Journal of Business Research xxx (2014) xxx–xxx

Contents lists available at ScienceDirect

Journal of Business Research

Unraveling the link between managerial risk-taking and innovation: The mediating role of a risk-taking climate

Ana García-Granero [a,c,*], Óscar Llopis [b,c,1], Anabel Fernández-Mesa [c,d,2], Joaquín Alegre [b,3]

[a] Grenoble Ecole Management (GEM), Rue Pierre Sémard, 38003 Grenoble, France
[b] GREThA UMR CNRS 5113, University of Bordeaux, Avenue Leon Duguit, 33608, Pessac Cedex, France
[c] INGENIO (CSIC-UPV) Universitat Politècnica de València, Camino, de Vera s/n, 46022 Valencia, Spain
[d] Universitat de València, Dep. de Direcció d'Empreses 'Juan Jose Renau Piqueras', Avda. Tarongers s/n, 46022, Valencia, Spain

ARTICLE INFO

Article history:
Received 12 June 2013
Received in revised form 27 October 2014
Accepted 28 October 2014
Available online xxxx

Keywords:
Innovation performance
Managers' risk-taking
Risk-taking climate
Signaling theory
Social cognitive theory

ABSTRACT

Scholars have proposed that taking risks in organizations is important in explaining innovation performance. Analysis of this link has traditionally been based on two unconnected perspectives. From a managerial perspective, entrepreneurial orientation and leadership theories have been used to explain the positive relationship between managers' risk-taking and innovation. On the other hand, research on creativity suggests that a risk-taking climate helps to explain the generation of novel ideas. However, there is little empirical research analyzing this link. This study examines the possibility of a connection between managerial risk-taking propensity, risk-taking climate and innovation performance. To do so, we test a quantitative model where the impact of the manager's risk-taking propensity on innovation is mediated by its effect on risk-taking climate. Structural equation modeling is used to test the research hypotheses on a data set of 182 firms from the Spanish and Italian ceramic tile industry.

1. Introduction

The ability of firms to innovate is a primary factor in achieving and sustaining competitive advantage (Baer, 2012; Nelson & Winter, 1985). It is widely acknowledged that the production of creative ideas is the first and most critical stage for innovation (Mumford, 2000; Perry-Smith, 2006) and thus, creative behaviors should be strongly encouraged across all levels of the firm due to their positive influence on innovation (Amabile, Barsade, Mueller, & Staw, 2005). Previous research has highlighted that innovation requires taking risks at all levels of the firm (e.g., Colquitt, Scott, & LePine, 2007; Zahra, 2005). However, studies to date usually focus on risk-taking at one organizational level, thus disregarding the complexity involved in the generation of creative ideas and their translation into firms' innovation. The purpose of this study is to refine the understanding of the relationship between risk taking and innovation performance. Specifically, we theorize and test that risk taking is crucial in bridging the gap between different organizational levels and hence, in offering a more detailed understanding of how innovation emerges and is deployed in organizations.

The relationship between risk taking and innovation performance is particularly fruitful. In March's (1987: 1408) words, "risk-taking is valued, treated as essential to innovation and success". Substantial research from diverse fields suggests a close link between risk-taking and innovation in organizational settings (Latham & Braun, 2009; March & Shapira, 1987). From a managerial perspective, the link between risk taking and innovation performance has been examined using a wide range of approaches, such as the entrepreneurial orientation and leadership literatures (Covin & Slevin, 1986; Ling, Simsek, Lubatkin, & Veiga, 2008; Wu, Levitas, & Priem, 2005). Managerial risk taking involves investing significant resources in activities with a high possibility of failure, which includes incurring heavy debt or making large resource commitments in the hope of reaping potentially high benefits (Fernández-Mesa, Alegre-Vidal, & Chiva-Gómez, 2012; Lumpkin & Dess, 1996). Managers vary in their individual propensity to take risks. This is not trivial given that the evidence shows that a manager's preference for a risky behavior is positively associated with the attainment of higher innovation results (e.g., Ling et al., 2008). Thinking "outside the box" entails a great deal of uncertainty, and bold decisions and actions are often necessary to achieve innovative results. This implies that, compared to risk-averse managers, managers with a higher preference for risk will be more likely to consider the potential gains from risky decisions (Ling et al., 2008; Wu, 2008).

The literature on creativity provides a different, yet related, view of this relationship, with a greater focus on the personal and contextual

* Corresponding author at: Grenoble Ecole Management (GEM), Rue Pierre Sémard, 38003, Grenoble, France. Tel.: +33 476 70 64 76.
E-mail addresses: ana.garciagranero@grenoble-em.com (A. García-Granero), oscar.llopis-corcoles@u-bordeaux.fr (Ó. Llopis), anabel.fernandez@uv.es (A. Fernández-Mesa), joaquin.alegre@uv.es (J. Alegre).
[1] Tel.: +33 556 84 85 51.
[2] Tel.: +34 963 864 438.
[3] Tel.: +34 963 828 877.

http://dx.doi.org/10.1016/j.jbusres.2014.10.012
0148-2963/

factors explaining why employees engage in innovative activities (e.g., Amabile, Conti, Coon, Lazenby, & Herron, 1996; Oldham & Cummings, 1996; Gumusluoglu & Ilsev, 2009). One fundamental idea is that creative behaviors are about challenging the status quo of a given aspect of the organization. From the employee's point of view, the consequences of such challenges are uncertain. In fact, those employees displaying creative behaviors may face negative consequences if they fail (Zhou & George, 2001). For instance, Janssen (2003) demonstrates that employees coming up with new ideas are likely to come into conflict with co-workers because they possibly challenge the established courses of action and their co-workers' assumptions. Resistance, in the form of work conflicts, is likely to arise.

Although work from both views has significantly advanced our understanding of the nature of the link between risk taking and innovative performance, observation of this relationship through a combined lens is lacking. We believe that it would be more informative to explore the effects of risk taking on innovation performance at different levels of the organization. Upper echelon theory hinges on the assumption that the firm's dominant coalition influences organizational outcomes. We do not reject this assumption but defend that the impact is not direct. Despite the existence of a top manager's risk-biased attitude, the legitimation of their strategy in the broader organizational context is necessary to foster risk at all levels in the organization and generate and implement novel ideas successfully. We would argue that managers' risk-taking behavior not only exerts a direct effect on innovation performance but also that the organizational risk-taking climate benefits due to a positive signaling effect deriving from managers' risk-taking attitudes.

The paper is structured as follows. First, we provide a brief theoretical review of innovation in organizational contexts. Second, we introduce the relevance of managers' and employees' risk taking for fostering organizational innovation. In the third section, we present the conceptual model and develop our hypotheses. The last two sections test our model on a sample of 182 companies for the Spanish and Italian ceramics sector, and present our results, findings, limitations and some managerial implications.

2. Conceptual background

2.1. Innovation performance

Innovation is central to firms' achieving sustained competitive advantage (Baer, 2012; Teece, Pisano, & Shuen, 1997). The evolution of an increasingly complex environment has made innovation an unavoidable option in plans to increase the performance, continuing growth and survival of firms (Rogers, 2003; Tellis, Prabhu, & Ghandy, 2009). Innovation can be defined as the successful implementation of new ideas. Whereas creativity refers to the generation of novel and useful ideas, innovation includes not only novelty but also usability as two indispensable conditions (Amabile et al., 1996; Baer, 2012; Gong, Zhou, & Chang, 2013). Thus, innovation requires new ways to solve problems and achievement of commercial success.

Innovations can be either product or process innovations (Martínez-Ros & Labeaga, 2009; OECD, 2005). Product innovation is understood as a product or service introduced to meet the needs of the market or an external user; process innovation is understood as a new element introduced into production operations or functions (Damanpour & Gopalakrishnan, 2001). The two types of innovation are closely related, and although firms may be more focused on product innovation, process innovation may be necessary for the successful implementation of their new products (Martínez-Ros & Labeaga, 2009). Although significant efforts have been invested in trying to understand the factors underlying innovation performance, the process entails high failure rates (Wu et al., 2005). Despite the difficulties involved in producing innovation, it is one of the main drivers of organizational growth; it is therefore important to have a more fine-grained understanding of its determinants.

2.2. Managers' risk-taking propensity

The determinants of innovation include exogenous factors such as the firm's external environment, and more malleable aspects such as the organizational culture, structure, and strategy (Papadakis, Lioukas, & Chambers, 1998; Vega-Jurado, Gutiérrez-Gracia, & Fernández-de-Lucio, 2008). In particular, leaders have been repeatedly recognized as strategic decision makers able to identify opportunities and make the right decisions to encourage innovation (Alexiev, Jansen, Van den Bosch, & Volberda, 2010; Elenkov, Judge, & Wright, 2005). Firms' managers involved in decision making are faced with the uncertainty intrinsic to innovation activities. Innovation needs investments of time, effort, and resources, such as increases in R&D expenditure and greater allocation of management attention, although the distribution of the returns from these investments is unknown (Ling et al., 2008; Wu et al., 2005). This uncertainty and the significant possibilities of failure often lead to risk-averse behaviors and under-investment in innovation (Finkelstein, 1992; Wu, 2008). However, expectations of potentially high returns drive many managers to opt for risky solutions and to focus on the potential benefits of innovation rather than the potential losses (Ling et al., 2008).

Several streams of research propose that managers' risk-taking propensity can make a difference in defining the ability of firms to innovate. For instance, a relevant stream in entrepreneurial and management research has developed the concept of entrepreneurial orientation (EO) as a reflection of "the extent to which the top managers are inclined to take business-related risks, to favor change and innovation in order to obtain a competitive advantage for their firm, and to compete aggressively with other firms' organizational processes, methods and styles that firms use to act entrepreneurially" (Covin & Slevin, 1986, p.77). EO is proposed to heighten performance (Madsen, 2007; Wiklund & Shepherd, 2005; Zahra & Covin, 1995) and innovation (Atuahene-Gima & Ko, 2001). Three main dimensions of EO have been identified and widely used in the literature: innovativeness, proactiveness and risk taking. Our focus in this paper is on the critical role of the risk-taking dimension as a driver of firms' innovation. Risk taking includes taking bold actions by venturing into the unknown, borrowing heavily or committing significant resources to venture uncertain environments (Rauch, Wiklund, Lumpkin, & Frese, 2009), and thus, captures the extent to which top managers are inclined to take business-related risks (Covin & Slevin, 1986).

Scholars using the upper echelon perspective study risk-taking propensity in managers and top management teams according to characteristics such as tenure and age, and their effects on innovation performance (Bantel & Jackson, 1989; Liu, Li, Hesterly, & Cannella, 2012; Wu et al., 2005). Research in the leadership literature assesses more directly how the propensity of top management teams for risk taking influences performance (Papadakis et al., 1998; Peterson, Smith, Martorana, & Owens, 2003), and specifically innovative processes and outcomes (Ling et al., 2008). In general, results confirm that managers prone to risk-taking behaviors are more likely to obtain better innovation results. Along similar lines, studies on option-based compensation have identified that different compensation structures can affect observable managerial decisions, such as risk-taking behaviors (e.g., Coles, Daniel, & Naveen, 2006; Ederer & Manso, 2013). For instance, it has been suggested that convex payoffs should be given to CEOs in order to mitigate their risk aversion and provide them with explicit incentives toward engaging in risky projects (Core & Guay, 1999).

Together, the above insights suggest that managers may exhibit a myriad of risk-taking behaviors and attitudes depending on a wide range of factors, ranging from contextual-level issues to individual-level characteristics. However, a common argument across all approaches is the importance attached to managers' risk taking as a pivotal antecedent for explaining innovation performance across diverse organizational levels.

Please cite this article as: García-Granero, A., et al., Unraveling the link between managerial risk-taking and innovation: The mediating role of a risk-taking climate, *Journal of Business Research* (2014), http://dx.doi.org/10.1016/j.jbusres.2014.10.012