond quickly to environmental turbulence, which is quite common when companies embrace sustainability.

Environmental turbulence also inspires Zanin and Corazza's research that provide empirical evidence about the validity of scenario planning tools in dynamic and fast changing environments. Particularly, they show that scenario planning tools remarkably help managers in enhancing the level of performance as environmental turbulence increases.

Ianni, Marullo, Migliori, and DeLuca's paper also aims to deal with control tools that may be relevant in turbulent environments. Particularly, they present a systematic literature review of financial distress and solvency prediction models. They discuss extant studies, focusing specifically on the effectiveness of methodologies concerning the purpose for which they are adopted (prediction, anomalies detection in auditing, detection of antecedents of economic or financial crisis, etc.).

The final paper published in this special issue is the first contribution to a new journal section titled "Topics and Research Methods in Management Control: State of the Art and Research Perspectives." Santini opens the new section by discussing the consequences that may arise from a blind alignment with the international research perspective and methods that may threaten the cultural pillars on which the Economia Aziendale was grounded.

The journal invites scholars to contribute to this section by submitting papers, aiming to critically discuss research directions, related methodologies, relevance of results, quality of research, educational perspective, or any other issue that may stimulate a positive discussion

between scholars and practitioners about the present and future of management accounting.

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