

Effects of coordination mechanisms on combined and balanced dimensions of ambidexterity

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Abstract

The aims of this article are twofold. First, we aim to strengthen the argument that ambidexterity entails two distinct properties which are duality and balance. Hence, this research draws upon a new conceptualization of ambidexterity by examining its attributes and distinguishing its static and dynamic dimensions. The second aim is to highlight the importance of knowledge combination in order to support ambidexterity and to examine the effect of the interplay of formal and informal coordination mechanisms. Our study provides an integrative model linking ambidexterity attributes to components of combinative capability. Such an integrative view merges the theoretical gap between structural and contextual approaches on ambidexterity literature. Our study reveals that organization with plural coordination mechanisms (formalization, decentralization and connectedness) is able to combine distinct knowledge sets and thus to pursue exploratory and exploitative innovations simultaneously. However, having combinative capabilities pertain to unbalanced level of ambidexterity that means not an equal dexterity because it supports more exploitative innovations than exploration ones. An integrative model is generated with some theoretical propositions for further empirical testing. Our study provides new insights to how hybrid organizational practices can cope with contradictorily pressures of innovation and regulate exploratory and exploitative innovations balance.

Keywords: Innovation ambidexterity, balanced dimension, combined dimension, combinative capabilities.

1. Introduction

Ambidexterity is a relatively young concept that becomes nowadays a central topic in innovation management research (O'Reilly & Tushman, 2007; Raisch & Birkinshaw, 2008). Recognizing the close relation between innovation and knowledge, past researches have highlighted paradoxical nature of knowledge which can be replicated in order to produce exploitation innovation or explored to develop new product and activities (March, 1991). Rather than studding the exploitation-exploration duality as dichotomy, recent studies have emphasized their complementarity and interdependency despite the fact that they have also opposite characteristics and generate conflictual tensions (Lewis 2000, Smith & Lewis, 2011).As such, the concept of ambidexterity has been introduced to describe the capability of firms to conciliate between conflicting activities by realizing high levels of both in a simultaneous way (Tushman & O'reilly, 1996, Gibson & Birkinshaw, 2004: Lin & al., 2007). Managing this paradox in dialogical way implies moving beyond admitting their opposition to seek for how to valorize synergetic effects from their parallel development. Exploitation is referred to amelioration, adjustment of past knowledge which produce certain and short outcomes (March, 1991; He & Wong, 2004). However, exploration illustrates experimentation, discovery of novel ideas and new knowledge with uncertain and long outcomes (March, 1991, He & Wong, 2004; Lin et al., 2007). The relation between those innovation activities is considered as conflictual because of inertial routines, resource rigidity and scarcity and even resistance to change. The challenge facing ambidextrous firms is therefore to deal with those conflictual tensions by changing past routines, smartly allocating resources between those activities and by developing a paradoxical thinking. This critical step pertains to eliminate

initial organizational barriers for attempting ambidexterity in order to start looking for exploitation and exploration as interdependency (Jansen & al., 2005). In fact, scholars have highlighted that the strong argument defending ambidexterity is the complementarity between old and new activities. The simultaneous pursuit avoids spatial, temporal and organizational myopia as such firms with dual innovation strategy can't confront neither failure trap nor success trap (March, 1991). Empirical researchs have found also positive effect of ambidexterity on firm performance and on competitive advantage. Therefore, in order to admit exploitation and exploration paradox, one can understand their interdependency relation. Further, literature has shown that there is co-evolution between exploitation and exploration processes (Garud & al., 2010). Firstly, past knowledge constitutes tool for firm capacity to absorption of new external knowledge. Secondly knowledge creation is a path depending process in which past experience determine the choice of future technological development but also potential exploitation activities depend upon actual knowledge exploration activities. Finally, because knowledge is an auto-productive resource, its value increase in use (Cohen & Levinthal, 1990) in a way that exploration innovation on market or clients may be generated from an earlier exploitation innovation in technological aspect of products. Taking into account temporality, past problems detected or novel solutions invented continually enrich and modify innovation trajectory across the time (Guttel & Konlechner, 2009). Even if paradox entails opposition and interdependency, scholars examining ambidexterity through a paradoxical lens propose different conceptualizations based either on duality and simultaneity to promote interdependency or balance and trade-off to emphasize tensions. To best understand a complex concept of ambidexterity, this study starts from a very generic standpoint to originally conceptualize ambidexterity as parallel development and balancing of exploitation and exploration (Cao & al., 2009). Indeed, if the necessity of conciliating these paradoxical demands is well emphasized, which remains a major point of discussion in the literature is the matter firms can develop, nurture and sustain ambidexterity capability (O'Reilly & Tushman, 2004; Lubatkin, Simsek, Ling & Veiga, 2006; Raisch & Birkinshaw, 2008). How firms may adjust their organizational system in order to reconcile these tensions and being ambidextrous are therefore attracting increasing interest in the research community but also subject of a lot of controversies. Recent studies reveal that combinative capacity is one of main drivers for ambidexterity and call for implantation of hybrid and contradictory organizational practices (Jansen & al., 2005, 2010). However, the literature is seldom explicit regarding the effects of such plural organizational practices on attaining ambidexterity and silent regarding how these combinative capabilities affect the balanced dimension of ambidexterity. In order to participate to this theoretical debate and reduce this conceptual gap, this study offers an integral view linking ambidexterity attributes and components of combination capacity. This paper is organized as follows. In the next section, we shed some light on past conceptualizations of ambidexterity and of combinative capacity. We began by a critical review of ambidexterity literature in order to restrict our definition and delimitate ambidexterity attributes. This conceptualization is followed by drawing boundaries of the construct of combinative capacity and discussing its role in attaining ambidexterity. The following section examines the effect of their components interplay on ambidexterity attributes and comprises our theoretical model and our propositions. We conclude with a discussion of conclusion and implications for future research.

2. Ambidexterity attributes and combinative capability

2.1 Ambidexterity attributes: simultaneity and balance

Academic literature displays that the topic of ambidexterity is explicitly related to the exploitation-exploration duality, to paradox resolution but also even less explicitly to balance of conflictual activities (Raisch & Birkinshaw, 2008). Unfortunately, essays to simplify this complex concept or to profit from its originality have contributed to divergence and fragmentation in the ambidexterity field which can consequently rob this good concept of its utility. We find confusion of ambidexterity concept with sequential development which has been well studied through a punctual equilibrium model. Original works on ambidexterity start with March's exploitation-exploration model which highlights necessity to find an appropriate balance between those paradoxical demands. However, studies still rely on the first mobilization of the topic in Duncan study of innovation process in which exploitation and exploration are treated as two sequential steps of new product development. When we conceptualize exploitation and exploration as two orthogonal innovation activities which is the case of majority of recent studies, one must move off this simplified perspective. In the management field, academic literature studying ambidexterity extensively highlights the idea of simultaneity in developing exploitative and exploratory innovations (Tushman & O'Reilly, 1996; Birkinshaw & Gibson, 2004; O'Reilly & Tushman, 2004; Lubatkin, Simsek, Ling & Veiga, 2006; Raisch & Birkinshaw, 2008). Simultaneity appears to be the most studied property of ambidexterity. Thus, the sequential or punctuated equilibrium solution (Gupta, Smith & Shalley, 2006) has to be excluded when examining consensual conception of ambidexterity. Simultaneous approach is analyzed through terms as "in the same time", "synchronous pursuit of both", "simultaneously explore and exploit" to point a dialogical way to manage this paradox. However, fewer scholars examine the second property of ambidexterity which is the idea of dealing with balance of those both activities despite the fact that ambidexterity concept refers originally to double dexterity and March's framework emphasized the idea of balance or equilibrium in dealing with exploitation and exploration paradox. Ambidexterity illustrates literally the rare characteristic of some people being equally skilled in using their left and right hands rather than being either "righthanded". Dexterity implies not only to realize contradictory activities but to develop both activities to their maximum. As such, developing paradoxical demands in a dialogical or simultaneous way must be done without forgetting opposition and conflictual assumptions. However, less studies have explicitly point the idea of balance". Based on original conceptualization and relying on Cao & al. (2009) study, we admit that the topic of ambidexterity is characterized by two different attributes. The authors argued that there are two dimensions of IA. The so-called combined dimension (CD) refers to capacity to synchronous pursuit of both exploitation and exploration in the same time. This property is related to idea of interdependency of exploitation and exploration and the necessity to produce synergetic effect from their combination. The second dimension is the so-called balanced dimension (BD) which to say the capacity to the firm to excel in developing both activities. Using He & Wong's (2004) instrument, Cao et al. (2009) tested ambidexterity levels in 200 randomly selected high technology firms in China and provided a strong indication that BD and CD represent two distinct dimensions of ambidexterity. Those two properties of ambidexterity concept are independent. Firms may combine both activities with different or low levels of both activities. In the same manner, firms may have equal dexterity over time and without parallel development. in this

perspective, Holmqvist (2004) have argued that 'coexistence' does not mean that the two process of exploitation and exploration have similar importance, while 'balancing' does" (p.277). To conclude ambidexterity is defined as firm capacity to simultaneously develop and balance exploitation and exploration in the same time. The first attribute reflects firm ability to resolve innovation paradox in a dialogical perspective by developing simultaneously both activities. The second attributes implies seeking to regulate levels of those activities. As such, we can rich conceptualization of ambidexterity as dynamic capacity of innovation (Raisch & Birkinshaw, 2008; O'Reilly, & Tushman, 2007). It is entailed the ability to simultaneously exploit and explore (capacity) and a process of regulating and balancing in equal dexterity level of those activities (dynamic).

2.2 The Role of combinative capabilities in ambidexterity

The most challenge to be ambidextrous is how to encounter inertial organizational routines in order to produce novel alternatives while exploiting existing knowledge base. Studies underline while to deal with rigidity of routines, it is necessary to make way for experimental and unstable processes, which uncork in new ideas and adaptable processes which can produce unpredictable results (Helfat & Peteraf, 2003; Katkalo & al., 2010). In this perspective, scholars have pointed that exploitation and exploration can be jointly developed and co-evolved through process of knowledge combination which emerges in context of social interactions and by individual acts of experimentation. This process existing knowledge combination allows the company to experiment the effective borders of its current capacities and to invest and surround the emergent opportunities in order to sketch new options of innovation (Verona & Ravasi, 2003; Schreyögg & Klieschh-Eberl, 2007). Consequently, building organizational knowledge occurs by combining employees' distinct knowledge skills and a set of particular organizational activities because 'it is this combination that enables innovation' (Leonard-Barton, 1995, p.8). As such, when observing and enacting their environment, actors collectively favor the energization of skills at the firm level and allow to feed the organizational system with new knowledge situated in their operational practices (Verona & Ravasi, 2003; Schreyögg & Klieschh-Eberl, 2007). Past studies have pointed out that combination of existing stocks of knowledge is a vital combinative capability for continuous innovation in technology-intensive industries (Schumpeter, 1934). Hence, Kogut and Zander (1992) conceived capacity of firms to be ambidextrous as gauged by their ability to recombine existing knowledge resources and technologies and to systematically exploit the effects produced by combinations (Soete & Weel, 1999). In fact, interaction of heterogeneous cognitive plans and variety of actor's interpretations of external signals pertain to a new connection of existing knowledges or to a different connection of knowledge. However; to remain reproducible in time and in space, these processes must be nevertheless directed and activated by certain managerial actions (Rindova & Kotha, 2001; Jay & Feline, 2013). Indeed, management role is to register the process of knowledge combination in an institutional basis to make it viable. So, since knowledge creation is envisaged in a collective perspective, actions coordinative mechanisms constitute the context supporting actors' actions while it is determined by their actions and interactions. Ambidexterity is so supported by firm capacity to combine existing knowledge in order to manage and develop today's activities while producing exploration. Combinative capacity is so directly connected to the coordination of collective and situated actions, which importance for innovation

ambidexterity was raised by researches. Scholars define combination capacity as a learnt, highly modelled and repetitive capacity which is imbricated in stable patterns of collective interaction and pertain to connection between pockets of existing knowledge (Bueschgens & al., 2010). Most of academic studies highlight that combination capacity is a plural construct which is closely related to coordination mechanisms of collective actions. It entails organizational processes that by using the firms existing stock of knowledge takes place in order to create new applications and innovations (Kogut & Zander, 1992). It is conceptualized as firm ability to synthesize and apply current and acquired knowledge to generate new applications (Hansen, 2004). To effectively combine knowledge is important to mobilize and manage different knowledge categories of knowledge (explicit, implicit and tacit) in order to be assembled and connected. Combinative capability concept is thus extended to three elements: system capacity, coordination capacity and socialization capacity. Hence, for Zollo & Winter (2002) combinative capabilities describe how a company systematizes, socializes, and coordinates knowledge which can according to Bosch & al. (1999) either contribute or hinder exploitation and exploration. Systemizing knowledge refers to formalization of organizational rules and procedures which constitutes a source of explicit and codified knowledge. Knowledge can be coordinated through decision making decentralization or participation in decision processes. As such, personalized and tacit knowledge can be in use. The socialization of knowledge is based on the density of social ties in an organization (Bosch & al., 1999; Jansen & al., 2005; Kogut & Zander, 1992) which pertain to application and mobilization of social and tacit knowledge.

2.3. Components of combinative capacity

Formalization is concerned with an organization's information utilization and represents the degree to which rules define roles, authority relations, norms and procedures (Deshpande and Zaltman, 1982; Jaworski and Kohli, 1993, p.56). Formalization is aimed at codifying best practices in order to be more efficient to exploit and to be broadly diffused (Jansen et al., 2005: 354). It pertains to reduce variance and conflict, motivates individuals to share explicit as well as tacit knowledge and reduces the cost associated with knowledge sharing (Jansen et al., 2005: 354). According to previous researches formalization positively influences exploitation (Jansen, Van den Bosch & Volberda, 2006) but is negatively correlated with exploration because it may inhibit search for others than already-known solutions (Weick 1979).

Decentralization is described as organizational members' participation to decision making (Hage & Aiken, 1967). It facilitates ad hoc problem solving and allows for the interplay between a variety of perspectives (Jansen & al., 2005). Decentralization facilitates deviant behaviors and increases range of new responses to problems. Thus, it is considered as positively associated with exploration while negatively related with firms or units abilities to engage in exploitation activities (Jansen, van den Bosch & Volberda 2006; Mom, Van den Bosch & Volberda 2007). Researches on innovation ambidexterity are divided on those militating in favor of formalized rules to translate its federative effect of the opposition of objectives and past experience codification roles (O'Reilly & Tushman, 2008; He & Wong, 2004) and those who find in the active participation of the actors a vector of achievement of compromise and generation of new experimentation.

Connectedness, or density of social relations describe the degree of formal and informal direct contact among employees in organization (Jaworski & Kohli, 1993, p. 56). Densely connected networks serves as a governance mechanism which permits individuals to develop deep knowledge structure and facilitates knowledge exchange (Jaworski & Kohli, 1993; Jansen & al., 2005). We give supports in this study to the potential of densely connected networks in refining existing businesses, products, and processes (Rowley & al. 2000) as well as reducing tensions between innovation activities.

3. Theoretical Model

3.1 Effect of the interplay of formalization and decentralization on combined dimension

Moving away of above mentioned discretionary reasoning, a set of researches on collective learning (Kogut & Zander, 1992; Moran & Ghoshal, 1998) and on process development of organizational capacity (Van den Bosch & al, 1999; Salvato & Rerup, 2010; Katkalo & al., 2010) attempted to explain the complementarity between the explicit and tacit categories of the knowledge or to underline the dissociation between cognition and action (Wenger & al. 2002; Cohendet & Llerena, 2003). Others clearly claimed the aggregation of mechanistic and organic modes of coordination (Siggelkow & Levinthal, 2003; Jansen & al ., 2005; Jansen, 2008). The argument advanced is that developing knowledge by exploitation or by exploration requires featuring all social entities in its constructive potentialities, independently of their busy positions. To overtake knowledge asymmetry problems, Van den Bosch & al. (2005) as well as Moran & Ghoshal (1998) showed that combination of knowledges at the collective level requires matching knowledge management practices intuitively considered as brought into conflict. Kogut & Zander (1992) reached the same reports, by considering that knowledge dispersion problems constitute one of the main barriers in the process of generation of buried and previously not connected resources. Consequently, abolition of those barriers allows to deconstruct past mental models, to question and revise underlying logic of actual actions (Siggelkow & Levinthal, 2003; Argyris, 2004). Matching ambidexterity, it is a question of intercepting different knowledge categories being able to be differently mobilized (the same rules mobilized and interpreted differently by actors having heterogeneous cognitive plans) or still mobilized from various manners (individual initiatives applied to different practices) (Kogut & Zander, 1996-1992). Therefore, exploration of new knowledges draws upon reorganization of the existing knowledge structure and depends on the presence for formalized rules (Langlois and Garrouste, 1997, p. 288). Evolution of past knowledges depends besides of actors abilities to interpret their practices, to give meaning to the current stock of organizational knowledges (Siggelkow & Levinthal, 2003; Hargadon & Bechky, 2006). This way, the formalized rules can be applied, mobilized and interpreted differently by actors according to their cognitive capacities, to their personal experiences, practices in use and the specific problems to which they are confronted (Kogut & Zander, 1992; Nahapiet & Ghoshal, 1998; Siggelkow & Levinthal, 2003). So, heterogeneity of humans cognitions activated through decision making decentralization is source of variety allowing dynamization of initial organizational routines and overtaking past path (Garaus & al., 2012). Seen in this way, formalized rules need cognitive efforts for their interpretation (Zollo & Singh, 2004) or reflexive process to making sense (Weick & al., 2005) for understanding observed results and interpretation of the way of applying

them in order to develop new alternatives. In another side, studies underlined mitigated or negative effect of decision making decentralization on exploitative innovation. We admit that it's true only if formalized rules are absent or ineffectively mobilized. In fact, knowledge codification stimulates transformation of individual implicit knowledges (Jansen & al., 2005), allows to clarify tacit knowledges and makes its more accessible (Zaltman & al., 1973; Bontis & al., 2002). As far as actors are tightened towards different purposes and throw different cognitive representations, knowledge codification also limits ambiguity which they feel during their interactions and conflicts and disagreements around deviants initiatives while making more effective their actions (Zmud, 1982; Garaus & al., 2012). Firm ability to simultaneous pursuit of exploitation and exploration implies combination of different categories of knowledge; that to say interaction of tacit and explicit knowledges (Kogut & Zander, 1992 ; Tsai & Ghoshal, 1998 ; Moran & Ghoshal, 1998 ; Garaus & al., 2012) , exchange of codified and personalized one (Siggelkow et Levinthal, 2003) and so to be managed by organic and mechanic coordination mechanisms (Adler & al. 1999, Sheremata, 2000 ; Mom & al., 2007 ; Jansen & al., 2009). Based on those arguments, we admit that combined dimension of ambidexterity is supported by formalization and decentralization. The further pertains to codify past knowledge and reduce conflicts of actor's orientations while the later supports tacit knowledge exchange, interpretation of existing knowledge base.

Proposition 1: Interaction of Formalization and decentralization positively affects combined dimension of innovation ambidexterity

3.2 Effect of connectedness on combined dimension

Previous researches admitted that social interactions play an important role in the processes of innovations development (Fulk, 1993). They also demonstrated that diversity of knowledge ensuing from dense links contributes outstandingly to increase innovation capacity (Uzzi, 1997; Tsai & Ghoshal, 1998; Dyer & Hatch, 2006), accessibility to intellectual capital of others and to increase frequency of information and resources sharing (Nahapiet & Ghoshal, 1998). The development of exploitation and exploration depends on the social context in which individual actors as knowers interact with their partners, use their mutual knowledge fields to evolve in their practices. For example, Walsh & Ungson (1991) consider that the organizational knowledges require a common interpretation and a system of shared representations. Concerning the co-development of exploitation and exploration is important to examine the impact of this source of knowledge combination. Contextual model of ambidexterity developed by Gibson and Birskinhaw (2004) highlights the importance of social context because actor's oscillation between exploitation and exploration needs a common interpretative structure which supports knowledges exchange and reduces tensions (Dyer & Hatch, 2006). Indeed, structure of a social network establishes, for some studies, the main engine of understanding motivations inherent to the commitments in a process of social exchange and reflection of existing practices (Uzzi, 1997; Tsai & Ghoshal, 1998; Nahapiet & Ghoshal, 1998; Sheremata, 2000). In this perspective, the density of links is associated with the increase of the possibilities that an actor identifies but also acquires knowledge which can be used for exploitation operation or still exploration of knowledge (Hansen & al., 2001; Nahapiet & Ghoshal, 1998; Sheremata, 2000). As such, an actor can take advantage of the use of his direct contacts to acquire and assimilate a diversity of new knowledge, develop new skills (Floyd and

Lane, 2000), make a commitment in deviants intentions (Subramaniam & Youndt, 2005) or still to find innovative solutions in the already met problems (Sheremata, 2000). He can also take advantage of the use of the contacts of networks to obtain connected or complementary knowledge necessary for the improvement and for the refinement of the existing skills (Floyd & Lane, 2000), to adjust the current practices (Subramaniam & Youndt, 2005) and to strengthen existing cognitive representations (Rivkin & Siggelkow, 2003). Dense networks are also considered as real channels increasing the level and the quality of intra-organizational communication and favoring cooperation between actors situated at various levels and organizational locations (Hansen, 1999; Adler & Kwon, 2002). It is also about mechanisms of combination of several forms of knowledge detained by various categories of actors (Ghoshal & al. 1994; Tsai, 2002; Adler & Kwon, 2002). Aligned with this logic, capacity based perspective emphasizes the federative role which plays ties density as a mechanism allowing the creation of a wide understanding of rules inherent to individual actions (Volberda, 1998; Dyer & Hatch, 2006). Dense networks are advantageous for the development of trust and cooperation and knowledge sharing (Rowley & al., 2000) and for the reduction of the emergence of conflicts inherent to the opposite objectives and their application (Rindfleisch & Moorman, 2001). Density of ties constitutes a source of knowledge multiplication, of accumulation of those acquired and for production of new practices through actors interactions (Van den Boech & al, 1999; Cavusgil & al., 2003; Atuahene-Gima & Murray, 2007). Basing on those explanations, we admit in this study that the density of the social ties, by its contribution to the increase of the uses(practices) made by the exchanged knowledge and its potential of construction of shared representations, acts in favor of the simultaneous pursuit of the opposite activities of innovation.

Proposition 2: Connectedness positively affects combined dimension of innovation ambidexterity

3.3 Effect of the interplay of formal and informal mechanisms on balanced dimension

Number of studies have posited that that combinative capacity even if it contributes to co-development of exploitation and exploration remains with limited impact on balancing exploitation and exploration. For instance, Iansiti & Clark (1994) underlined that this type of capacity mobilizes and applies directly know-how registered in the organizational routines knowledge's trajectories created remain nevertheless compressed by the presence of those same routines and by the ordinary path development. In this sense, Sorensen & Stuart (2000) argued that " the dynamics of change is the product of searches for new practices situated in the neighborhood of existing organizational routines from which the sluggish character cannot be ousted in spite of the reflexivity of the actors. Doz (1994) joins Sorensen and Stuart (2000) when he gives evidence that «mobilization and constant application of the same series of skills can lead at the same time to self-satisfaction and to vulnerability " (p. 101). This vulnerability is for some (Smits and Kuhlmann, 2004; Ramachandran and al., 2010) explicated by the emergent and evolutionary character of the process of combination of various sorts of knowledge. In addition, because of auto-organization, combination of knowledge will depend on intrinsic motivation of actors as well as on the quality of their negotiations. O'reilly and Tushman (2013) asserts however that this spontaneous interactivity which is submitted to deliberated actors choices is not sufficient to translate learning flows generated in concrete actions to innovations of exploration results. Authors add that interactive

learning does not allow to reach standards of dynamic capacities of innovation which property is continuity and adaptation to external circumstances. Others (Garud & al., 2003; Ramachandran and al., 2010) stipulate that this informal community responsible for developing combination is unstable and fragile as any internal perturbation "disagreement between actors" or external one (power forces) affects especially deviants actions because of social cohesion between implicated actors and of absence of institutional legitimization. In this perspective, Feldman & Pentland (2003) explained that "one of major causes of the reputation whom have the routines to be inert can come from the difficulty to implement deliberate changes" (p. 749). He & Wong (2004) as Lubatkin & al. (2006) admit that while phenomena as conflicts of interests and power cannot be excluded and while the collective learning is based on which on sociability to stabilize innovation activities, combination capability cannot guarantee that an activity gets the upper hand over the other one. Examining limits of capacity of combination, Kogut & Zander (1992, p. 396) highlighted that "the transformation towards new capacities is difficult, as far as neither knowledge imbricated in the current relations are likened well, nor the social orders required to support the new learning are recognized". In addition to routines inertia and the fragility of context of action, certain works evoke the risk of identity and relational inertia of the actors involved in the process of collective learning (Dyer and Hatch, on 2006). Indeed, Volberda (1998) as well as Schreyögg and Klieschh-Eberl (2007) explain that in reality, the interpretative frames of actors are very vulnerable as far as the actors can transform voluntarily their deviants ideas or still manipulate their critical thoughts to align itself to collective behavior supporting their interactions. Indeed, the collective action acts as "cognitive pilot" by training in a direct way learning ability of interaction members (Elfring and Volberda, 2001). Works (Van den Boch and al., 1999; Cavusgil and al., 2003) also underline that social negotiation is unstable because the density of ties presents fragile integrators effects. It favors an unbalanced un-balanced compromise between exploitation and exploration. In this sense, new ideas and options emerging from informal interactions can quite naturally be the object of resistance or still conflicts between actors stretch out practices towards behavior corresponding to pre-established one. Relational density can lead also in the intersection of formalized procedures and cognitive deliberation to try to eliminate the disagreements, cognitive conflict and restrict thus variety of interpretations. By referring to Weick (1979), Volberda (1998) underlines, in this respect, that the search for compromise at all costs risk to lead to the ineffectiveness of choices operated for development of knowledge through the retention of consensual options of innovation against more promising but not corresponding alternatives and to favor so rather the dominant logic of exploitation. Studies on hierarchical organization of so called dynamic capacities (Collis, 1994; Zollo and Winter, 2002; Winter, 2003; Zahra & al., 2006; Ramachandran & al., 2010) classify the organizational capacity of combination as a more exploitative capacity because situated at the operational level, it not allow lonely stabilization of deviants practices. It does not necessarily mean that the capacity of combination don't favor the development of the innovation of exploration. Consequently, we admit that the combinative capacity by means of interaction of decentralization, formalization, and connectedness favors an asymmetric ambidextrous equilibrium with exploitation dominance.

Proposition 3. Combinative capacity (Interaction of decentralization, formalization, and connectedness) negatively affects balanced dimension of IA and impacts more exploitative innovation than exploration innovation.

4. Theoretical conclusion and practical implications

In the paper we suggest a dual dimensional conceptualization of ambidexterity by distinguishing its static dimension which is simultaneity or duality or the so-called combined dimension and its dynamic one which is referred to its balanced dimension. Our study reveals that organization with plural coordination mechanisms (formalization, decentralization and connectedness) is able to combine distinct knowledge sets and thus to pursue exploratory and exploitative innovations simultaneously. However, having combinative capabilities pertain to unbalanced level of ambidexterity that means not an equal dexterity because it supports more exploitative innovations than exploration ones. An integrative model is generated with some theoretical propositions for further empirical testing .Our study provides new insights to how hybrid organizational practices can cope with contradictorily pressures of innovation and regulate exploratory and exploitative innovations balance. Combining antagonist organizational characteristics is a main issue in order to pursue simultaneously both exploitative and exploratory orientation. Combinative capacity presents however limited impact on balancing with equal dexterity those activities which arise the importance of others organizational characteristics in assuming appropriate regulation of innovation activities levels. Each of the propositions generated in this study opens doors for empirical investigation in Surveys or case study exploration. Future research can test propositions by measuring differently ambidexterity's dimensions. As such interaction and addition measure can be used in the same study. Detailed studies may also be directed in order to examine specific relations between combinative capacity constructs and the two dimensions of innovation ambidexterity.

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