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Research on Creativity in Accounting Management: Overview and Opportunities for Research in the Brazilian Context

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Creativity represents a source of competitive advantage for organizations and, for this reason, has been widely studied in the fields of psychology and administration (Speckbacher, 2017). Despite its importance, the emphasis in accounting studies has been on examining the effects of managerial control systems on the performance of individuals in routine tasks, that is, programmable and repeatable tasks (Brüggen, Feichter & Williamson, 2018). Only recently, research in managerial accounting begun to concern itself with the effect of management controls on the performance of creative tasks, which are not repeatable and more difficult to foresee (Shields, 2015). There are no studies in the Brazilian context in the field of managerial accounting specifically addressing creativity. The importance of understanding the role of managerial controls in promoting creativity in the work environment is to allow managerial control systems to be appropriately designed to the level of creativity desired by an organization.

The purpose of this editorial is to provide an overview of studies addressing creativity in the sphere of managerial accounting and discuss opportunities for future research in the Brazilian context. In particular, the intent is to address the following questions: How has creativity been defined and operationalized in studies addressing managerial accounting? Are control and creativity conflicting objectives? What managerial controls are being examined to explain creativity? What are the opportunities to research this subject in Brazil? The discussion around these questions is proposed by researchers who have paid attention to the topic of creativity in managerial accounting, such as Michael Williamson, Isabela Grabner, and Gerhard Speckbacher, and in the psychology and management fields, including Teresa Amabile and Robert Eisenberger.

Creativity Concepts and Operationalization

There is no consensus on the definition of creativity in the literature (Amabile, 1983). For this reason, Amabile (1996) suggests that two complementary definitions, a conceptual and a consensual, are used. The conceptual definition focuses on the process, therefore, understands creativity as a process that results in something useful and innovating for a given group for some time. The consensual approach, predominant in research addressing the topic, focuses on the product, and therefore, specifies that a product is creative when different experts independently define it to be creative. While the process view is necessary to establish a theory of creativity, the product view is important to establish methods to assess it (Amabile, 1996).

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There are, therefore, two main aspects of these two definitions of creativity: the first is characterized by terms such as innovating and different, while the second is characterized by terms such as acceptability, appropriateness, and usefulness. Hence, for something to be considered creative, it must be innovating on what is available, although it must also be useful and applicable. Note that even though there is a relationship between creativity and innovation, these two concepts are different because creativity, together with implementation, is necessary for innovation to exist (Axtell et al., 2000; Shalley & Gilson, 2004).

As with research in psychology and administration, the definition of creativity as a product predominates in accounting management research. But even though it emphasizes the definition of creativity as a product, accounting management has adopted distinct approaches to treat this subject, both in terms of theoretical approach and study design.

On the one hand, Williamson and colleagues (e.g., Kachelmeier, Reichert and Williamson, 2008; Kachelmeier & Williamson, 2010; Brüggen et al., 2018) employ an agency approach and use experimental designs to examine the effect of different incentive contracts on creative tasks. These studies define creativity as the production of original ideas that contribute to organizational innovation, adaptation, and growth (Kachelmeier et al., 2008). In operational terms, Williamson and colleagues have used different variations to capture the creativity of participants, with an emphasis on rebus puzzles (Kachelmeier et al., 2008; Kachelmeier & Williamson, 2010; Kachelmeier, Wang & Williamson, 2019), a creative use for an abandoned house on the university campus (Chen, Williamson & Zhou, 2012), and the development and brief description of new experimental tasks (Brüggen et al., 2018). In general, the performance of participants in creative tasks is assessed by 'experts' who are informed the participants were asked to create something new, innovative and useful. This procedure is directly linked to the definition of creativity as a product (consensual approach) in which experts establish what is creative (Amabile, 1996).

On the other hand, Grabner (2014; Grabner & Speckbacher, 2016) starts with organizational theories and employ a contingent approach to examine, using survey data, managerial control European organizations use to promote creativity. Grabner defines creativity as the importance organizations assign to creativity among their collaborators as a source of competitive advantage, while organizations that assign the greatest importance are called 'creativity-dependent firms'. In operational terms, Grabner develops a scale to measure firms' level of dependency on creativity based on five questions. This scale is based on interviews with experts from the field and presents statements related to creativity as a source of creation of value and revenue, in addition to commercial success and competitive advantage as being dependent on the creativity of collaborators.

While these two main approaches to creativity in the field of managerial accounting seem to have followed different paths in initial studies, more recent studies are starting to reconcile evidence obtained by each approach (e.g., Kachelmeier et al., 2019) and expand the scope of research on the topic. In this sense, Speklé, van Elten and Widener (2017) rest on organizational theories and define creativity as the generation of new ideas that facilitate adaptation so that organizations can survive and compete in constantly changing markets. Operationally, Speklé et al. (2017) capture creativity by surveying business units of European organizations in which respondents self-assess the extent to which they have developed new ideas and found solutions for problems associated with the performance of their tasks.

Note that, even though the focus on the definition of creativity remains on product, more recent studies in the field of managerial accounting have started considering creativity as a process. Kachelmeier et al. (2019) for instance, define creativity in their experimental study as a process that includes the following stages: initial preparation, incubation, and eventual gain accruing from creativity. Note the studies by Cools, Stouthuysen and Van den Abbeele (2017) and Davila and Ditillo (2017), who also adopt the perspective of process, but employ a qualitative approach to examine the role of managerial control mechanisms on encouraging creativity. Cools et al. (2017) introduce a multidimensional perspective of creativity in which two dimensions are differentiated depending on the type of problem. On the one hand, there is expected creativity, which is adopted when dealing with 'open' and 'self-discovered' problems. On the other hand, there is responsive creativity to deal with 'closed' 'unexpected' problems. Davila and Ditillo (2017) in turn see creativity from a multidimensional perspective that includes divergent creativity and convergent creativity. While divergent creativity is associated with the generation of ideas without any prior judgment, convergent creativity is associated with the assessment of ideas generated in a previous phase (Basadur & Finkbeiner, 1985). In particular, Davila and Ditillo (2017) examine convergent creativity, which incorporates innovation that requires less technical knowledge for the development of a product.

In summary, research on managerial accounting has broadened its scope in terms of including a growing variety of definitions for creativity, with consequent use of different forms to operationalize these definitions. In other words, there is not, in the literature addressing managerial accounting, a predominant and more widely accepted way to define and operationalize creativity so that such a definition and operationalization may be specific to each context (Speckbacher, 2017).

Is there a tension between Control X Creativity?

A frequent issue faced in research addressing creativity in managerial accounting is whether a more intense use of controls and the promotion of creativity are conflicting objectives (Speckbacher, 2017). In particular, the question is whether more creativity-dependent firms are also those that should make less frequent use of managerial control to monitor their collaborators and encourage them (Grabner & Speckbacher, 2016). Studies addressing creativity usually favor the perspective of incompatibility between control and creativity (Amabile, 1982; 1983). The two main arguments favoring this perspective are based on the hypothesis of intrinsic motivation and the fact that creative tasks have specificities that render control mechanisms little useful or even counterproductive (Speckbacher, 2017; Grabner & Speckbacher, 2016).

From the perspective of the first argument, creativity is conducted by a state of intrinsic motivation, while extrinsic motivation inhibits creativity (Amabile & Pillemer, 2012). As Speckbacher (2017) states, many of the control mechanisms such as the establishment of goals, budgetary controls, and performance-based compensation are used to influence an individual's extrinsic motivation, so that the expectation is that the use of managerial controls results in less creativity.

The hypothesis of intrinsic motivation, however, has been challenged by researchers, who suggest that extrinsic factors (e.g., incentives) may facilitate and promote creativity (e.g., Eisenberger & Cameron, 1996; Eisenberger & Rhoades, 2001). Eisenberger and Shanock (2003) suggest being possible to achieve motivation to pursue creative tasks by linking compensation to performance in terms of creativity. Many studies in the field of managerial accounting (e.g., Brüggen et al., 2018; Webb, Williamson & Zhang, 2013; Kachelmeier & Williamson, 2010) show that incentive contracts can facilitate the performance of creative tasks. Kachelmeier et al. (2008) for instance suggest that it is possible to encourage creativity in the presence of incentive contracts in comparison to a fixed salary. Grabner (2014) also states that performance-based compensation is an important control for creativity-dependent firms to productively promote creativity when complemented by a subjective assessment of performance.

As for the second argument, creative tasks are seen as having a high level of uncertainty, whether in terms of quantity of resources, expected actions, efficient use of resources, or in terms of the likelihood that a given outcome will result from creative tasks (e.g., Amabile, 1982; 1983). Given these measurement challenges, managerial controls would be inappropriate to promote creativity (Grabner & Speckbacher, 2016).

Once more, empirical evidence does not always support this second argument (Speckbacher, 2017; Adler & Chen, 2011). Grabner and Speckbacher (2016) note that a perceived lack of knowledge regarding the cause-effect relationship in a given task makes managers of creativity-dependent firms more frequently trust input controls in the form of employee selection processes.

In general, evidence suggests that it is important to take into account that managerial control systems exist not only to influence extrinsic motivation but also to facilitate decision-making when qualifying collaborators to achieve organizational goals (Sprinkle, 2003). Managerial controls can also influence intrinsic motivation, and thus, promote creativity (Cools et al., 2017; Davila & Ditillo, 2017). In this sense, a higher level of control and performance in creative tasks are not necessarily conflicting objectives and can co-exist in certain contexts and jointly contribute to the achievement of organizational goals (Speckbacher, 2017). It is also important to mention that firms that do not dependent on the creativity of their collaborators may establish managerial controls with the explicit objective to inhibit creativity while even creativity-depend firms need managerial controls to restrict creativity at a productive level, avoiding the 'art for art's sake' problem (Grabner, 2014; Grabner & Speckbacher, 2016).

Managerial Control and Creativity

Research on creativity has attempted to identify organizational factors, including managerial control mechanisms that can promote creativity (Shalley & Gilson, 2004). Among managerial control mechanisms, studies in managerial accounting have especially been attentive to the effect of incentive schemes on creativity. As previously mentioned, studies addressing creativity in managerial accounting have followed two different paths to discuss this topic. The first involves the studies by Williamson and colleagues, while the second includes the studies conducted by Grabner.

Williamson and colleagues analyze how incentive contracts affect creativity performance based on an agency approach. The main results from initial studies show that performance in creative tasks is superior in the presence of incentive contracts when compared to fixed salaries. When this incentive contract, however, is based on a measure of creativity, performance in creative tasks is inferior to incentive contracts based on productivity (Kachelmeier et al., 2008; Kachelmeier & Williamson, 2010). Later, studies broaden this initial perspective as they examine the role of incentive contracts on creativity in a group context (Chen et al., 2012), the role of additional control mechanisms such as the level of a goal's difficulty (Webb et al., 2013), or yet whether the is an input or output goal (Brüggen et al., 2018). In a recent study, Kachelmeier et al. (2019) examine the effect of different incentive contracts on creativity considering two stages of the creative process: the first, creative preparation and the second, incubation in which the gains accruing from the initial stage are realized. Kachelmeier et al. (2019) reinforce evidence of initial studies that, when one considers the stage in which gains are realized, performance in creative tasks is superior to when in the presence of incentive contracts based on productivity and in comparison to a fixed salary. In general, Williamson and colleagues suggest it is possible to use managerial control mechanisms, specifically, incentive schemes, to promote creativity, as opposed to the hypothesis of intrinsic motivation of creativity.

Grabner (2014; Grabner & Speckbacher, 2016) examines which managerial controls creativity-dependent firms adopt. Grabner (2014) shows that creativity-dependent firms more frequently use performance-based compensation to promote creativity when a subjective assessment of creativity is complementarily used. In a different study, Grabner and Speckbacher (2016) verify whether trust in managerial controls on the part of creativity-dependent firms is explained by factors such as intrinsic motivation and perception of lack of knowledge of the cause-effect relationship in a given task. In general, the results presented by Grabner evidence that creativity-dependent organizations use managerial controls to promote creativity, once more providing evidence that opposes the idea of conflicts between control and creativity.

Considering additional managerial accounting studies, Speklé et al. (2017) provide evidence for the absence of conflicts between control and creativity. Specifically, Speklé et al. (2017) employ the levers of control model provided by Simons (1995) to show that the intensity of managerial control mechanisms increases the managers' perception of empowerment, which in turn positively impacts creativity. Cools et al. (2017) also employ the levers of control model to show that budget can, on the one hand, encourage expected creativity when used interactively by creative firms, or encourage responsive creativity when used in a diagnostic manner. Hence, the results presented by Cools et al. (2017) suggest that even the diagnostic use of managerial control mechanisms can boost creativity.

The study by Davila and Ditillo (2017) also supports the perspective that managerial control mechanisms can facilitate, instead of inhibiting, performance in creative tasks. Specifically, in a working group context, Davila and Ditillo (2017) show that a set of control mechanisms is used to delimitate the scope of creativity among working groups (directional mechanisms) while another set is used to communicate a common vision for the creative efforts of working groups (inspirational systems). Note that directional controls are those that deal with the 'art for the art's sake' problem while inspirational controls are related to informal controls. Davila and Ditillo (2017) highlight the role of strategy to inform which managerial control systems are more important to promote creativity adherent to strategic demands.

In general, research addressing creativity in managerial accounting has broadened its scope in terms of control mechanisms, emphasizing not only incentive schemes but also taking into account more varied perspectives of managerial control, especially the levers of control model. Also worthy of attention is the expansion of the scopes of studies to address the relationship between control and creativity in terms of methodological approaches, relying on experimental studies, which favor internal validity, though are limited in terms of external validity (Aguiar, 2017); survey studies, more balanced in terms of internal and external validity; and qualitative studies, which enable analyses that consider specific contexts of organization.

Conclusion

There are many opportunities to address creativity in the field of managerial accounting considering there is a lack of such studies in the Brazilian context. First, creativity in the organizational context is perceived as an important source of competitive advantage (Shalley & Gilson, 2004; Webb et al., 2013). A work environment conducive to creativity is particularly important in organizational contexts in which creativity is a source of competitive advantage (Grabner & Speckbacher, 2016). Therefore, future studies can examine whether there are any differences in the managerial controls adopted by creativity-dependent firms in comparison to the remaining firms in the Brazilian context. Additionally, it is interesting to verify whether there are managerial controls specifically used to inhibit creativity in organizations not dependent on creativity. Such studies could provide a better understanding of whether managerial controls are commonly used in the Brazilian context to specifically encourage, delimitate or inhibit creativity in the work environment. These studies could also adopt a contingency approach, similar to that used by Grabner (2014; Grabner & Speckbacher, 2016).

Second, the argument explaining the existence of conflicts between control and creativity is that managerial controls are typically associated with extrinsic motivation (Speckbacher, 2017). While this argument makes sense in terms of formal control of results, the purpose of which is mainly to restrict behaviors, the same does not occur in terms of informal controls and/or inputs that influence behavior via self-regulation (Ouchi, 1979). Brüggen et al. (2018) for instance, state that informal goals and other forms of informal communication can promote creativity. Therefore, studies in the Brazilian context could address the role of managerial control in the performance of creative tasks beyond the traditional perspective of formal, diagnostic and coercive mechanisms when exploring a more comprehensive approach that include informal, interactive and/or facilitating controls (Ouchi, 1979; Simons, 1995; Adler & Borys, 1996). Studies such as those conducted by Speklé et al. (2017) and Cools et al. (2017) already take into account this perspective as they adopted the levers of control model. Future studies could examine, on the one hand, the effects of these different types of control on creativity and, on the other hand, verify the extent to which these different types of controls are used complementarily in creative-dependent firms. Such studies may be particularly relevant if they consider the specific definitions of managerial controls and creativity adopted in a certain organization (Speckbacher, 2017).

Third, part of research on creativity in managerial accounting emphasizes the effect of incentive contracts on creativity without considering the process through which this effect occurs (e.g., Kachelmeier et al., 2008; Kachelmeier & Williamson, 2010; Webb et al., 2013). Another share, however, considers this process by including mediating variables (e.g., Kachelmeier et al., 2019). Chen et al. (2012) for instance, examine whether group cohesion explains the effect of types of incentives on creativity in a group context. Speklé et al. (2017) in turn, verify whether empowering explains the intensity effect of the use of levers of control on creativity. Taking into account the previously mentioned more comprehensive perspective of managerial control, studies on the Brazilian context can attempt to identify processes through which managerial controls affect creativity. To identify potentially relevant mediating variables, such studies can seek the support of studies addressing creativity in the field of psychology and administration – which already explore the process through which creativity is affected— as they include variables such as intrinsic motivation (Eisenberger & Rhoades, 2001), interest in a task, in addition to immediate operational aspects (operational ownership) (Dorenbosch, Engen & Verhagen, 2005) and performance pressure (Eisenberger & Aselage, 2009). Alternatively, studies conducted in the Brazilian context taking into account mediating variables examined in other contexts within the field of managerial accounting can be also equally relevant for research addressing creativity. Literature in the managerial accounting has increasingly sought to understand the mediating role of social standards to explain the behavioral effects of managerial control mechanisms (e.g., Cardinaels & Yin, 2015; Maas & Van Rinsum, 2013).

Finally, creativity has been typically considered a variable that depends on the context of managerial accounting (e.g., Kachelmeier et al., 2008; Kachelmeier & Williamson, 2010; Chen, et al., 2012; Webb et al., 2013). In this sense, Speckbacher (2017) draws attention to a promising opportunity of research, which refers to the joint effect of creativity and control on different outcome variables, such as process efficiency and product quality, in addition to financial results. In particular, creativity is considered an antecedent of innovating processes (Axtell et al., 2000; Shalley & Gilson, 2004). Future studies can verify which managerial controls hinder or enhance the positive effects of creativity on innovating processes.

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