The Mediating Role of Corporate Entrepreneurship in the Organizational Support–Performance Relationship: An Empirical Examination

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Corporate entrepreneurship has been recognized as an important element in organizational performance. Organizational support in terms of training and trusting individuals within the firm to detect opportunities and in terms of resource availability has been proposed to positively influence a firm's entrepreneurial activities. Despite the recognition of the organizational support—corporate entrepreneurship—performance linkage, this relationship has been approached in different ways from the theoretical and empirical perspective. Some unsolved mediation issues of past research are addressed in this study by testing three alternative hypotheses. The research design was a cross-sectional, mailed questionnaire. The findings indicate that corporate entrepreneurship (new firm formation, product/service and process innovation) can be considered a potent mediator in the organizational support—performance relationship.

Introduction

Corporate entrepreneurship (i. e. entrepreneurial activities at the level of an established organization) has been recognized as an important element in organizational and economic development, performance and wealth creation. Organizational support in terms of training and trusting individuals within the firm to detect opportunities and in terms of resource availability has been proposed to positively influence a firm's entrepreneurial activities. Despite the recognition of the organizational support—corporate entrepreneurship—performance linkage, this relationship has been approached in different ways from the theoretical and empirical perspective. For example, first, organizational support

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has been seen as a part of the corporate entrepreneurship construct or the corporate entrepreneurship antecedent, and second, the mediating role of corporate entrepreneurship in the linkage has usually not been tested appropriately. These unsolved issues of past research are addressed in this study by testing alternative hypotheses.

Corporate Entrepreneurship

Corporate entrepreneurship is defined as entrepreneurship activities within an existing organization. Corporate entrepreneurship refers not only to the creation of new business ventures, but also to other innovative activities and orientations such as development of new products, services, technologies, administrative techniques, strategies and competitive postures. The three most pronounced elements of organizational level entrepreneurial activities are: new venture formation, and product/service and process innovation. First, new venturing can include the formation of more formally autonomous or semi-autonomous units or firms, often labeled incubative entrepreneurship (Schollhammer 1981; 1982), internal venturing (Hisrich and Peters 1984), corporate start-ups (MacMillan, Block, and Narasimha 1984), autonomous business unit creation (Vesper 1984), venturing activities (Guth and Ginsberg 1990), newstreams (Kanter and Richardson 1991), and corporate venturing (Sharma and Chrisman 1999). Second and third, product/service and process innovation refer to product and service innovation, with the emphasis on development and innovation in technology. In the words of different researchers, corporate entrepreneurship includes the extensiveness and frequency of product innovation and the related tendency of technological leadership (Covin and Slevin 1991), new product development, product improvements, and new production methods and procedures (Schollhammer 1982), or development or enhancement of products and services as well as techniques and technologies in production (Knight 1997).

The Organizational Support-Corporate Entrepreneurship-Performance Relationship

Corporate entrepreneurship is very likely related to improved organizational performance, usually in terms of growth and profitability (Covin and Slevin 1991). Past research has presented much evidence for the relationships of corporate entrepreneurship to organizational growth (Covin and Slevin 1986; Covin 1991; Zahra 1991; 1993; Zahra and Covin

1995; Morris and Sexton 1996; Stetz et al. 1998; Wiklund 1999; Antoncic and Hisrich 2001) and profitability (Covin and Slevin 1986; Zahra 1991; 1993; Zahra and Covin 1995; Wiklund 1999; Antoncic and Hisrich 2000; 2001).

One important organizational element that is beneficial for corporate entrepreneurship is organizational and management support for entrepreneurial activities. This support includes top management involvement (Merrifield 1993), encouragement (Hisrich and Peters 1984), support, commitment, and style, and the staffing and rewarding of venture activities (MacMillan 1986).

Organizational support has been seen as an important antecedent of corporate entrepreneurship. In particular, supports in terms of training and trusting individuals within the firm to detect opportunities (Stevenson and Jarillo 1990) and in terms of resource availability (Kanter 1984; Pinchot 1985) have been proposed to positively influence organizational entrepreneurial activities and behavior. Antoncic and Hisrich (2001) have provided empirical evidence for this linkage. They also found a positive relationship between intrapreneurship and performance (growth and profitability). This research suggests that corporate entrepreneurship would act as a mediator in the organizational support–performance relationship. In past research the exact mediation role of corporate entrepreneurship in the organizational support-performance relationship has not been appropriately empirically tested. In their structural equation model findings, Antoncic and Hisrich (2001) report neither a coefficient of a direct relationship between organizational support and performance elements nor an analysis on the nature of the mediation. Mediation could exist, but it may be in one of three alternative forms described by Baron and Kenny (1986). The first alternative form is a single, dominant mediator. In this case, the direct relationship between the independent variable and the outcome variable is zero, whereas the outcome variable is impacted through the mediator. The second alternative form is a potent mediator. In this case, the outcome variable is also impacted through the mediator but the direct relationship between the independent variable and the outcome variable is not zero, hence indicating the operation of multiple mediating factors. For a mediator to be considered potent, the path from the independent variable to the outcome variable should be significantly reduced by the introduction of the mediator. If the path is not significantly reduced the mediator can be considered non-potent (the third alternative). Research in corporate entrepreneurship, as described above, would suggest that entrepreneurship can be considered an important mediator in the organizational support–performance relationship but does not indicate a preferred alternative between the dominant and the potent moderation form. For this reason two alternative hypotheses are formed:

Hypothesis 1: Corporate entrepreneurship activities (new ventures, product innovation, and process innovation) are dominant mediators in the organizational support–performance relationship.

Hypothesis 2: Corporate entrepreneurship activities (new ventures, product innovation, and process innovation) are potent mediators in the organizational support–performance relationship.

Alternatively to the mediation issue, organizational support has been considered a complement or an integral part of corporate entrepreneurship activities. Zahra (1993), for example, included organizational support activities (such as training and rewarding employees, and establishing procedures for dealing with new ideas) designated to foster creativity and innovation as a part of a corporate entrepreneurship construct, rather than considering them as antecedents of corporate entrepreneurship. This is the basis for a third alternative hypothesis:

Hypothesis 3: Corporate entrepreneurship activities (new ventures, product innovation, and process innovation) are neither dominant nor potent mediators in the organizational support–performance relationship.

Method

The research design was a cross-sectional, mailed questionnaire, administered in Slovenia. All constructs were measured by multiple items. Corporate entrepreneurship was measured by items, which pertain to product/service innovativeness (8 items) from the corporate entrepreneurship scale (Zahra 1993), process innovativeness (6 items from Zahra 1993; two from Lumpkin 1998; and one from Covin and Slevin 1989 and Knight 1997), and by four items reflecting new venture formation in terms of new autonomous or semi-autonomous unit or firm formation. Organizational support was measured by items from Hornsby et al. (1993) and items reflecting support activities for creativity and innovation from Zahra (1993). Organizational support questions (12 items) refer to management encouragement, worker's discretion about their work-related decisions, designating idea champions, establishing procedures to solicit

and examine employee ideas, permeability of job boundaries, training, rewards and reinforcement, and availability of time and financial resources for pursuing new ideas or projects. Variables of performance, the dependent variables in the model, were measured in terms of absolute growth and profitability. Growth was assessed by two items. While the first asks about the average annual growth in number of employees in the last three years, the second asks about the average annual growth in sales in the last three years. Profitability was assessed by three items: average annual return on sales (ROS), average annual return on assets (ROA), and average annual return on equity (ROE) in the last three years. Control variables were also used. Respondents checked appropriate boxes for age, size and industry for their organization.

Questionnaires were sent to 2,086 established firms (477 responses were usable for analysis). All measurement scales were examined for their convergent and discriminant validity. The existence of mediations was tested with regression analyses by using a hierarchical procedure as proposed by Baron and Kenny (1986).

Results

The results of regression analyses are displayed in Tables 1, 2, and 3. Hypothesis 1 stated that corporate entrepreneurship activities would act as dominant mediators in the organizational support–performance relationship. The relationships between organizational support and all three corporate entrepreneurship elements were found positive and significant (unstandardized coefficients in prediction of new ventures 0.33, product innovation 0.40, and technological innovation 0.54, see Table 1). The relationships between two out of three corporate entrepreneurship activities and performance elements were found positive and significant (unst. coef. in prediction of growth: new ventures 0.13, prod-

Table 1: The organizational support–corporate entrepreneurship relationship (regr	ession
equations with unstandardized coefficients)	

Dependent variable	New ventures	Product innovation	Technological innovation
Intercept	0.00	0.00	0.00
Organizational support	0.33*	0.40*	0.54*
R ²	0.11	0.16	0.29

^{*} p < 0.05.

Table 2: Corporate entrepreneurship mediation in the organizational supportperformance relationship (regression equations with unstandardized coefficients, dependent variable: growth)

	Model 1	Model 2
Intercept	0.00	0.00
Organizational support (os)	0.12*	0.24*
New ventures (NV)	0.13*	
Product innovation (PI)	0.14*	
Technological innovation (TI)	0.08	
Interaction terms		
os×nv	0.03	
$os \times pi$	0.15*	
os × ti	0.02	
R ²	0.14	0.06
Adjusted R ²	0.12	0.06

Significant differences in coefficients (p < 0.05) in *italics*. * p < 0.05.

Table 3: Corporate entrepreneurship mediation in the organizational supportperformance relationship (regression equations with unstandardized coefficients, dependent variable: profitability)

	Model 1	Model 2
Intercept	0.00	0.00
Organizational support (os)	0.09	0.22*
New ventures (NV)	0.03	
Product innovation (PI)	0.16*	
Technological innovation (TI)	0.12*	
Interaction terms		
os×nv	0.00	
OS × PI	0.07	
os×ti	0.06	
R ²	0.11	0.05
Adjusted R ²	0.09	0.05

Significant differences in coefficients (p < 0.05) in *italics.* * p < 0.05.

uct innovation 0.14; unst. coef. in predicition of profitability: product innovation 0.16, technological innovation 0.12; see Tables 2 and 3). To-

gether with these findings, a non-significant or even zero relationship between organizational support and performance would indicate dominant mediation effects. However, the organizational support—growth relationship was found positive and significant in both models (unst. coef. 0.12 in Model 1, which includes organizational support and corporate entrepreneurship elements; unst. coef. 0.24 in Model 2, which includes organizational support only; see Table 2). The organizational support—profitability relationship was found positive in both models (unst. coef. 0.09, non-significant in Model 1; unst. coef. 0.22, significant in Model 2; see Table 3). On the basis of these findings Hypothesis 1 can be rejected.

The alternative Hypothesis 2 stated that corporate entrepreneurship activities would not act as dominant, but still as potent mediators in the organizational support—performance relationship. Findings presented in the previous paragraph indicate the presence of mediation of entrepreneurship elements in the organizational support—performance relationship, and the non-existence of dominant mediation effects. In support of Hypothesis 2 the path between organizational support and performance was found to be significantly reduced with the introduction of the mediation elements in both cases of prediction of growth (unst. coef. from 0.24 to 0.12) and profitability (unst. coef. from 0.22 to 0.09).

The alternative Hypothesis 3 stated that corporate entrepreneurship activities would neither act as dominant nor as potent mediators in the organizational support–performance relationship. Hypothesis 3 can be rejected on the basis of supporting evidence for Hypothesis 2. It needs to be noted, however, that a trace of moderated mediation was found in the organizational support–growth relationship (a positive and significant unst. coef. 0.15 for the organizational support–product innovation interaction term, see Table 2).

Conclusion

The findings indicate that corporate entrepreneurship (new firm formation, product/service and process innovation) can be considered a potent mediator in the organizational support—performance relationship. Organizational support can be most properly viewed as an important antecedent, or even a necessary condition, for development of corporate entrepreneurship activities and subsequent improvement in firm growth and profitability. In addition to these two most important conclusions and research—related implications, some practical recommendations for managers can be proposed. Both corporate entrepreneurship

activities and organizational support for these activities are important for subsequent performance improvements. In order to foster corporate entrepreneurship, managers need to take good care to: encourage other members of the organization, enable worker's discretion about their work-related decisions, designate idea champions, establish procedures to solicit and examine employee ideas, assure permeability of job boundaries, training, rewards and reinforcement, and availability of time and financial resources for pursuing new ideas or projects. In addition to the management and organizational support, managers may need to select and pursue new firm formation, product and process innovation as primary strategic goals of the organization, in order to achieve goals of growth and profitability.

The findings of this research can be generalizable to some extent, despite the limitation of using one sample from Slovenia. Past research (Antoncic and Hisrich 2000; 2001) indicated that corporate entrepreneurship research-related findings can be comparable to the United States and perhaps also to other economic contexts, especially to economies that have gone through transition from the social or state to the private ownership structure and from the state- to the market-oriented economy in the past decades. We are confident that corporate entrepreneurship activities and organizational support for these activities are particularly important for the performance of firms in Slovenia, in countries that followed similar transition patterns, and in other countries.

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