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Management accounting change and sustainability: an institutional approach

Paulina Arroyo
CMA International Centre for Studies of Business Processes, HEC Montréal, Montréal, Canada

Abstract

Purpose – The purpose of this paper is to propose an institutional entrepreneurship approach to examining management accounting change triggered by social and environmental concerns.

Design/methodology/approach – The study begins with a literature review concerning the role that old institutional economics and new institutional sociology have played in the study of management accounting change, underlining strengths and weaknesses. To deal with the main weaknesses, the institutional entrepreneurship approach is presented and utilized as the basis for the development of a conceptual framework, which is contextualized to the examination of management accounting change triggered by sustainability issues.

Findings – Management accounting change literature has not paid enough attention to the social constructivist roots of institutional theory. Through the application of a conceptual framework inspired by institutional change models and institutional entrepreneurship literature, this paper proposes another approach to examine how new management accounting practices are socially constructed during the course of organizational change, particularly in response to sustainability concerns.

Research limitations/implications – This new framework has not yet demonstrated its explanatory power in a particular field.

Originality/value – The paper examines management accounting change as a social construction process led by institutional entrepreneurs who aim to mobilize resources and negotiate the definition and implementation of sustainability strategies and new management accounting practices, which will take environmental and social issues into consideration, in order to reach an agreement on the pre-institutionalization, diffusion and institutionalization of sustainable practices.

Keywords Management accounting change, Institutional theory, Sustainability, Institutional entrepreneurship, Theorization, Accounting, Organizational change, Entrepreneurialism

1. Introduction

Accounting change, particularly management accounting change, is a research topic that has drawn the attention of several accounting scholars for many decades (Napier, 2006). Hopwood (1987, p. 207) argued that very little was known about accounting change, especially “the preconditions for such change, the change process or its organizational consequences”. After this call for further research on accounting change, an increasing number of studies have been conducted, and diverse organizational theories have been proposed for enhancing the level of understanding of accounting change. In the last few decades, accounting has begun to be interpreted as a social, situated, and context-dependent...

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practice (Busco et al., 2007), and so-called “alternative management accounting research” has been encouraged as a means to gain deeper knowledge about accounting practices and their change process (Baxter and Chua, 2003). Alternative researchers have adopted interpretive, critical and post-modern perspectives to examine the development, maintenance and change in managerial accounting practices (Covaleski et al., 1996). Within the interpretive perspectives, institutional theory has been used extensively in the accounting literature to study management accounting change. However, this literature has the same limitations observed by organizational scholars regarding the use of old institutional economics (OIE) and new institutional sociology (NIS) to explain institutional change. To bridge both lenses of institutional theory, organizational scholars have introduced the concept of institutional entrepreneurship (DiMaggio, 1988; Dacin et al., 2002), which has been almost unexplored in the management accounting change literature.

Institutional entrepreneurs are actors that make triggering events seem significant (Munir, 2005). They thus motivate the deinstitutionalization of the prevalent practices and lead the theorization, diffusion and reinstitutionalization of new practices. One of the main advantages of this approach is that it allows us to focus on the process of management accounting change rather than on the object of change (Busco et al., 2007). Indeed, institutional entrepreneurship serves to explain how institutional and organizational entrepreneurs negotiate the definition and implementation of new management accounting practices during the process of institutional change. This paper focuses on the process of “theorization”, whereby firms and their stakeholders mobilize resources to motivate the adoption of new management accounting practices, while negotiating and creating alliances during the change process to obtain an agreement on its implementation.

One of the new accounting practices seen in organizations in recent decades has been environmental and social management accounting, resulting mainly from organizational changes triggered by a growing interest on sustainability issues. The emergence of these new practices has drawn the attention of several accounting scholars, who have been mainly evaluated what types of management accounting practices, such as cost allocation, capital budgeting, and performance measurement systems (Bennett and James, 1998; Bennett et al., 1999) have changed within organizations to include environmental and social issues. However, as Bouma and van der Veen (2002) highlight, those studies have focused on “describing the state of implementation of new tools rather than analyzing or critically evaluating their effectiveness”. Another group of accounting scholars has investigated environmental and social management accounting change, although emphasis has been placed on the role of environmental and social management accounting in creating organizational change. Therefore, examinations of how management accounting practices change in response to environmental and social concerns claimed by diverse stakeholders are still underdeveloped.

The main objectives of this paper are to propose a multilevel conceptual framework that explains the process of management accounting change, and contextualize the framework to management accounting changes triggered by environmental and social issues. The conceptual framework proposed in this paper seeks to explain the change process that organizations and organizational fields might face while they are moving from the use of traditional to sustainable accounting systems (MAS). Extending the definition of Bennett and James (1998, p. 33), sustainable management
accounting (SMA) is the generation, analysis and use of financial and non-financial information to optimize corporate environmental, social, and economic performance and to achieve sustainable business. For instance, an SMA system might mainly identify environmental and social costs, reallocate environmental and social costs, define environmental and social measures, link environmental and social measures to financial performance, and apply environmental and social accounting to capital budgeting.

The remainder of this paper is organized as follows. The next section presents a literature review of the two streams of institutional theory that have sought to explain the change process in management accounting, and highlights their main shortcomings. At the end of this section, institutional entrepreneurship is introduced as an alternative approach to examine management accounting change. That approach is further analyzed in Section 3 and utilized for the development of the multilevel conceptual framework presented in this paper. The last two sections discuss management accounting change triggered by sustainability concerns. Section 4 briefly summarizes the main studies of the role of environmental and social management accounting in organizational change and reviews how NIS in particular has been utilized to understand the emergence of social and environmental management accounting systems. At the end of Section 4, the conceptual framework is contextualized to the examination of management accounting change triggered by sustainability and briefly illustrated with the change process taking place in the US carpet industry. The last section presents some preliminary conclusions and the main limitations of this study, along with avenues of future research.

2. Understanding management accounting change through an institutional approach

The management accounting literature contains many studies of the change process from two perspectives of institutional theory: OIE and NIS. This section begins by presenting and analyzing a literature review of 13 studies[1] belonging to these categories and underlines their main strengths and weaknesses. A synthesis of both streams of institutional theory is presented after the literature review and two approaches for bridging the gap between both streams are discussed at the end of this section.

Old institutional economics

OIE is one of the most recurrent perspectives that have motivated research in management accounting change. One of the most cited articles in this literature is that of Burns and Scapens (2000, p. 5), who argue that “management accounting practices can both shape and be shaped by the institutions that govern organizational activity”. Institutions are taken-for-granted assumptions that shape the action of organizational actors, whereas assumptions are the outcome of social actions. Therefore, there is always a possibility for change.

The process of institutionalization introduced by Burns and Scapens (2000) divides the process of institutionalization into four sub-processes. First, institutional principles (taken-for-granted assumptions) are encoded into accounting rules and routines. Second, actors enact those routines, which could be resisted if they challenge existing meaning and values. Third, after repeated behavior, routines are reproduced. Finally, once patterns of behavior are dissociated from their historical circumstances and become the unquestioned way of doing things, accounting routines are institutionalized.
Burns and Scapens argue that it should be easier to achieve management accounting change when new routines are consistent with existing routines and institutions as opposed to challenging previous routines. However, in either case, the behavior of new routines is difficult to predict because they might be intentional and rational, yet they may be influenced by other institutions. Therefore, management accounting change requires close examination of the current context of the organization, i.e. its routines and institutions and particularly the taken-for-granted assumptions.

Burns and Scapens' (2000) framework has been extended in several studies of management accounting change, primarily to examine the main barriers and conditions for change. In terms of barriers, Soin et al. (2002) observed that managerial conservatism and misunderstanding of the value of additional accounting information were the main reasons behind the failure to transform the strategic thinking of senior management. Burns (2000) concluded that the mobilization of power over resources and decision making can work against accounting change. However, he counters that the mobilization of power over meanings, in which taken-for-granted assumptions become questioned, is a facilitator of institutional change. Other conditions for change highlighted in the management accounting literature, based on Burns’ and Scapens’ framework, are the existence of contradictions (Burns and Baldvinsdottir, 2005), the establishment of trust (Busco et al., 2006) and the development of informal routines loosely coupled to formal rule systems (Lukka, 2007).

To summarize, OIE explains management accounting change as a process in which new routines are enacted, reproduced and institutionalized. Key elements added to Burns and Scapens’ framework are power mobilization, contradictions, trust, and loose coupling. Unfortunately, the main contribution of this approach seems to be the rich examination of the change process. However, it does not analyze the role of external pressures in the process of institutionalization extensively. That analysis is provided by another stream of institutional theory – NIS – described in the following section of this literature review.

New institutional sociology

Accounting scholars applying NIS define accounting practices as features that can legitimize organizations (Carruthers, 1995). These researchers base their studies on DiMaggio and Powell (1983, 1991) and Meyer and Rowan (1977), and emphasize the concept of institutional isomorphism (coercive, mimetic or normative). In this approach, actors and organizations develop shared systems of meanings within an organizational field, which once objectified constitute social reality (Greenwood et al., 2002). Therefore, the NIS approach mainly seeks to explain how inter-organizational change is diffused within an organizational field.

Among the main concepts that have been explored by accountant scholars following NIS theory are decoupling and loose coupling (Orton and Weick, 1990), and resistance and power. Regarding loose coupling, it is argued that the existence of contradictions forces a division between formal structures and actual operations (Nor-Aziah and Scapens, 2007). Accounting is presented as a facilitator of loose coupling because it can provide a consensus between institutional and technical demands (Collier, 2001). However, if accounting practices are introduced solely to justify decisions (legitimize) instead of rationalizing them, accounting will be decoupled from actual organizational decision making (Carruthers, 1995). Therefore, loose coupling can be seen as essential
to solve conflicts between institutional pressures, and to allow the co-existence of greater efficiency with external legitimation demands. Some authors present decoupling both as a common strategy to deal with conflicting institutional pressures in public sector organizations (Brignall and Modell, 2000) and as a consequence of the simultaneous resistance and passivity of local actors, which generate inertia and difficulties in fully realizing the intentions of those who seek changes (Modell, 2003). However, external institutional pressures may be moderated by intra-organizational factors such as the relative power of contesting actors, early involvement in implementation, market competition and technological complexity (Modell, 2002).

Regarding resistance and power, an early criticism of institutional theory was its failure to recognize the relative power of different institutional actors and the conflicts resulting from those relations of power (Collier, 2001). Power can be defined as the “ability of individuals, or the members of a group, to achieve aims or further the interests they hold” (Giddens, 1996, p. 744). Therefore, power has an enabling character that contributes to the minimization of conflicts, together with a constraining character that has been mainly explained in terms of resistance to change (Tsamenyi et al., 2006). Resistance is intended to preserve the status quo and the power and interests of organizational actors from potential adverse effects caused by the change process (Nor-Aziah and Scapens, 2007). Therefore, loose coupling is viewed by Nor-Aziah and Scapens (2007) as both a process and an outcome that is socially constructed through the day-to-day interaction of different organizational actors, where trust, power and resistance are intertwined. However, factors such as ambiguity alter the status quo. Dambrin et al. (2007) note that both the ambivalence of techniques and the ambiguity of ideals enable a gradual diffusion and dissemination of change in actors’ daily practices and facilitate the internalization of norms.

In conclusion, NIS has been considered a useful perspective in the process of understanding management accounting change; in particular through the process of decoupling/loose coupling and resistance and power. However, it does not provide insights into how the process of institutionalization occurs inside organizations (Dambrin et al., 2007).

In the next sub-sections of this literature review, a synthesis of the main differences between both approaches and the solutions proposed by the accounting and organizational literature are presented, together with the alternative explored in this paper.

**Institutional theory – a synthesis**

The Table I presents a synthesis of the main differences between the two streams of institutional theory presented in the organizational and management accounting literature.

As mentioned above, one of the main criticisms of old institutionalism is its focus on internal dynamics, to the detriment of the environment (Demers, 2007). Its power to recognize higher levels of social, political, and economic issues that influence the organizational context (Dillard et al., 2004) is consequently limited. New institutionalism has been criticized for its focus on explaining why organizational practices diffuse, but fails to address how those practices evolve within adopting organizations (Sastry et al., 2002). Moreover, new institutionalism has problems explaining how a new practice acquires legitimacy in the first instance (Munir, 2005).

Most of the accounting scholars have proposed to extend NIS to gain insights into how institutional changes affect organizations. Indeed, most of the prior studies
presented in this literature review recommend the analysis of organizational factors such as resistance, relations of power and conflict of interest. However, other accounting scholars prefer to combine OIE and NIS to mitigate the main weaknesses of each approach. In the organizational literature, another institutional approach has been proposed: institutional entrepreneurship. Both approaches are described below.

**Bridging the gap between OIE and NIS: two different perspectives**

**Combining OIE and NIS – an accounting proposition.** Although some prior accounting studies have extended NIS by investigating aspects of OIE, there are three accounting studies that have combined OIE with NIS. These studies argue that OIE is useful to understand the change process but it does not explain the causes of management accounting change as well as NIS does. In contrast, NIS does not deal with intra-organizational issues such as internal conflict and power distribution, as OIE does (Ribeiro and Scapens, 2006; Yazdifar et al., 2008). Therefore, although the streams diverge in level of analysis, these studies consider both perspectives to be complementary because of their shared conceptual foundations. The complementarity sheds light on external influences to which organizations are exposed, and their effects on the change process (Siti-Nabiha and Scapens, 2005).

These three management accounting studies have been mainly focused on examining decoupling, power, and external factors. Decoupling is considered as a complex and dynamic process of resistance that involves both stability of decisions and a change of rules and routines in accounting systems (Siti-Nabiha and Scapens, 2005), but it is not necessarily seen as an organizational response to external pressures. Therefore, decoupling is mainly presented as a passive reaction to external pressures. In terms of power, Yazdifar et al. (2008) propose that accounting change should take into account the importance of local power, politics and culture in facilitating or preventing change, mainly when organizations face conflicting, inconsistent demands from institutional actors. However, that approach seems to be another passive reaction...
to external factors, as well as Ribeiro and Scapens’ (2006) study, who advocate assessing the “circuits of power” (distribution of resources and technologies) inside organizations to understand the process of institutionalization and decoupling. Therefore, although the combination of OIE and NIS brings important elements from both institutional streams simultaneously, it still tends to underestimate the role of agency of organizational actors in the process of accounting change. That role can be further examined using another institutional lens, named institutional entrepreneurship.

**Institutional entrepreneurship – an organizational approach.** Organizational scholars have sought to bridge old and new institutionalism through the concept of “institutional entrepreneurship” (DiMaggio, 1988; Dacin et al., 2002) and institutional entrepreneurs, who are actors that make triggering events seem significant to encourage the deinstitutionalization of prevalent practices and the reinstitutionalization of new ones. However, events cannot singularly destabilize established practices. The scope, significance and relevance of an event are thus determined by the process of theorization (Hoffman, 1999; Munir, 2005), in which several actors participate in the “development and specification of abstract categories and the elaboration of chains of cause and effect” (Greenwood et al., 2002, p. 61). To become widely adopted, new practices need to be specified and justified (Strang and Meyer, 1993) and diffused (Greenwood et al., 2002). Therefore, institutional entrepreneurship requires that individuals and organizations exert purposive actions to create, maintain, and disrupt institutions (Lawrence and Suddaby, 2006), which means that not all change agents are institutional entrepreneurs. They must fulfill two conditions: initiate divergent changes, and actively participate in the implementation of these changes (Battilana et al., 2009).

The first author to introduce the notion of institutional entrepreneurs was DiMaggio (1988), who aimed to bring back the role of agency in institutional theory to understand how actors can shape and be shaped by institutions (Leca et al., 2006). Institutional entrepreneurs are strategic in nature and thus they will experiment with and modify existing institutions because they have strategic objectives and interests that drive their actions (Rothenberg, 2007). In that sense, institutional entrepreneurship can be seen as an ongoing political process that engages the agency and strategies of institutional entrepreneurs (Levy and Scully, 2007) and that reflects the power and interest of organized actors (MaGuire et al., 2004). However, institutional entrepreneurship also demands a capacity for theorization (MaGuire et al., 2004; Tracey et al., 2011) and a capacity to alter or create systems of meaning. That task is challenging given that it requires actors to combine aspects of established institutional logics[2] that may have little in common and that could be even in conflict (Tracey et al., 2011).

As many authors in the organization literature maintain, the process through which institutional entrepreneurs seek to change “the rules of the game” (Leca et al., 2006) and to institutionalize new practices needs to be explored as an ongoing and not as a discrete event (Sastry et al., 2002). Following Acquier and Aggeri (2008), the role of institutional entrepreneurs should be analyzed through institutional constructivism, which focuses on understanding the emergence of new practices as a learning process. Institutional entrepreneurs should thereby be able not only to mobilize “subsidiary actors” (Beckert, 1999) by transforming their interests but also be flexible enough to change their strategies depending on the support they receive. From this constructivist perspective, institutional entrepreneurship focuses on the construction of new institutions/practices rather than on their diffusion alone (Acquier and Aggeri, 2008).
Any stakeholder group could act as an institutional entrepreneur, although its impact on organizational change would be limited to the resources it could mobilize and its position in the social network. Stakeholders with more mobilizing assets (legitimacy, formal authority, position in the organization, and access to scarce and critical resources (Leca et al., 2006; Battilana et al., 2009)) will probably be more successful at creating new practices or transforming existing ones. Some examples of stakeholders acting as institutional entrepreneurs presented in the literature are environmental managers, who purposefully altered the framing of environmental performance within an organization (Rothenberg, 2007); the Security Exchange Commission and the accounting professional association (Greenwood et al., 2002; Greenwood and Suddaby, 2006); the Chinese Government and its agencies during the development of the country’s environmental protection system (Child et al., 2007); and university graduates interested in creating a business to employ homeless people in Bristol, UK (Tracey et al., 2011).

*Management accounting change: combine theories or adopt an organizational viewpoint?*

As summarized in Table II, the management accounting change literature has attempted to overcome some criticisms by introducing the role of power and decoupling in institutional change. However, one of the main shortcomings of that approach is the neglect of the role of agency and interests in shaping the action of organizational actors, which has been mainly depicted as a reactive/passive process of resistance instead of a proactive process of agency. Moreover, previous accounting research has focused on practices that have already become institutionalized rather than on new practices and the means by which they gradually become institutionalized (Ezzamel et al., 2007).

Therefore, the institutional entrepreneurship approach proposed by organizational scholars is best suited to examination of new accounting practices and their transformations. Indeed, the institutionalization of new practices or non-isomorphic changes, particularly when they result from several interactions and negotiations between diverse stakeholders, seems difficult to explain using the combination approach. For these reasons, the conceptual framework presented in the following section is based on the institutional entrepreneurship approach instead of a combination of OIE and NIS approaches. In Section 4 it will be contextualized to management accounting change triggered by sustainability concerns.

### 3. Conceptual framework

The purpose of this study is to investigate how management accounting change is part of the whole change process within organizations and their fields, i.e. how the management accounting change process is socially constructed by institutional entrepreneurs during the course of organizational change. The institutional entrepreneurship approach will also

<table>
<thead>
<tr>
<th>Combining OIE and NIS</th>
<th>Institutional Entrepreneurship</th>
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<tbody>
<tr>
<td>Change</td>
<td>Practices already institutionalized</td>
</tr>
<tr>
<td>Agency</td>
<td>Decoupling (passive)</td>
</tr>
<tr>
<td>Power</td>
<td>Facilitate or prevent change</td>
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<tr>
<td>Interest</td>
<td>Resistance (passive)</td>
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*Table II. Comparison of both alternatives*
allow us to shift the discussion of management accounting change to changes that result from a negotiated process between organizations and their multiple stakeholders.

One of the main arguments in this paper is that stakeholders seek to influence and exert pressure on organizations. These organizations can respond to those pressures in several ways. The strategy selected will be conditioned by their interests and the power that stakeholders might exert during the negotiation process. Therefore, organizational strategy can be seen as the outcome of a negotiation between the organization and its stakeholders. In that sense, management accounting practices not only reflect corporate strategies but are in turn affected by the interactions and negotiations between managers and stakeholders. Consequently, stakeholders’ interactions produce new organizational strategies while triggering changes in management accounting practices (for instance in performance measurement systems). This constructivist approach characterizes the relationship between stakeholders as a process in which values, interests and actions depend on the actors’ capacity to mobilize others to get their support (Pasquero, 2008). Pasquero argues that each stakeholder adjusts his or her objectives and strategies to those of other stakeholders. Therefore, as stakeholders encounter each other and negotiate issues, they build a common understanding of the particular situation and commit themselves to a temporary agreement (Saiia, 2007).

A second argument in this paper is that once the strategy is defined, it shapes management accounting practices. The main reason is that management accounting systems provide useful information for assessing the validity of a particular strategy, stimulating learning and allowing new strategies to emerge, as managers and stakeholders respond to perceived opportunities and threats (Simons, 1995). Therefore, two processes of change are examined simultaneously in this conceptual framework: an organizational change process (for example a change in the business model) and a management accounting change process (developing or adapting performance measurement systems, cost systems, etc.). Because of the major changes that a new business model could entail for a firm, the organizational change process should imply the deinstitutionalization of the taken-for-granted model to institutionalize a new one. However, that radical change should not necessarily lead to a drastic change within management accounting systems, and thus the change process should be mainly examined as an innovation rather than a deinstitutionalization of current practices. Finally, the new management accounting systems should support the diffusion and institutionalization of the new business model.

A third argument in this paper is that institutional change occurs at different levels. A multiple level of analysis (individual, organizational and field) thus captures the change process within the conceptual framework proposed in this paper. According to Tracey et al. (2011), institutional entrepreneurship research has tended to focus on how individual and/or organizational actors influence field level processes related to diffusion and legitimization, but the distinction between micro and macro levels of analysis remains relatively undeveloped. Suddaby et al. (2007, p. 468) underscore the need to “reconnect institutional research with processes that occur inside the organizations”. Therefore, the process of management accounting change combines these three levels of analysis, as Figure 1 shows, but the framework is initially focused on the process at the field level and then it will evolve to examination at the organizational and individual level. The field level analysis is mainly based on both Tolbert and Zucker’s (1996) and Greenwood et al.’s (2002) institutional change models while the organizational and
individual levels of analysis are inspired by Burns and Scapens’ (2000) framework related to management accounting change and on Crossan et al. (1999) organizational learning framework, to examine how organizations explore and learn new practices and how those practices are socially constructed by individuals.

**Field level analysis**

At the field level, two models of the process of institutionalization have been discussed extensively in the organizational literature, Tolbert and Zucker (1996) and Greenwood et al. (2002). Both models are summarized in Table III.

Although both models seem to be very similar, the main difference between them lies in the factor that “promotes” the institutional change[3]. Tolbert and Zucker’s
model is more focused on innovation, i.e. how new structures become institutionalized, whereas Greenwood et al.'s model is centered on the deinstitutionalization of old structures, i.e. how old structures are questioned, thus allowing the emergence and institutionalization of new structures. Greenwood et al. (2002) recommend examining the processes of deinstitutionalization and reinstitutionalization to understand how new practices become institutionalized.

In Greenwood et al.'s (2002) model, the process of institutional change begins with a precipitating jolt, i.e. an initiating or triggering of a social, technological or regulatory event. A precipitating jolt could also take place when institutional entrepreneurs make contradictions significant (Munir, 2005), thus motivating the deinstitutionalization of prevalent practices. As Seo and Creed (2002, p. 231) argue, contradictions “set the stage for praxis whereby actors move from unreflective participation in institutional reproductions to imaginative critique of existing arrangements to practical action for change”. Therefore, institutional entrepreneurs purposively encourage debate among organizational actors to publicize the contradiction and enlist the support of partners in the deinstitutionalization of actual practices (Munir, 2005).

The second stage of the process is deinstitutionalization (Oliver, 1992, p. 564). Oliver defines deinstitutionalization as “the delegation of an established organizational practice or procedure as a result of organizational challenges to or the failures of organizations to reproduce previously legitimated or taken-for-granted organizational actions”. Therefore, as Lawrence and Suddaby (2006) highlight, deinstitutionalization is a process that recognizes the potential for organizational actors to actively engage in the disruption of institutions. Oliver (1992) proposes three mechanisms (political, functional, and social) as determinants of deinstitutionalization, which can emerge within the organization or in its environment. Regarding political pressures, Oliver (1992) points out that the development of political dissensus that disrupts the unanimity of agreement among organizational members is a critical antecedent to deinstitutionalization. She argues that this dissensus might arise when specific organizational stakeholders with power or visibility perceive that an organizational practice is in conflict with their own interests or beliefs.

The third stage of the process is theorization (Strang and Meyer, 1993), which has been discussed extensively in both the organizational and institutional entrepreneurship literature (Suddaby and Greenwood, 2005; MacGuire et al., 2004). Strang and Meyer (1993, p. 492) suggest that new practices must be theorized in order to become widely adopted. They define theorization as a “self-conscious development and specification of abstract categories and the formulation of patterned relationships such as chains of cause and effect”. Tolbert and Zucker (1996) argue that there are mainly two major tasks within theorization: specification of the problem and justification of the possible solution. They consider that theorization must precede objectification (development of social consensus and increasing adoption of the innovation). Greenwood et al. (2002) agree with the importance of the process of theorization and its position during the process of institutional change. However, Munir (2005) adds another task within the process of theorization precedes deinstitutionalization and pre-institutionalization: the act of bringing an event to people’s notice and making it disruptive. Therefore, in order to incorporate these three theorization tasks, a parallel process of theorization at the field level is proposed in the conceptual framework, which takes place throughout the first three phases of institutional change. First, theorization allows institutional
entrepreneurs to make the contradictions significant; then it helps them specify the problem. Finally, it will be useful to justify the possible solutions.

As Greenwood et al. (2002) contend, these new structures are diffused when institutional entrepreneurs can assert their functional superiority and thus confer legitimacy on the new structures. To this end, institutional entrepreneurs must not only develop social consensus regarding the value of the new structures for the organization but must also encourage the adoption of the new structures within the field. This process, called objectification (Tolbert and Zucker, 1996), occurs concomitantly with the diffusion of new structures. Finally, once the new structures become taken-for-granted, it is possible to consider them fully institutionalized, i.e. uncritically accepted as the definitive way of thinking (Tolbert and Zucker, 1996, p. 184).

Organizational and individual levels
According to Burns and Scapens (2000), although taken-for-granted assumptions shape the action of organizational actors, those assumptions can be challenged by social actions and thus there is a possibility for change. The institutionalization of a new management accounting practices thus requires actors to challenge the taken-for-granted assumptions. Once a new practice is presented to organizational actors, they have to encode, enact, and reproduce it for it to become institutionalized. However, Burns and Scapens’ framework does not fully explain how organizational actors follow those processes. Therefore, an organizational learning perspective is proposed to complement that framework by analyzing how organizational actors interpret and integrate new values, beliefs or norms before a new model becomes institutionalized in accounting practices.

The process of change at the organizational and individual levels begins by a precipitating jolt taking place at the field level but that should also affect the perceptions of organizational actors of their taken-for-granted daily practices. Therefore, the individual processes of interpretation and integration play an important role during the phases of encoding, enactment and reproduction of new practices at the organizational level. Indeed, prior to the introduction of a new management accounting routine, managers must have interpreted this initial idea to make it explicit, named, and incorporated into their cognitive maps (Lawrence et al., 2005). After that interpretation, the development of a shared understanding among managers (integration) is needed to achieve coordinated actions through mutual adjustment (Crossan et al., 1999). It is after those two processes that a new model is likely to emerge in the cognitive map of managers. The new routine, which challenges the taken-for-granted assumptions institutionalized in the organization, is then presented to the organizational actors for their encoding, enactment, and reproduction. However, the process of encoding is also affected by the innovations or other alternatives presented at the field level. As Barley and Tolbert (1997) suggest, enacting a routine may or may not entail a conscious choice or an awareness of these alternatives, but if individuals become conscious of their existences, they would also need to interpret and integrate those alternatives in their cognitive maps. During both processes, any stakeholder could also try to exert pressure to ensure that its concerns are included in the new accounting routine. In that sense, interpretation and integration can be considered as ongoing processes that could be adjusted during the phases of encoding, enactment and reproduction as well.
One of the reasons for this dynamic characteristic is that organizations are often political arenas populated by self-interested actors (Lawrence et al., 2005) that could be considered micro-level institutional entrepreneurs, i.e. as “organizational entrepreneurs”. These entrepreneurs seek to champion the process of interpretation in order to integrate their interest in the organizations’ activities. Moreover, when those interests change, the integration tends to change accordingly. Lawrence et al. (2005) state that during the interpretation process, only some of the ideas will be accepted by others as legitimate; this depends on the ability of internal and external actors to influence thoughts, feelings and behaviors. Therefore, if the distribution of power within an organization changes the ability of previous actors to influence behaviors may be affected as well.

It is only after that the new practice is constantly reproduced at the organizational level and taken-for-granted by its actors that it could be considered as an institutionalized practice. However, in order to be institutionalized at the field level, it will be necessary that the new practice be reproduced by other organizations (diffusion) and highly accepted by them to acquire a normative quality (Barley and Tolbert, 1997). Inspired by the previous models of change, the conceptual framework proposed to explain the process of management accounting change at multiple levels is shown in Figure 1.

4. Management accounting change within the context of sustainability

Beyond doubt, management accounting practices are affected by sustainability issues. Sustainability, specifically sustainable development, is defined as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland, 1987). However, this macroeconomic definition has not provided much guidance for managers (Epstein and Roy, 2003), which explains why many businesses and scholars have tended to focus the discussion on only one of the dimensions of sustainability: the business case (Dyllick and Hockerts, 2002). The business case consists in asking how firms can further their economic sustainability by increasing their social and ecological efficiency. The business case requires managers to quantify the link between social and environmental strategies and financial performance (Epstein and Roy, 2003).

Indeed, during the last 15 years several firms worldwide have realized the potential benefits of incorporating sustainability issues into their corporate strategies (DeSimone and Popoff, 1997; Sharma and Starik, 2002). To evaluate the benefits of those strategies, firms need management accounting systems that generate, analyze and control environmental, social and economic performances. Although there is plenty of information about how North American companies are developing performance metrics and indicators for a wide range of sustainability issues, hardly any information exists about how these companies adapt their management accounting systems to support their sustainability strategies. It is not clear whether changes in management accounting (for instance in performance measurement systems) respond to a planned introduction of sustainability strategies within an organization, unintended actions that emerge from organizational actors concerned by environmental and social issues, or as a corporate strategy to manage public impressions (Neu et al., 1998).

Environmental management accounting has been portrayed in the literature as a tool companies use to negotiate and define the concept of the environment (Gray et al., 1995; Larrinaga-Gonzalez et al., 2001), to appropriate the environmental agenda
(Larrinaga-Gonzalez and Bebbington, 2001), to open others’ eyes regarding the problems organization might begin to face (Ball, 2005), or to stimulate workplace activism (Ball, 2007). However, the change process of management accounting practices is not fully developed in those studies. To explain this process, another group of accountant scholars advocates examining the development of environmental management accounting through an institutional view, in which regulatory, normative, and cognitive institutions are considered as the pillars for the understanding of environmental management accounting change (Qian and Burritt, 2008), and coercive, mimetic and normative pressures could also explain the initial homogeneous adoption of environmental management accounting systems (Bollecker et al., 2006).

Qian and Burritt (2008) contend that isomorphic responses to institutional contexts should influence the development of environmental management accounting systems. However, non-isomorphic responses to institutional pressures are also observable within organizations, which mean firms do not react passively to environmental and social pressures by modifying their management control systems mechanistically. Rather, they have a degree of freedom (Bollecker et al., 2006). According to Bollecker et al., one of the main reasons is that social and environmental information are not necessarily pertinent, reliable, and homogeneous, and thus although performance measures related to the environment and society can be incorporated in management control systems, they tend to be subordinated to the financial performance of the company or they are utilized solely to appear environmentally and socially responsible, with no intention of pursuing sustainability. In the same line of reasoning, Ball and Craig (2010) define four institutional lenses to explain how institutional approaches can frame ideas about social change and accounting practice. These lenses can shed light on the interactions of organizational actors with social movements, refine the ideological implications of social and environmental accounting for organizational life, direct the attention to how organizations make sense of sustainability through new accounting practices, and reflect how culture, ritual and ceremony shape the reality of organizational life.

Although these studies identify both isomorphic and non-isomorphic responses of organizations to sustainability concerns, they do not explicitly consider the existence of diverse actors that interact jointly within and outside the organization in the change process. In other words, it is still not unclear how management accounting change influences and is influenced by diverse stakeholders and in particular how diverse stakeholders interact and negotiate management accounting practices to transform them into SMA practices. Moreover, environmental-social management accounting is not an institutionalized practice within organizations, and indeed, sustainability practices are not truly incorporated in many organizations’ business agendas. Several scholars in the organizational literature have highlighted that sustainability requires a radical change in the mental frames of organizations (from an economic model to a sustainable model).

Therefore, to examine the emergence of these new management accounting practices, the conceptual framework presented in Section 3 will be contextualized to the particular case in which management accounting change is triggered by sustainability issues. Indeed, sustainable development challenges the traditional role of organizations in society and thus it seems more pertinent to follow Greenwood’s et al. (2002) model rather than Tolbert and Zucker’s (1996) model of institutional change. However, sustainable management accounting systems (SMAS) will not necessarily seek the
deinstitutionalization of traditional management accounting systems but rather the integration of environmental and social issues within management accounting systems. As previously argued in this paper, SMAS will resemble an innovation more than a new form of management accounting thinking[4].

Specifically, the multilevel conceptual framework presented in Section 3 will be used in this section of the paper to explore how diverse institutional entrepreneurs interact and collaborate in the implementation of sustainability strategies, and how institutional entrepreneurs with similar powers but different interests negotiate to reach a durable agreement regarding these strategies. In other words, the conceptual framework will be used to examine how these institutional entrepreneurs negotiate the definition and implementation of sustainability strategies and new management accounting practices, which will take environmental and social issues into consideration, in order to reach an agreement on the pre-institutionalization, diffusion and institutionalization of sustainable practices (Pasquero, 2008; Hensmans, 2003).

In this contextualized conceptual framework, the process of institutionalization begins with a triggering event (for instance a regulatory change) that should instigate an institutional change at the field, organizational and individual levels. Each organizational change typically leads to the development of a new environmental or social strategy that is not only defined and implemented by each organization but is socially constructed through the firm’s interaction with its stakeholders. The social construction begins with the deinstitutionalization of previous business models within an organizational field, followed by the pre-institutionalization of different sustainability practices, which should reveal the diverse sustainability strategies being followed by these organizations. Indeed, the stage of pre-institutionalization is mainly characterized in the literature as one in which organizations innovate independently, seeking technically viable solutions to locally perceived problems (Greenwood et al., 2002). Therefore, it would be not surprising that different structures take place, such as sustainability initiatives, strategies, programs, or organizational structures that reflect the specific response of each organization to the challenge of incorporating sustainability in its day-to-day operations.

At the pre-institutionalization stage, the process of management accounting change begins. As explained previously, a parallel process of theorization takes place throughout the first three phases of change. In this particular case, the contradiction could be the lack of management accounting practices that allow the control of new sustainability strategies. Once the contradictions become significant and the problem is specified at the field level, the processes of encoding, enacting and reproducing new management accounting practices take place at the organizational level. However, as previously explained, encoding, enacting, and reproduction require the interpretation and integration of the new logics behind the new accounting practices. That organizational learning process taking place at the individual level is lead by organizational entrepreneurs, who try to force their own interpretation of sustainability within each organization and integrate it into new management accounting practices. These processes also affect the enactment of new practices at the organizational level. Indeed, enactment is the phase where each organization “experiments” with its own new accounting practices, which, after being successfully reproduced and accepted by other organizations, are diffused and become taken for granted at the field level. In other words, the institutionalization of sustainability strategies and SMA practices will be fully achieved at the field level when most of the stakeholder groups accept these new
institutional logics and structures as taken for granted and thus granting them cognitive legitimacy. All the actions behind the institutionalization process at the field, organizational, and individual level could be considered as different types of institutional work occurring at different levels, as suggested by Tracey et al. (2011).

The multiple level analysis of management accounting change contextualized to sustainability issues is summarized in Figure 2.

Management Accounting Change and Sustainability: a brief illustration
Beyond doubt, although the objective of this paper is merely to propose a conceptual framework to examine management accounting change and not to test it in a particular field, this should be empirically examined in another study to validate its conceptual contribution. In the meantime, and in order to illustrate its potential contribution and motivate future researches, some evidence from the US carpet industry is presented in the following paragraphs.

As Sharma and Henriques (2005) noticed, several companies have been proactively integrating environmental considerations into their business strategies during the last decades. One example is the US carpet industry, which has made a commitment to reduce its environmental impact and is currently one of the most environmentally conscious industries within the textile industry (Rusinko, 2007). Indeed, most of the US carpet firms, such as Interface, Inc. and Shaw Floor have been restructuring their business models around environmental sustainability (Stubbs and Cocklin, 2008; Unruh, 2008). For instance, Interface, Inc. has tried to redefine its product as “floor comfort” via leasing of carpets (Sharma and Henriques, 2005), and Shaw Floors has embarked on several initiatives to become the “carpet of the twenty-first century” (Unruh, 2008). At the industry level, the US carpet industry created a multi-stakeholder organization named Carpet America Recovery Effort (CARE) that seeks to promote environmental
manufacturing practices to develop market-based solutions for the recycling and use of post-consumer carpet (Rusinko, 2010). In the particular case of Interface, Stubbs and Cocklin (2008) found that among the factors that contributed to institutionalizing sustainability were the visionary leadership of the founder (organizational entrepreneur) and the existence of tools for measuring and reporting sustainability progress. Indeed, these authors noticed that Interface is using a triple bottom line approach to measure its performance through three main performance measurement tools: QUEST (focused on waste reduction), EcoMetrics (focused on environmental outcomes), and SocioMetrics (focused on social performance).

Therefore, based on these studies, it could be possible to presume that some management accounting systems have been adapted at Interface, Inc. to incorporate sustainability issues, but also that the development of these systems has helped in the institutionalization of sustainability, as proposed in Figure 2. Consequently, there is some evidence regarding the existence of these two processes of change occurring at the firm level, and future studies should examine whether management accounting changes have also been taking place at the industry level, and how those processes of change have been occurred in that industry.

5. Some preliminary conclusions and future research

The emergence of new management accounting practices has not been successfully explained through the two traditional lenses of institutional theory (OIE and NIS). This review paper proposed an institutional entrepreneurship approach to deal with the shortcomings of the accounting literature regarding management accounting change. By focusing on the change process instead of on the role of accounting in the change process, the institutional entrepreneurship approach allows us to examine management accounting change generated by the implementation of sustainability strategies or the emergence of environmental and social concerns, which seems to be an unexplored field of study in management accounting change based on the literature review presented in this paper.

One of the main arguments of this paper is to utilize a constructivist approach to understand the emergence of new accounting practices, in which organizational and institutional entrepreneurs must challenge traditional business models to trigger a change process within management accounting practices and thus institutionalize new management accounting practices. In particular, introducing the institutional entrepreneurship approach can help actors integrate the issues of agency, power and interests in discussions about sustainability strategies, and especially to understand how those issues play a role in the definition of SMAS. One of the key stages that should be extensively examined at the field level is theorization, which could provide insight into the process of enlistment of stakeholders (Munir, 2005) in the design of new accounting practices (environmental and social accounting systems) and elucidate the way those practices acquire legitimacy (Greenwood et al., 2002).

A multilevel analysis is also proposed, as Tracey et al. (2011) suggest, to analyze the different types of institutional work occurring at different levels. While at the individual level the change process mainly requires an interpretation and integration of new practices, at the organizational level it requires the encoding, enactment and reproduction of these practices to institutionalize them within each organization. To ensure the institutionalization of these practices at the field level, a process of
theorization and diffusion must be followed. The theorization process requires two main types of institutional work: motivate the adoption of new accounting practices and create alliances to obtain an agreement on their implementation.

Most likely, given the novelty of environmental and social accounting practices in North America, we will observe only companies in the initial process of institutionalization of these practices. Research should therefore focus on understanding how diverse stakeholders negotiate within a particular field to promote and put SMA practices within organizations into practice. It would be interesting to observe if the contradiction between external and internal requirements creates the conditions for institutional change to occur (Burns and Baldvinsdottir, 2005), and specifically whether environmental accounting is the tool that could expose the contradictions between short-term profit maximization versus long-term sustainable development.

It could be also interesting to assess what kind of change process takes place after the emergence of these contradictions and how that process occurs. We could thus determine whether the change in management accounting practices is morphostatic, i.e. a system that will show a different appearance but whose main assumptions will remain in the system, or morphogenetic, i.e. an authentic change that modifies the taken-for-granted assumptions (Gray et al., 1995). As many authors have stated, accounting could be utilized as a discourse that seeks only to change the appearance but not the genetic code of the firm (Larrinaga-Gonzalez et al., 2001). These issues in environmental management accounting and change should be further investigated in future research.

Research questions that could be analyzed in an institutional entrepreneurship approach include:

RQ1. How do diverse stakeholders interact and negotiate management accounting practices in order to transform them into SMA practices?

RQ2. How does innovation occur in the institutionalization of SMA practices?

RQ3. What events (jolts) related to sustainability have precipitated non-isomorphic institutional changes in the management accounting practices of North American firms?

RQ4. Who are the organizational and institutional entrepreneurs of management accounting change and how do they impart meaning to triggering events?

RQ5. How do sustainability measures become coupled with (or decoupled from) measures utilized in the decision-making process?

The conceptual framework proposed in this paper contains some limitations. First, some authors have highlighted the fact that in some cases environmental management accounting practices have emerged in parallel with traditional management accounting systems, and thus they are mainly decoupled from management accounting systems. In those cases, it would be difficult to talk about real change. Therefore, the change process should be also focused on explaining issues of institutional pressures, legitimacy and decoupling, such as the literature on NIS proposes instead of focusing exclusively on issues related to the pre-institutionalization of new practices and the theorization tasks. Second, the main assumption in this paper is that an institutionalization process is taking place. However, due to the novelty of sustainable
development in many organizational fields, it could be difficult to assess whether the process of change is following an institutionalization process or not. In those cases, it could be only possible to suggest that some stages of the institutionalization process have been taking place but with the possibility that the process could be blocked at some point and thus it would never achieve an institutionalization stage. Third, given the purpose of this paper, it would be impossible to generalize the findings obtained from the conceptual framework proposed given that the most suitable research methodology for this study is the qualitative approach, in which we must sacrifice generalization of findings to obtain a deeper understanding of the problem. Further, it would be very difficult to observe the whole process of institutionalization in real time (it could easily take more than ten years of change) and thus the examination of the change process will have to consider the different interpretations that organizational actors will confer to previous events. Finally, to simplify the process of institutional change, the conceptual framework is presented as a linear process, but in practice the process seems to be more complex and dynamic. Therefore, any analysis of the findings based on the proposed multilevel conceptual framework should consider all these limitations.

Notes
1. The selection of these articles was based on their citation frequency and uniqueness.
2. Institutional logics guide the behavior of actors within a field and render their actions comprehensible and predictable (Lounsbury, 2002).
3. There is another difference between both models with respect to presenting theorizing and diffusion as a process (Tolbert and Zucker, 1996) or as a stage within the institutional process (Greenwood et al., 2002).
4. From a critical perspective, we should expect a new management accounting mindset with respect to sustainability. In practice, however, that alternative seems to be very far from our expectations.

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**Corresponding author**
Paulina Arroyo can be contacted at: paulina.arroyo@hec.ca

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