



# Exploring Internal and Environmental Moderators of Entrepreneurial Orientation - Performance Relationship in Bulgarian Enterprises

Tsvetan Davidkov<sup>1</sup>, Desislava I. Yordanova<sup>2</sup>

<sup>1</sup>Faculty of Economics and Business Administration, Sofia University "St. Kliment Ohridski," bl.3, 125 Tsarigradsko Shose Blvd., 1113 Sofia, Bulgaria, <sup>2</sup>Faculty of Economics and Business Administration, Sofia University "St. Kliment Ohridski," bl.3, 125 Tsarigradsko Shose Blvd., 1113 Sofia, Bulgaria. \*E-mail: [d\\_yordanova@abv.bg](mailto:d_yordanova@abv.bg)

## ABSTRACT

Moderators of entrepreneurial orientation - performance relationship have not been sufficiently examined in the existing literature especially in countries operating in Central and Eastern Europe. The purpose of the present study is to explore internal and environmental moderators on entrepreneurial orientation - performance relationship in a sample of Bulgarian enterprises. The relationship between entrepreneurial orientation and firm performance is stronger when the chief executive officer has no ownership stake in the company. Environmental dynamism and access to financial resources are not able to moderate the entrepreneurial orientation - performance relationship. These findings indicate that the moderating effects of environmental dynamism and access to resources identified in previous empirical studies may not be universal across all countries and contexts. The paper comments practical implications of the findings and recommendations for future research.

**Keywords:** Entrepreneurial Orientation, Performance, Mediating Effects, Bulgaria

**JEL Classification:** M19

## 1. INTRODUCTION

For several decades the focus of entrepreneurship research was restricted mainly to the individual entrepreneurs, the context and the process of creation of new enterprises (Low and MacMillan, 1988). Since the beginning of the 1980s the concept of corporate entrepreneurship (entrepreneurship within existing organizations) has attracted the interest of both scholars and practitioners (Antoncic and Hisrich, 2001) and during the last few decades considerable research has been published on this topic (Ahmed, 2016). Corporate entrepreneurship involves the creation of new businesses within existing organizations and strategic renewal (Güth and Ginsberg, 1990). Enterprises that want to be entrepreneurial need to develop entrepreneurial orientation (Dess and Lumpkin, 2005. p. 147). In contrast to other areas of entrepreneurship research, the research on entrepreneurial orientation has received a significant research attention, which stimulated the generation of a cumulative body of knowledge (Rauch et al., 2009). However, moderators of entrepreneurial

orientation - performance relationship have not been sufficiently examined in the existing literature and future research has to explore more profoundly moderation effects of other variables on this relationship (Rauch et al., 2009).

Despite the importance and the potential role of entrepreneurship in transition economies (McMillan and Woodruff 2002; Smallbone et al. 2001), relatively little research attention has been devoted to entrepreneurship in this context (Manev and Manolova, 2008). The theoretical and empirical research on entrepreneurial orientation was conducted mainly in the North American context and therefore understanding to what extent the existing findings may be applicable to other countries and contexts may contribute not only to EO research, but also to theorizing about entrepreneurship (Rauch et al., 2009). Reviewing the research on entrepreneurship in transition economies, Manev and Manolova (2008) identified only 11 journal articles employing data analytical methods at firm level. The empirical studies on entrepreneurial firms operating in the economies in transition from centrally planned to market economy

are descriptive in nature (Luo et al., 2005). Sporadic empirical evidence suggests that similarly to other contexts, in transition economies entrepreneurial orientation exerts positive impact on firm performance (Manev et al., 2005). However, there is a lack of understanding what variables moderate entrepreneurial orientation - performance relationship in this context. Therefore, the purpose of the present study is to explore internal and environmental moderators on entrepreneurial orientation - performance relationship in a sample of Bulgarian enterprises.

The article proceeds as follows. The next section reviews previous theoretical and empirical contributions investigating the relationship between entrepreneurial orientation. The third section describes the research methodology employed in the study, the following sections presents the empirical findings of the present study. The final section outlines conclusions, limitations of the study and recommendations for future research.

## 2. REVIEW OF LITERATURE AND HYPOTHESES

### 2.1. The Nature of Entrepreneurial Orientation

The introduction of the concept of entrepreneurial orientation aims to avoid some contradictions in the operationalization of corporate entrepreneurship that impede entrepreneurship theory building and testing as well as researching the relationship between entrepreneurship and performance (Lumpkin and Dess, 1996). Entrepreneurial orientation was defined as “the processes, practices, and decision-making activities that lead to new entry” (Lumpkin and Dess, 1996, p. 136). Miller (1983, p. 771) emphasizes that the entrepreneurial organization engages in product-market innovation, undertakes somewhat risky ventures, and is first to come up with “proactive” innovations, beating competitors to the punch, while the nonentrepreneurial organization is reluctant to innovate and take risks and prefer to imitate competitors’ actions rather than to act as a leader in the marketplace (Miller, 1983, p. 771). Drawing upon Miller’s (1983) seminal article, many researchers (Knight, 1997; Covin and Slevin, 1991; Lumpkin and Dess, 1996) have agreed that entrepreneurial orientation contains a combination of various dimensions including risk-taking, innovativeness, and proactiveness and reveals the extent to which organizations exhibit certain entrepreneurial behaviours such as taking risks, innovating, behaving pro-actively, etc.

Lumpkin and Dess (1996) and Dess and Lumpkin (2005) further clarify the content of innovativeness, risk-taking, and proactiveness. Risk-taking underlies the seizing of market opportunities, because this requires obtaining debt or devoting considerable resources in order to achieve high returns (Lumpkin and Dess, 1996). Successful corporate entrepreneurs choose riskier alternatives and are ready to abandon existing products and methods (Dess and Lumpkin, 2005). Innovativeness involves novelty, creativity, openness to new ideas, and experimentation aimed at introduction of products and processes (Lumpkin and Dess, 1996, p. 142). Innovativeness requires that firms replace existing practices and approaches with novel solutions (Dess and Lumpkin, 2005, p. 150). Dess and Lumpkin (2005) stress

that innovations are important source of competitive advantage and firm growth especially in an environment of rapid change. Proactiveness is associated with “processes aimed at anticipating and acting on future needs” in order to capitalize on emerging opportunities and establish a first-mover advantage in the marketplace (Lumpkin and Dess, 1996, p. 146). Such processes may include monitoring trends, identifying the future needs of customers, anticipating changes in demand, recognizing emerging problems as well as acting upon anticipated changes before competitors (Lumpkin and Dess, 1996, p. 150).

Dess and Lumpkin (2005) suggest two additional dimensions of the construct of entrepreneurial orientation: Autonomy and competitive aggressiveness. Autonomy is defined as “a tendency toward independent and autonomous action” (Lumpkin and Dess, 1996, p. 140), while competitive aggressiveness is defined as “a firm’s efforts to outperform its industry rivals” (Dess and Lumpkin, 2005, p. 151). However, Morris et al. (2006) emphasize that competitive aggressiveness can not be considered as a separate dimension of entrepreneurial orientation because it forms part of the proactiveness dimension, while autonomy is considered as a contextual factor, which enables corporate entrepreneurship. Each of the three dimensions (risk-taking, innovativeness, and proactiveness) is necessary but not sufficient without the other two dimensions in order for an organization to be considered entrepreneurial (Morris et al., 2006).

### 2.2. Entrepreneurial Orientation and Business Performance

Several authors have provided conceptual arguments linking risk-taking, proactiveness, and innovativeness to higher firm performance (Covin and Slevin, 1991; Zahra and Covin, 1995; Lumpkin and Dess, 1996; Wiklund and Shepherd, 2005). Innovativeness may be a source of competitive advantage because innovative companies may establish positive market reputations thus gaining customer loyalty and tend to monitor market changes and respond quickly thus being able to exploit emerging market opportunities (Zahra and Covin, 1995). Proactiveness allows for developing quick market responses and reaching a market before competitors (Zahra and Covin, 1995). Existing organizations may need to adopt risk-taking in uncertain situations; product innovation and technological leadership; and proactive competition with industry rivals in order to achieve and sustain improved performance (Covin and Slevin, 1991). In today’s business environment characterized with uncertainty entrepreneurial orientation may assist companies in seeking new opportunities (Wiklund and Shepherd, 2005).

Empirical research has generated contradictory findings about the strength of the effect of entrepreneurial orientation on firm performance (Rauch et al., 2009). Drawing upon a meta-analysis exploring the magnitude of the entrepreneurial orientation-performance relationship, Rauch et al. (2009) demonstrate the presence of moderately large correlation between entrepreneurial orientation and performance, which is similar across countries. However, they find that in some studies the magnitude of the relationship between entrepreneurial orientation and performance is strong implying that organizations exhibiting

strong entrepreneurial orientation report much better performance (Hult et al., 2003; Wiklund and Shepherd, 2003), while in other studies the magnitude of this relationship is rather weak (Dimitratos et al., 2004; Lumpkin and Dess, 2001). Rauch et al. (2009) also identify studies that failed to detect a significant relationship between entrepreneurial orientation and performance (George et al., 2001; Covin et al., 1994).

It was acknowledged, however, that the application of contingency and configurational approaches may provide increased understanding about the relationship between entrepreneurial orientation and performance (Lumpkin and Dess, 1996; Wiklund and Shepherd, 2005) and may contribute to explaining the contradictory empirical findings generated in the past research. Lumpkin and Dess (1996) propose a contingency framework in which the form or strength of the relationship between entrepreneurial orientation and firm performance is contingent on environmental characteristics (dynamism, munificence, complexity, and industry characteristics) and organizational factors (firm size, structure, strategy, strategy-making processes, firm resources, culture and top management team characteristics). Wiklund and Shepherd (2005) employ a configurational approach involving the simultaneous interaction of strategy, organizational characteristics, and environmental factors and conclude that this approach generates a greater insight into entrepreneurial orientation-performance relationship compared to one or two-way interactions.

Various internal and external moderators have been tested in empirical studies examining the role of entrepreneurial orientation for achieving superior firm performance. Previous studies demonstrate that internal factors may shape the relationship between entrepreneurial orientation and performance. Namen and Slevin (1993) investigate the fit of entrepreneurial style, organizational structure, and mission strategy with external environment in small and medium sized high technology manufacturing firms. Their empirical findings show that fit is an important determinant of firm success. The index of fit is positively related to firm performance. Wiklund and Shepherd (2003) identify a contingent relationship between entrepreneurial orientation and characteristics internal to the firm and suggest that the future research on the relationship between entrepreneurial orientation and firm performance should investigate the moderating effects of internal characteristics such as knowledge based resources. Network capabilities and ties tend to affect entrepreneurial orientation - performance relationship. Stam and Elfring (2008) demonstrate that the combination of high network centrality and extensive bridging ties strengthened this relationship. Although Walter et al. (2006) fail to identify a direct relationship between entrepreneurial orientation and university spin-off performance, they report that firm's ability to develop and utilize inter-organizational relationships enhances the link between entrepreneurial orientation and organizational performance. Internal organizational processes may also influence the strength of the effect of entrepreneurial orientation on firm performance. De Clercq et al. (2010) find that internal social exchange processes (procedural justice, trust, organizational commitment) that facilitate knowledge flows across functional departments tend to enhance or diminish the entrepreneurial orientation - performance

relationship. Some empirical findings suggest that the effect of entrepreneurial orientation on organizational performance depends on strategic variables. Tang and Tang (2012) find that some strategies exert a moderation effect on entrepreneurial orientation - performance relationship. Particularly, prospector and analyzer strategies tend to align better with entrepreneurial orientation to allow firms to fully benefit from their risk-taking, proactiveness, and innovativeness. Covin et al. (2006) find that the effects of EO on firm growth depend on several strategic process variables. Entrepreneurial orientation has a more positive influence on sales growth rate among firms that employ autocratic decision making and that exhibit an emergent strategy formation process.

Past research reveals that the entrepreneurial orientation-performance link is also contingent on environmental factors. Covin and Slevin (1989) explore the strategic responses to environmental hostility among small manufacturing firms. Their findings reveal that in hostile environments performance is positively associated with an entrepreneurial strategic posture, while in benign environments performance is positively related to a conservative strategic posture. Zahra and Covin (1995) demonstrate that the strength of the relationship between firm performance and corporate entrepreneurship reflected in company's risk-taking, innovation, and proactive competitive behaviour increases over time and environmental hostility exerts a moderating effect on this relationship. Zahra and Garvis (2000) examine the impact of international corporate entrepreneurship efforts defined as the sum of a company's efforts aimed at innovation, proactiveness, and risk taking on firm performance. Empirical findings show that international corporate entrepreneurship is associated with both firm's overall profitability and growth and its foreign profitability and growth. In addition to benefits, Zahra and Garvis (2000) highlight also the risks of pursuing international corporate entrepreneurship in an environment characterized by an excessive environmental hostility. Environmental hostility moderates the effect of international corporate entrepreneurship on return on assets. As hostility in international environment increases, return on assets also increases but then starts to decrease. Lumpkin and Dess (2001) find that the stage of industry life cycle, environmental dynamism and environmental hostility moderate the effects of some dimensions of entrepreneurial orientation on performance. Using a longitudinal design, Wiklund and Shepherd (2005) demonstrate that the configuration of entrepreneurial orientation, access to financial capital, and environmental dynamism provides additional information about the variation in performance over and above the main-effects model. Drawing upon cumulative empirical evidence from 37 empirical studies, Rauch et al. (2004) conclude that firm size and cross-country differences shape the entrepreneurial orientation - performance relationship.

### 2.3. Hypotheses

Environmental dynamism may favour organizations with high entrepreneurial orientation. Environmental dynamism refers to "unpredictability of customers and competitors, rates of change of change in market trends, industry innovation and R and D" (Miller, 1987, p. 62). Companies operating in transition economies in Central and Eastern Europe are confronted with significant environmental dynamism due to profound economic

and institutional changes. Miller and Friesen (1982, p. 6) argue that dynamic environments are hospitable and advantageous to entrepreneurial firms because in such settings they may take risks and gain high rewards. Therefore, we suggest that:

H<sub>1</sub>: Environmental dynamism moderates the relationship between entrepreneurial orientation and firm performance, such that the relationship is stronger when the environmental dynamism is higher.

The successful implementation of entrepreneurial strategies depends on organizational resources and access to more resources is associated with higher entrepreneurial orientation (Wiklund and Shepherd, 2005). Organizational resources are considered as facilitators or deterrents of corporate entrepreneurship (Covin and Slevin, 1991). Financial resources are important for entrepreneurial activities because they can help the firm to overcome resource constraints in other types of resources (Wiklund and Shepherd, 2005). Financial capital should foster a firms' innovativeness because it facilitates experimentation (Wiklund and Shepherd, 2005). Greater access to financial capital stimulates risk-taking because it improves the chance for success of risky projects (Wiklund and Shepherd, 2005). The availability of financial capital facilitates reinvestment and therefore makes it easier for the firm to become proactive in the marketplace (Wiklund and Shepherd, 2005). We expect that the availability of resources may strengthen the positive relationship between entrepreneurial orientation and firm performance:

H<sub>2</sub>: Access to financial resources moderates the relationship between entrepreneurial orientation and firm performance, such that the relationship is stronger when the access to resources is good.

Kim and Lu (2011) argue that chief executive officer's (CEO's) ownership stake may be associated with high wealth-performance sensitivity, managerial entrenchment and overly conservative risk choices. The CEOs exhibiting a tendency to make conservative risk choices may avoid exploitation entrepreneurial opportunities and may reject risky projects that may threaten their own wealth and job security.

H<sub>3</sub>: The CEOs ownership stake moderates the relationship between entrepreneurial orientation and firm performance, such that the relationship is stronger when the CEO has no ownership stake in the company.

### 3. RESEARCH METHODOLOGY

#### 3.1. Sample and Data Collection

The proposed hypotheses about moderating effects on entrepreneurial orientation - performance relationship are tested in a sample of 235 companies operating in Bulgaria. Data was acquired through structured interviews with the CEOs of the companies. This research relies on a convenient sample of Bulgarian companies due to the restricted research budget which was not sufficient for obtaining a representative sample of Bulgarian enterprises. Companies were identified from the

Voluntary Unified Trade Register of the Bulgarian Chamber of Commerce and Industry as well as personal contacts and contacted in advance in order to obtain their agreement to participate in the investigation and to respond to all questions included in the questionnaire. The structured questionnaire contained both questions about the characteristics of the organization and about environmental conditions in which they operate. Since the indexes of some of the variables used were adopted from previous studies, the items included in these indexes were translated from English to Bulgarian and then translated back to English to ensure accuracy. The initial version of the questionnaire was pre-tested in a pilot study conducted among 5 companies and minor changes were introduced in some questions. The share of family businesses in the sample is similar to the share of family businesses among Bulgarian enterprises announced by the National Statistical Institute<sup>1</sup>.

Table 1 contains the characteristics of the studied organizations. Most sample firms are located in Sofia (70.6%). About 21.3% of the sample companies are located in a district center, while 7.2% of the sample companies are located in a small town. The rest of the sample companies are located in a village. More than 63.4% of the sample companies operate predominantly in the service sector, while 17% of the companies are involved in a wholesale or retail trade. About 17.9% of the sample companies are manufacturing businesses. As in the population of Bulgarian enterprises in general, the great majority of the enterprises in the sample used in this study are small and mediums sized enterprises (SMEs). SMEs represent 80.9% of the sample firms (26% - micro-enterprises; 33.6% - small enterprises; 21.3% - medium-sized enterprises)<sup>2</sup>. The rest of the sample is composed by large enterprises, which have more than 249 employees. Approximately 24% of the sample firms operate for <6 years, while 28.1% of the sample firms are registered between 6 and 10 years ago. About 23% of the studied companies exist for more than 10 years, but <15 years. Almost 17% of the sample companies report that their firm age is between 16 and 20 years. Only 7.7% of the sample companies operate for more than 20 years. The sample contains family-owned enterprises (37.4%) and non-family-owned enterprises (62.6%).

#### 3.2. Variables

It was acknowledged that self-reported performance measures are valid and reliable measures of firm performance (Venkatraman and Ramanujam, 1987). Therefore, this study measures organizational performance (PERFORMANCE) in relation to the performance of a firm's competitors using 4 items adopted from previous research (Hult et al., 2004; Wang, 2008; Wiklund, 1999; Wiklund and Shepherd, 2005; Tang et al., 2008; Tang et al., 2007). The CEOs were asked to compare the growth of sales, market share, growth of profit before tax, and overall performance of their own firm with those of their main competitors in the past 3 years on a 5-point Likert scale ranging from "much worse than our competitors" to "much better than our competitors." The variable PERFORMANCE is the sum of the four items. The Cronbach's alpha of the scale is 0.867, which exceeds significantly the minimum acceptable level

1 <http://www.fbn-bulgaria.org/bg/news/59/17/nad-42-ot-kompaniite-v-blgariya-sa-familni>. Accessed on 20 January 2012.

2 We apply the European Commission's employment criterion for an SME.

**Table 1: The characteristics of the sample firms**

Characteristics	n (%)
Firm age	
<6	57 (24.3)
Between 6 and 10	66 (28.1)
Between 11 and 15	55 (23.4)
Between 16 and 20	39 (16.6)
More than 20	18 (7.7)
Firm size	
SMEs	190 (80.9)
Large enterprises	45 (19.1)
Family business status	
Yes	88 (37.4)
No	147 (62.6)
Internationalization	
Yes	112 (47.7)
No	123 (52.3)
Sector	
MANUFACTURING	42 (17.9)
Services	149 (63.4)
TRADE	40 (17.0)
Other	4 (1.7)
Location	
Sofia	166 (70.6)
Other	69 (29.4)

SMEs: Small and mediums sized enterprises

of 0.6 (Hair et al., 1998). PERFORMANCE is the dependent variable in this study.

The independent variables used in the study are EO, RESOURCES, DYNAMISM, and OWNERSHIP. The variable entrepreneurial orientation (EO) is measured with 9-item, 7-point scale proposed by Covin and Slevin (1989), which contains items adapted from Khandwalla (1976/1977) and Miller and Friesen (1982). The items are of the forced choice type, with pairs of opposite statements. This scale reveals the extent to which the firms innovate, take risk and behave proactively. Wiklund (1998) identified several studies using this instrument, which provide evidence of its validity and reliability. In this study the scale reports very high reliability. The Cronbach alpha's value of the entrepreneurial orientation scale is 0.857, which greatly surpasses the minimum recommended level of 0.6 (Hair et al., 1998).

Environmental dynamism (DYNAMISM) is measured with the 4-item, 7-point scale proposed by Miller (1987). The items are of the forced choice type, with pairs of opposite statements. The variable DYNAMISM could take values between 1 and 28. The value of the Cronbach's alpha of the scale is 0.633, which exceeds the minimum acceptable level of 0.6 (Hair et al., 1998).

Following Wiklund and Shepherd (2005), this study uses a subjective measure of the small business manager's level of satisfaction with his/her access to financial capital. The authors argue that if there are sufficient financial resources for the development of the business the owner-manager will likely be satisfied with his/her access to financial resources. On the contrary, if there are insufficient financial resources for the development of the business, then the owner-manager is likely to be dissatisfied with his/her access to financial resources (Wiklund and Shepherd,

2005). The respondents were asked to evaluate to what extent they were satisfied with the access to financial resources of their organization on a 7-point Likert scale (1= insufficient and a great impediment for our development; 7 = fully satisfactory for the firm's development) (Wiklund and Shepherd, 2005). The variable RESOURCES is coded 1 if the respondent's answer to this question is somewhat satisfactory, mostly satisfactory or fully satisfactory for the firm's development and 0 if the respondent has given another answer.

The variable OWNERSHIP takes value 1 if the CEO has no ownership stake in the company and value 0 otherwise.

Several control variables are employed in the analysis. FIRM\_AGE takes value 1 if the company is older than 5 years and value 0 otherwise. In this paper we adopt the European Commission's employment criterion for an SME. The variable SIZE is a binary variable (1 = more than 249 employees (large enterprise), 0 = otherwise (micro, small or medium-sized enterprise)). TRADE is a binary variable, which takes a value 1 if the company operates mainly in the trade sector and value 0 if it operates predominantly in another sector. MANUFACTURING reveals if the company operates mainly in the manufacturing sector (value 1) or in another sector (value 0).

### 3.3. Data Analysis

A moderator is a variable that influences the relationship between two variables (Baron and Kenny, 1986). The existence of a moderating effect implies that the casual relationship between two variables depends on the moderator (Baron and Kenny, 1986). Taking into account the objectives of this study and the properties of the data, we employ a hierarchical moderated regression analysis to test the proposed hypotheses. The interaction terms were calculated by multiplying EO with each of the other independent variables. In order to avoid multicollinearity problems the continuous variables were mean-centered before multiplying them (Aiken and West, 1991). Several alternative regression models were calculated and compared in order to measure whether the interaction terms explain additional part of the variance in the dependent variable over the main effects of the independent variables (Jaccard and Turrisi, 2003). For all estimated models the modeling assumptions were satisfied. The VIF values are <2.33.

## 4. EMPIRICAL FINDINGS

Table 2 reports the results of several alternative regression models based on hierarchical moderated regression analyses. In Model 1 the dependent variable PERFORMANCE is regressed on the control variables FIRM\_AGE, MANUFACTURING, TRADE, and SIZE, which together explain a significant proportion of the variance in the dependent variable PERFORMANCE (adjusted  $R^2 = 0.053$ ,  $P < 0.01$ ).

In Model 2, the independent variables RESOURCES, DYNAMISM, EO, and OWNERSHIP are entered in the regression analysis. The variables employed in Model 2 explain a significant share of the variance in PERFORMANCE (adjusted  $R^2 = 0.308$ ,  $P < 0.01$ ) and this addition increased the explained variance in the dependent

variable ( $R^2 = 0.263$ ,  $P < 0.01$ ). The results reported in Table 2 provide evidence of direct positive effects of the variables RESOURCES, DYNAMISM and EO on the dependent variable PERFORMANCE.

The two-way interaction terms EO x RESOURCES, EO x DYNAMISM, and EO x OWNERSHIP are added to the analysis in model 3. The variables used in Model 3 explain a significant part of the variance in PERFORMANCE (adjusted  $R^2 = 0.327$ ,  $P < 0.01$ ). The addition of two-way interaction terms increased significantly the explained variance in the dependent variable ( $R^2 = 0.027$ ,  $P < 0.05$ ). The interaction terms EO x RESOURCES and EO x DYNAMISM have no statistically significant effects on PERFORMANCE. Thus the hypotheses  $H_1$  and  $H_2$  can be rejected. The interaction term EO x OWNERSHIP has a significant and positive impact on the dependent variables. The hypothesis  $H_3$  cannot be rejected.

## 5. DISCUSSION AND CONCLUSIONS

Existing empirical findings about moderators of entrepreneurial orientation - performance relationship are particularly valid for Western economies, which are characterized with developed institutional environment, abundant resources, and presence of entrepreneurial role models. The economies in Central and Eastern Europe have experienced profound economic, political, and institutional changes, which have led to the emergence of private enterprises. There is a clear lack of research particularly on the link between entrepreneurial orientation and firm performance and factors moderating this link in the economies in Central and Eastern Europe including Bulgaria. Understanding determinants and consequences of entrepreneurial orientation in these economies is essential for guiding public policies and private actions to stimulate corporate entrepreneurship.

Our results reveal that entrepreneurial orientation exerts a strong positive effect on firm performance, which supports previous empirical evidence from other countries and contexts (Rauch et al., 2009). The presence of good access to financial resources and environmental dynamism are also positively associated

with firm performance. There are no significant differences in firm performance between companies in which the CEO has ownership stake and the rest of the companies. The positive effect of entrepreneurial orientation on firm performance is moderated by the presence of CEO's ownership stake in the company. The relationship between entrepreneurial orientation and firm performance is stronger when the CEO has no ownership stake in the company. Contrary to our expectations, environmental dynamism and access to resources are not able to moderate the entrepreneurial orientation – performance relationship. These findings indicate that the moderating effects of environmental dynamism and access to resources identified in previous empirical studies (Lumpkin and Dess, 2001; Wiklund and Shepherd, 2005) may not be universal across all countries and contexts.

Our study has several limitations which should be considered before interpreting and using the results. First, our findings should be interpreted with caution because they are based on a convenient sample. Second, data was collected through a self-reported survey and thus may be subject to cognitive biases and errors. Third, our findings may be influenced by specific features of the Bulgarian cultural and institutional environment and therefore may not be applicable to other countries and contexts. Finally, causal relationships cannot be deduced due to the cross-sectional design of the research.

Future research needs to examine in more details the following aspects. First, future research in the Bulgarian context should examine the effects of other factors posited by theoretical and empirical literature as affecting the strength or the direction of entrepreneurial orientation-performance relationship, which are not included in the present study. Second, the proposed hypotheses should be tested in a representative sample of Bulgarian enterprises. Third, future research needs to examine to what extent the findings of this study can be generalized to firms operating in different countries and contexts. And finally, a longitudinal analysis should complement the findings in this research in order to confirm causal relationships.

Our findings have important practical implications for entrepreneurs, managers, owners, investors, etc. Banking institutions and investors which would like to identify potentially high performing companies should pay particular attention on entrepreneurial orientation at firm level. Entrepreneurs and owners which would like to enhance the link between entrepreneurial orientation and firm performance should be aware of the moderating effect of the CEO's ownership stake and to structure carefully the CEO's compensation package.

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**Table 2: Results of hierarchical regression analyses**

Variables	Model 1	Model 2	Model 3
Control variables			
FIRM_AGE	0.113*	0.053	0.042
MANUFACTURING	-0.044	0.012	0.007
TRADE	-0.057	-0.037	-0.052
SIZE	0.228***	0.097*	0.087
Main effects			
RESOURCES		0.194***	0.192***
DYNAMISM		0.127**	0.099*
EO		0.359***	0.192**
OWNERSHIP		0.091	0.080
Moderating effects			
EO x DYNAMISM			0.023
EO x RESOURCES			0.104
EO x OWNERSHIP			0.167**
Adjusted R <sup>2</sup>	0.053	0.308	0.327
R <sup>2</sup> change		0.263***	0.027**

\* $P < 0.1$ , \*\* $P < 0.05$ , \*\*\* $P < 0.01$

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