

A Service of

ZBW

Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Milovanović, Bojan Morić; Bubaš, Zoran; Mikić, Mihaela

Article

Entrepreneurial orientation, strategic networking, and Croatian SMEs performance: A configurational approach

Business Systems Research (BSR)

Provided in Cooperation with: IRENET - Society for Advancing Innovation and Research in Economy, Zagreb

Suggested Citation: Milovanović, Bojan Morić; Bubaš, Zoran; Mikić, Mihaela (2021) : Entrepreneurial orientation, strategic networking, and Croatian SMEs performance: A configurational approach, Business Systems Research (BSR), ISSN 1847-9375, Sciendo, Warsaw, Vol. 12, Iss. 2, pp. 236-252, https://doi.org/10.2478/bsrj-2021-0030

This Version is available at: https://hdl.handle.net/10419/318775

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.



https://creativecommons.org/licenses/by/4.0/

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



WWW.ECONSTOR.EU

💲 sciendo

Entrepreneurial Orientation, Strategic Networking, and Croatian SMEs Performance: A Configurational Approach

Bojan Morić Milovanović, Zoran Bubaš

Institute of Public Finance, Croatia Mihaela Mikić The University of Zagreb, Faculty of Business and Economics, Croatia

Abstract

Background: Many studies on entrepreneurship indicate an affirmative entrepreneurial orientation (EO) and small firm performance interrelationship. However, the empirical results are inconclusive, especially when firms face certain contingencies. Objectives: Strategic networking and environmental dynamism are important to SMEs' performance; therefore, the goal of this study is to apply a configurational approach for developing a model that promotes the roles of strategic networking and environmental dynamism as moderating variables in the EOperformance relationship. Methods/Approach: For determining which model fits the data best, a moderated linear regression analysis was used as an analytical method to test the proposed hypotheses. Specifically, configurational, contingency and universal models were examined. Results: Results reveal that a configurational model provides a statistically better explanation of variance in performance compared to both contingency and universal models. **Conclusions:** By adding strategic networking to the EO-performance relationship, our study helps explain why some firms, although restrained with internal resources, can still achieve entrepreneurial projects since required resources can be acquired from external network partners. Limitations of this study encompass the sample size, the use of a subjective scale, questioning of only one representative of the firm, and the short-term aspect of the study.

Keywords: entrepreneurial orientation; strategic networking; configurational approach; SME, Croatia JEL classification: L25; L26; M20; O30 Paper type: Research article

Received: Nov 02 2021 **Accepted:** Nov 21 2021

Citation: Milovanović Morić, B., Bubaš, Z., Mikić, M. (2021), "Entrepreneurial Orientation, Strategic Networking, and Croatian SMEs Performance: A Configurational Approach", Business Systems Research, Vol. 12, No. 2, pp. 236-252. **DOI:** https://doi.org/10.2478/bsrj-2021-0030

Introduction

Increasing performance is the main focus and the main challenge of every organization, and it also remains one of the most challenging research areas for business scholars today. The general tendency of product and business model life cycles contraction (Hamel, 2000) and uncertainty make this challenge harder. Because of these conditions, companies can no longer rely on long-term competitive advantages and long-term profits. Nevertheless, they need to adapt to uncertain conditions by constantly seeking new opportunities. There is no doubt that the companies that want to improve their business performance need to adopt an entrepreneurial attitude, otherwise known as Entrepreneurial orientation (EO).

EO has become a popular measure of entrepreneurial activities within an organization (Wales et al., 2020; Anderson et al., 2015; Ireland et al., 2009). We can look at EO from three perspectives. The first and most popular is EO as a multidimensional approach that includes innovativeness, risk-taking, and proactivity in competitive behavior (Miller, 1983; Covin et al., 1989). The second perspective assumes the covariance among many dimensions, including autonomy and competitive aggressiveness (Lumpkin et al.s, 1996). This perspective also defines dimensions that are relevant for describing the entrepreneurial company and that are at the same time contextually dependent. The third perspective suggests that EO is recognized as a concept that includes organizational configuration, entrepreneurial top management style, and new entry initiatives (Wales et al., 2020).

No matter the definition of EO we use, there is always the question of conditions in which the EO of the company will bring the best results. This paper investigates the relationship between EO and small firm performance, moderated by strategic networking and environmental dynamism. Instead of using a contingency model or two-way interaction between EO and small firm performance, we will be using a configurational approach. Unlike the contingency model, the configurational approach allows a simultaneous assessment of EO and variables in the small firm's internal and external environment. The internal environment variable refers to strategic networking, while the external environment variable refers to environmental dynamism.

Limited access to resources presents one of the common problems that small companies especially face. Therefore, company networks are considered an essential resource (Obeng, 2018). Also, changes in the environment call for strategic alliances, partnerships, and cooperation (Jiang et al., 2016). By joining strategic networks, companies can access capital and other missing resources. Also, the decisions made by entrepreneurs or managers are moving from just the individual company because of their awareness of other companies positions in terms of knowledge on market conditions, available resources, and functional capabilities (Soto-Acosta et al., 2016). This paper chose strategic networks as an internal variable and moderator because of their importance for small businesses.

The external moderator variable is presented with environmental dynamism. Dynamism presents one of the main characteristics of the environment, expressing a degree of turbulent, unpredictable, and rapid change (Deng et al., 2019). A highly dynamic environment is characterized by changes in demand, regulation, technology, and (or) competitors (Anseel et al., 2007). Also, according to the same source, information is often obsolete, unavailable, or inaccurate in such environmental conditions.

The paper opens up with the literature review related to EO and small firm performance and the concepts of strategic networking and environmental dynamism. Four hypotheses were developed based on the configurations of the previously stated concepts that address the extent to which strategic networking and environmental dynamism influence the relationship between EO and small firm performance. Afterward, the research method was discussed, followed by hypotheses testing and discussion of the results based on the data obtained from small and medium-sized enterprises in Croatia. The paper concludes with the implications for research and management, limitations, and potential future research in clarifying the EO – performance relationship.

Literature review and hypotheses

EO and performance

When considering EO, we will use the most common definition, which sees EO as a multidimensional approach that includes the characteristics of risk-taking, innovativeness, and proactivity in competitive behavior (Miller, 1983; Covin et al., 1989; Guth et al., 1990; Zahra et al., 1995). Risk-taking is defined as utilizing capital for ventures with uncertain outcomes (Wiklund et al., 2005), often demonstrated by companies that engage in non-traditional approaches and tactics. Innovativeness is defined as the ability to attempt and engage with the novel through ideas, experiments, and other creative processes, allowing the company to veer away from established practice (Lumpkin et al., 1996). Proactiveness is defined as an attitude in which the individual, and in extension the company, is prepared to anticipate, act and react to future conditions of the marketplace, which allow the company to guickly respond to situations, taking advantage and beating competitors (Lumpkin et al., 1996). These three characteristics assist in differentiating firms between entrepreneurial and non-entrepreneurial. The entrepreneurial business is defined as taking risks, engaging in innovation, and is generally characterized by its proactivity (Miller, 1983). Businesses can capture new opportunities by using these characteristics, outperforming their competition and producing better performance (Zahra et al., 1995). Entrepreneurship research suggests a positive relationship between EO and small firm performance (Zahra, 1991; Zahra et al., 1995; Wiklund, 1999; Wiklund et al., 2005; Bauweraerts, 2019; Jiang et al., 2018; Kohtamaki et al., 2019), as a firm's entrepreneurial behavior unequivocally results in a financial increase (Miller, 1986; Lumpkin et al., 1996; Wiklund et al., 2005).

Even while studying the EO characteristics one-on-one, the results show that each character has positive results. Traditional strategies often lead to high performance, but risk-taking can introduce variation, eventually being more profitable (March, 1991; McGrath, 2001). Innovation is often viewed as the engine of economic growth, allowing for increased performance and financial development (Schumpeter, 1934; Brown et al., 1998). Proactiveness allows companies to get the upper hand over their competitors regarding prices and targeting market segments (Zahra et al., 1995). Thus:

H1: EO has a universally positive effect on small firm performance.

The configurational approach to the relationship between EO and small firm performance

Many studies demonstrate the positive relationship between EO and small firm performance. However, the idea of such a causal relationship may be oversimplified and misleading (Wiklund et al., 2005). Empirically, research results are inconclusive, as Smart et al. (1994) demonstrated, who could not link EO and performance. It is even argued that specific entrepreneurial strategies may result in poor performance (Hart, 1992).

When studying the relationship between EO and small firm performance, context must be considered, as the relationship between the two is complex (Lumpkin et al., 1996). Therefore, the external environment and the organization's internal characteristics must be considered when assessing the relationship between EO and performance, which arises two additional assessment options. The first is a two-way interaction by using contingency models. This interaction can be between EO and the external environment (Covin et al., 1989; Zahra et al., 1995; Wiklund et al., 2005; Frank et al., 2010; Lee et al., 2013; Bauweraerts, 2019) or between EO and the organization's internal characteristics (March et al., 1963; Zahra, 1991). The second assessment option is a three-way interaction using a configurational approach, which allows for the concurrent assessment of EO and internal and external environments (Wiklund et al., 2005). Therefore, this paper uses the second option.

The premise of the configurational approach is that companies need to adapt their attributes to the environment to outdo their competitors (Ketchen et al., 1993). When using the configurational approach, organizations create configurations by clustering certain elements such as strategy, structure, process, and environment (Meyer et al., 1993). This approach better understands performance by determining similarities from separate but consistently similar sets of firms (Miller, 1996). Previous research emphasized that the relationships between environment, structure, and strategy can be problematic, especially when considering that aligning resources to the external environment can cause essential failures when developing strategies in organizing resources for matching opportunities and threats within the external environment (Zajac et al., 2000).

This study focuses on strategic networking rather than focusing on specific internal resources because it can allow a firm to compensate or complement its lack of resources and competencies (Adler et al., 2002; Baum et al., 2000; Parida et al., 2010; Mu et al., 2017; Jiang et al., 2018). Configurations are empirically represented by three variables concurrently (Baker et al., 1993; Dess et al., 1997; Miller, 1988); in this paper, such will be determined by the interaction of EO, strategic networking, and environmental dynamism.

The interaction of EO and the environmental dynamism

Research on business model innovation also investigates the role of the external environment (Pateli et al., 2005; Waldner et al., 2015), emphasizing uncertainty and innovative opportunities for business model development (Ağca et al., 2012). In previous research, environment represents a moderator between EO and small firm performance (Lumpkin et al., 2001; Wiklund et al., 2005), with dynamism and hostility being two standard dimensions of the environment (Lumpkin et al., 2001; Moreno et al., 2008; Wiklund et al., 2005). Due to its wide acceptance in business model innovation, environmental dynamism is also used in this study (Martinez-Conesa et al., 2017; Schneider et al., 2013).

Environmental dynamism is characterized by turbulence, more specifically by changes in innovation on industry level and market trends, and high volatility of customer and competitor behavior (Dess et al., 1984; Miller, 1987). Within this dynamic environment, entrepreneurial-oriented strategies are more likely to be successful (Miller, 1990). Also, this environment creates ideal competitive circumstances for entrepreneurial companies, which are innovators, anticipate demand, and adjust to it (Lumpkin et al. 2001). This environment requires a company to make high-risk decisions and be innovative (Miller et al., 1978, Kreiser et al., 2010). Furthermore, this environment compounds innovation and growth strategies (Moreno et al., 2008).

Finally, environmental dynamism positively influences more proactive businesses (Lumpkin et al., 2001).

For example, companies in dynamic growth environments had a positive EOperformance interrelation, while those in a static or underdeveloped environment had a negative relationship (Zahra, 1993). Similarly, innovating companies thrive in turbulent environments (Miller, 1988). Thus:

H2: Environmental dynamism moderates EO-small firm performance interrelation.

The interaction of EO and strategic networking

Implementing EO needs resources that can also be acquired through strategic networking, other than by traditional means. It is vital for small companies because, with this mechanism, they can overcome resource challenges that otherwise they may not have been able to (Lee et al., 2001). This relationship needs to be diverse so that firms can obtain a diverse gamut of resources in knowledge, competence, etc. (Adler et al., 2002; Baum et al., 2000). By carefully managing their network relationships, firms can better obtain open and broad network resources essential to their business operations (Hughes et al., 2007). Because of the uncertainty they face, this approach is particularly successful for companies with EO (Dess et al., 1997; Hughes et al., 2007).

As a strategy, EO urges companies to be proactive when searching their environment for resources and opportunities, eventually offering them relationships with helpful organizations and institutions (Li et al., 2011). Therefore, companies that use EO are more likely to identify a need for resource acquisition that they can pursue through networking opportunities (Teng, 2007) and succeed in this networking search. They can find and identify additional opportunities (Wales et al., 2013).

Furthermore, innovation EO further urges companies to acquire information about their environment leading to a more proactive approach to finding opportunities (Jones et al., 2006; Kollman et al., 2014). As mentioned, implementation of EO requires a lot of external resources, and this process is a risky activity since it requires effort and expenditure (Wiklund et al., 2003). Therefore, strategic networking will enhance the company's risk-taking ability and willingness to bear uncertainty. Also, engaging the strategic networks allows proactive companies to use a 'step-ahead' tactic (Morgan et al., 2003) and take advantage of the first move (Lumpkin et al., 1996). Such an approach would help the company to gain leverage in resource acquisition opportunities. Thus:

H3: Strategic networking moderates EO – small firm performance interrelation.

The configuration of EO, strategic networking, and environmental dynamism

A moderating role of environmental dynamism is proposed in hypothesis 2. Hypothesis 3 suggests that strategic networking has a moderating role in the interrelation between EO and small firm performance. Nonetheless, research on configurational models contends that companies configured on multiple constructs outperform others that only use two constructs. In line with the configurational research, the interaction of all three constructs is examined.

The configurational approach determines that businesses can most successfully benefit from EO when it takes an active approach to business, when the environment it operates in is dynamic, and when it participates to a high degree in strategic networking. The most harmful effect on performance is their inability to strategically network in a stable environment. Therefore, these lead to the following hypotheses: H4: EO, strategic networking, and environmental dynamism explain small firm performance.

H4a: Small firm performance is highest within SMEs with high EO, high strategic networking, and a dynamic environment.

H4b: Small firm performance is lowest within SMEs with high EO, low strategic networking, and a stable environment.

Research method

Sample

Data was found in the database of the Financial Agency Fina, which is the leading provider of financial and electronic services in Croatia. For data selection, the definition of European Union small and medium-sized enterprise was relied on. Therefore, a random sample of firms was selected from two different categories. The first had between 1-49 employees, while the second had 50-249. The data sample consisted of 2,000 randomly selected small and medium-sized enterprises contacted in December 2019 and January 2020. Of these, 851 received and opened the electronic questionnaire, while 202 firms responded to the questionnaire from this group and correctly replied via e-mail (i.e., a response rate of 10,1%). Out of the firms that participated in this research, 145 were micro and small (71.78%), while 57 were medium-sized firms (28.22%). Considering the industry, 66 firms operate in the manufacturing sector (32.67%), while 136 firms operate in the service sector (67.32%). From sample demographics point of view, 51.49% of the respondents were firm owners, 21.29% directors, and 27.23% managers, where 89.11% of the respondents had worked for the firm for more than five years, while 79.21% had more than seven years of the working experience with the firm.

Variables and measures

A seven-point Likert-type scale was used to measure small firm performance. This modified method was developed by Gupta et al. (1984). In this subjective scale, participants are asked to rate the importance of sales growth, market share, and market development to measure their business performance, ranging from 'not important to 'extremely important. That was followed by a second question indicating participant satisfaction with their achieved performance on the first set of indicators, using another seven-point Likert-type scale, ranging from 'not satisfied' to 'highly satisfied'. The scores of the first question on 'importance' were mathematically adjusted by summing up to 1, thereby minimizing potential individual bias (Naman et al., 1993). They were then multiplied with the 'satisfaction scores' to produce a weighted average performance index. This index has a mean of 3.74, a standard deviation of 1.42, a range of 6.86, and Cronbach's a value of .86.

Entrepreneurial orientation (EO) was measured using Covin et al. (1989) seven-point Liker-type questions scale for assessing innovativeness, proactiveness, and risk-taking. The EO score has a mean of 4.33, a standard deviation of 1.21, a range of 5.78, and a Cronbach's a value of .77.

Strategic networking (SN) was measured using Allen et al. (1990) scale for assessing commitment, Garbarino et al. (1999) scale for assessing trust, Hansen et al. (2008) scale for assessing reputation, Sivadas et al. (2000) scale for assessing communication, and Eriksson et al. (2007) scale for assessing cooperation. All these five scales were based on seven-point Liker-type questions. The strategic networking score has a mean of 5.27, a standard deviation of 0.91, a range of 4.67, and a Cronbach's a value of .77.

Environmental dynamism (ED) was measured using Miller et al. (1982) scale based on seven-point Liker-type questions, where environmental dynamism score has a mean of 3.80, a standard deviation of 1.18, a range of 5.50, and a Cronbach's a value of .65.

For determining the size of the firm, respondents were asked to select whether they had less than ten employees (micro firm), 10-49 employees (small firm), or 50-250 employees (medium-sized firm), which corresponds to the European Union definition of small and medium-sized enterprises. Regarding the industry in which they operate, respondents were asked whether their main line of business was manufacturing or service. The firm's size and industry may influence performance due to different organizational and environmental characteristics exhibited by the firm (Wiklund and Shepherd, 2005), which is why these two variables were included as controls.

Analysis

Moderated linear regression analysis was used as an analytical method to test the proposed hypotheses, according to the approach developed by Wiklund et al. (2005) and Zhang et al. (2007). All variables have been mean-centered since research shows this can improve the interpretability of results. Further robustness tests have been applied, where Durbin-Watson statistic and maximum Cook's distance were well below critical values. Moreover, multicollinearity diagnosis was applied to determine the absence of multicollinearity, where all variance inflation factors (VIF) were below 2, which is far below the maximum threshold of 10. A non-response analysis and common method bias analysis have been performed. It showed no significant differences between early and late respondents, meaning that this study did not present a non-response bias. Since Eigenvalues were greater than 1, we can state that common method bias was unlikely to be a severe concern in this study.

Empirical data and analysis

The means, standard deviations, and correlations of the variables are shown in Table 1, where the correlations among the independent variables are relatively modest, ranging from -0.214 to 0.470. More precisely, EO and performance have a statistically significant positive correlation coefficient (0.423), same as strategic networking and performance (0.415), and firm size and performance (0.224). When looking at correlations between two-way interaction terms and small firm performance, only two-way interaction between strategic networking and environmental dynamism has a statistically positive correlation coefficient (0.146) with performance. The three-way interaction term between EO, strategic networking, and environmental dynamism has a statistically significant positive correlation coefficient (0.350) with performance.

Means, S.D.s, and correlations (n = 202)												
	Mean	S.D.	1	2	3	4	5	6	7	8	9	10
1. Firm size	2.00	.756	1.00									
2. Industry	1.67	.470	- .214**	1.00								
3. EO	4.33	1.21	.074	.062	1.00							
4. ED	3.80	1.18	103	042	.368**	1.00						
5. SN	5.27	0.91	.068	.054	.290**	.231**	1.00					
6. Performance	3.74	1.42	.224**	.083	.423**	.011	.415**	1.00				
7. EO x ED			.020	045	019	.145*	.126	.067	1.00			
8. EO x SN			011	.003	100	.135	104	033	.410**	1.00		
9. ED x SN			.008	.026	.143*	.295**	021	.146*	.454**	.448**	1.00	
10. EO x ED x SN			.093	.068	.425**	.425**	.384**	.350**	.273**	107	.156*	1.00

Table 1

Notes: *P < 0.05; **P < 0.01 Source: Authors' work Table 2 provides the results of the hypothesis testing, whereby the result of each hypothesis test is shown in its respective column. Model 2 answers the first hypothesis, model 3 answers the second and third hypothesis, while model 4 answers the fourth hypothesis. For hypotheses testing, control variables were first added (model 1 in table 2), then the independent variables (the universal model in model 2, table 2), then the two-way interaction terms (contingency model in model 3, table 2), and lastly the three-way interaction term (configuration model in model 4, Table 2).

Small firm performance: universal, contingency, and configurational model (n = 202)									
	Model 1 Control variables		Model 2 Universal model		Model 3 Continger model	ncy	Model 4 Configura model	tion	
	β	S.E.	β	S.E.	β	S.E.	β	S.E.	
Control variables									
Firm size	.478***	.132	.319**	.114	.302**	.113	.261**	.112	
Industry	.415*	.213	.212	.182	.181	.181	.123	.179	
Main variable									
EO			.443***	.076	.430***	.077	.374***	.078	
Moderating variables									
Enviro. dynamism (EE)			223**	.078	286***	.080.	359***	.083	
Strat. networking (SN)			.518***	.096	.553***	.098	.499***	.098	
2-way interactions									
EO x ED					015	.060	070	.062	
EO x SN					.004	.082	.060	.083	
SN x ED					.229***	.094	.230**	.093	
3-way interactions									
EO x ED x SN							.154**	.057	
R ²	.068***		.339***		.365***		.388***		
Adjusted R ²	.059***		.323***		.338***		.359***		
∆ R²	.068***		.271***		.025***		.023***		

Table 2

Notes: *P < 0.10; **P < 0.05; ***P < 0.01 Source: Authors' work

Firm size and industry, as control variables, explain 6.8% of the variation in performance (P<0.01). As the second step of the analysis, the universal effect of EO, strategic networking, and environmental dynamism on small firm performance, account for an additional 27.1% of the variation in performance (P<0.01). As it can be seen from the model 2 in table 2, both EO (β = 0.443, P < 0.01), and strategic networking (β = 0518, P < 0.01), have statistically significant positive relationship with small firm performance, while external environment (β = -0.223, P < 0.05), has statistically significant negative relationship with small firm performance, there is enough evidence to confirm that EO has a universally positive effect on Croatian SMEs performance.

Contingency model, model 3 in table 2, explains for additional 2.5% of the variation in performance (P<0.01), and only two-way interaction between strategic networking and environmental dynamism is statistically significant (β = 0.229, P < 0.01), while the other two-way interactions are not. Therefore, the second and third hypotheses are not supported. In other words, there is not enough statistically significant evidence to

confirm that environmental dynamism and strategic networking moderate the interrelations between EO and small firm performance. Figures 2 and 3 provide further evidence not supporting previously stated claims, i.e., hypotheses 2 and 3.

Inclusion of the three-way interaction between EO, strategic networking, and environmental dynamism as part of the configuration model, model 4 in table 2, significantly increases explained variance by 2.3% (P<0.01) and has a statistically significant positive relationship with performance ($\beta = 0.154$, P < 0.05), which in turn supports hypothesis 4. More precisely, model 4 provides enough statistically significant evidence to confirm that EO, strategic networking, and environmental dynamism configurations can explain small firm performance.

We plotted the interaction effects of two-way interaction terms (figures 2, 3, and 4) and the three-way interaction term (Figure 1). Strategic networking and environmental dynamism values were set at one standard deviation above and below the mean, while the range of values for EO was entered (Cohen et al., 2003). Therefore, following the outlined procedure, figure 1 illustrates the three-way interaction effect of EO, strategic networking, and environmental dynamism on small firm performance under the following configurations: (a) high strategic networking, high environmental dynamism, (b) high strategic networking, low environmental dynamism, and (d) low strategic networking, low environmental dynamism.

Figure 1 shows that all lines slope upward. Small firm performance increases with EO increase regardless of strategic networking and environmental dynamism conditions. This finding provides additional support for hypothesis 1. It is vital to notice that small firm performance increases with increasing EO at a faster rate for firms operating in a stable environment and with a high degree of strategic networking than for all other combinations of strategic networking and environmental dynamism; thus, hypothesis 4a is not supported. Otherwise said, there is not enough evidence to support the notion that small firm performance is highest amidst firms with a high degree of EO, a high degree of strategic networking, and operating in a dynamic environment than other configurations.

Moreover, figure 1 does not support hypothesis 4b. We hypothesized that firms with a low degree of strategic networking and a stable environment would perform worst, which is not the case since firms with a low degree of strategic networking and operating in dynamic environments are relatively worst performers. Based on our analysis, the highest performing configuration is high EO, high strategic networking, and low environmental dynamism.



Figure 1 EO x Strategic networking x Environmental dynamism

Source: Author's illustration

Figures 2 and 3 provide additional evidence that interaction effects do not exist between EO, strategic networking, and environmental dynamism. In contrast, figure 4 supports the interaction effect between strategic networking and environmental dynamism when linked with firm performance.







Source: Author's illustration



Figure 3 EO x Strateaic networking

Source: Author's illustration

Figure 4

Strategic networking x Environmental dynamism



Source: Author's illustration

Discussion and conclusion

Based on the conducted analysis, we can summarize the following results of our study. First, our analysis confirmed two of our hypotheses:

- H1: EO has a universally positive effect on small firm performance.
- H4: EO, strategic networking, and environmental dynamism explain small firm performance.

We confirmed the universal positive effect of EO on small firm performance as it was already previously done by Zahra (1991), Zahra et al. (1995), Wiklund (1999), Wiklund et al. (2005), Bauweraerts (2019), Jiang et al. (2018), and Kohtamaki et al. (2019). Also, we confirmed that configurations of the following elements could explain small firm performance - EO (Wiklund et al., 2005; Frank et al., 2010; Bauweraerts, 2019), strategic networking (Parida et al., 2010; Mu et al., 2017; Jiang et al., 2018), and environmental dynamism (Wiklund et al., 2005; Frank et al., 2010; Lee et al., 2013; Bauweraerts, 2019).

Second, our analysis did not confirm the following hypotheses:

- H2: Environmental dynamism moderates EO-small firm performance interrelation.
- H4a: Small firm performance is highest within SMEs with high EO, high strategic networking, and a dynamic environment.
- H4b: Small firm performance is lowest within SMEs with high EO, low strategic networking, and a stable environment.

Even though the analysis showed the universal positive effect of EO on small firm performance, the moderating role of environmental dynamism was not proven. In other words, we can say that there is no proof that companies with EO in dynamic environments will achieve higher small firm performance than the companies in static or undeveloped environments. This conclusion is in line with the results made by Wiklund et al. (2005), Frank et al. (2010), and Bauweraerts (2019), but opposite to the research results by Zahra (1993) and Lee et al. (2013), which implies that companies in dynamic growth environments have a positive EO and small firm performance interrelationship.

Moreover, even though we confirmed that small firm performance is composed of EO, strategic networking, and environmental dynamism, it is not proven that these elements present a better construct than other configurations. Our results indicate that the supreme business performing configuration includes high EO, high strategic networking, and low environmental dynamism.

Lastly, our analysis showed that when combined with EO, a configurational approach provides a better explanation of small firm performance then both the contingency and the universal models. That confirms the thesis by Miller (1996), Wiklund et al. (2005), and Bauweraerts (2019) that you can better understand performance by using the configurational approach.

Implications for research and management

Our study's main contributions are the following. Firstly, our study provides empirical support of the EO and strategic networking concepts and their positive influence on small firm performance. Secondly, our study proposes and tests a configurational model which provides further insight into the relationship between EO and small firm performance. Due to the significant positive results, our study further confirms that a configurational approach provides a better concievement of the EO and small firm performance interrelationship than the two-variable contingency models. Lastly, by adding strategic networking to the interrelationship of EO and small firm performance, this paper adds to the discussion why some firms, although restrained with inhouse resources, can still achieve entrepreneurial projects since required resources can be acquired from external network partners. This research approach could potentially entice other researchers to explore further the role of strategic networking and its antecedents on the EO-performance relationship while simultaneously adding other environmental factors to the investigation.

While devising their strategies, small firm owners and managers should bear in mind that simply increasing the EO of the firm would not "per se" lead to better performance; rather, they should take into consideration other internal and external factors, such as in this case strategic networking and environmental dynamism. Management should not rely solely on developing a particular combination of entrepreneurial postures or trying to devise only one better strategy than the alternatives. Instead, management should combine the specific firm's entrepreneurial posture with the best fitting competitive strategy. Therefore, it is vital to understand that the configuration amidst EO, strategic networking, and dynamism yields the highest returns. This research showed that the best performing configuration is a high EO, strategic networking, and a low environmental dynamism.

Moreover, when summarizing the findings regarding each configuration, managers should keep in mind that the two best performing configurations are those with high EO and high strategic networking, while the two lowest are with high EO and low strategic networking. Further confirmation for these claims can be found by analyzing the direct effects of each observed variable on firm performance. Lastly, it should be noted that EO and strategic networking directly and positively affect small firm performance, while environmental dynamism does not. Instead, firms operating in highly dynamic environments realize lower performance than their peers operating in a more static environment.

Limitations and future research

Our study has the following limitations. The first is the size of the sample. Even though the questionnaire was sent to 2,000 addresses, we received only 202 responses. Although this number was enough to conduct this analysis, future studies should be done with larger samples. Second, because the collected data is based on subjective scales, there is always the problem of respondents' subjective perceptions. Although Venkatraman et al. (1986) proved a high level of correlation between subjective and objective measurements, in future research, priority should be given to objective measurements, especially in terms of performance measures. Third, another limitation of the study is questioning only one firm representative. Several representatives should be included to get a better picture of the firm's position. Finally, the fourth limitation represents the short-term aspect of the study since the research is based on observations that took place at one point in time. Therefore, recommendations for future studies would include conducting a longitudinal study. Future research could also investigate the configuration of each of the EO antecedents, strategic networking, and environmental dynamism to explore its impact on small firm performance further. Moreover, future research should include other internal or contextual variables, such as new ventures, generational involvement in the case of family firms, network resource acquisition, market orientation, etc. Also, future studies could develop more complex models to explore moderating roles of other external and internal variables, especially in other business cultures.

References

- 1. Adler, P. S., Kwon, S. (2002), "Social capital: Prospects for a new concept", Academy of Management Review, Vol. 27 No. 1, pp. 17-40.
- Ağca, V., Topal, Y., Kaya, H. (2012), "Linking intrapreneurship activities to multidimensional firm performance in Turkish manufacturing firms: An empirical study", International Entrepreneurship and Management Journal, Vol. 8 No. 1, pp. 15-33.

- Anderson, B. S., Kreiser, P. M., Kuratko, D. F., Hornsby, J. S., Eshima, Y. (2015), "Reconceptualizing entrepreneurial orientation", Strategic Management Journal, Vol. 36 No. 10, pp. 1579-1596.
- Anseel, F., Lievens, F. (2007), "The Relationship between Uncertainty and Desire for Feedback: A Test of Competing Hypotheses", Journal of Applied Social Psychology, Vol. 37 No. 5, pp. 1007-1040.
- 5. Baker, D. D., Cullen, J. B. (1993), "Administrative reorganization and configurational context: the contingent effects of age, size, and change in size", Academy of Management Journal, Vol. 36 No. 6, pp. 1251-1277.
- 6. Baum, J. A. C., Calabrese, T., Silverman, B. S. (2000), "Don't go it alone: Alliance network composition and startups' performance in Canadian biotechnology", Strategic Management Journal, Vol. 21 No. 3, pp. 267-294.
- 7. Bauweraerts, J. (2019), "Entrepreneurial orientation and performance in private family firms: A configurational model", Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration, Vol. 36 No. 3, pp. 418-431.
- 8. Brown, S. L., Eisenhardt, K. M. (1995), "Product development: Past research, present findings, and future directions", Academy of Management Review, Vol. 20 No. 2, pp. 343-378.
- 9. Covin, J. G., Slevin, D. P. (1989), "Strategic management of small firms in hostile and benign environments", Strategic Management Journal, Vol. 10 No. 1, pp. 75-87.
- Deng, X., Gao, B., Li, G. (2019), "The Effects of Dynamic Work Environments on Entrepreneurs' Humble Leader Behaviors: Based on Uncertainty Reduction Theory", Frontiers in Psychology, Vol. 10, pp. 1-10.
- 11.Dess, G. G., Beard, D. W. (1984), "Dimensions of organizational task environments", Administrative Science Quarterly, Vol. 29 No. 1, pp. 52-73.
- 12.Dess, G. G., Lumpkin, G. T., Covin, J. G. (1997), "Entrepreneurial strategy making and firm performance: Tests of contingency and configurational models", Strategic Management Journal, Vol. 18 No. 9, pp. 677-695.
- 13.Frank, H., Kessler, A., Fink, M. (2010), "Entrepreneurial orientation and business performance a replication study", Schmalenbach business review, Vol. 62 No. 2, pp. 175-198.
- 14.Guth, W. D., Ginsberg, A. (1990), "Guest editors' introduction: Corporate entrepreneurship", Strategic Management Journal, Vol. 11, pp. 5-15.
- 15. Hamel, G. (2000), Leading the revolution, Harvard Business School Press, Boston, MA.
- 16.Hart, S. L. (1992), "An integrative framework for strategy-making processes", Academy of Management Review, Vol. 17 No. 2, pp. 327-351.
- 17. Hughes, M., Morgan, R. E. (2007), "Deconstructing the relationship between entrepreneurial orientation and business performance at the embryonic stage of firm growth", Industrial Marketing Management, Vol. 36 No. 5, pp. 651-661.
- 18. Ireland, R. D., Covin, J. G., Kuratko, D. F. (2009), "Conceptualizing corporate entrepreneurship strategy", Entrepreneurship Theory and Practice, Vol. 33 No. 1, pp. 19-46.
- 19. Jiang, X., Liu, H., Fey, C., Jiang, F. (2018), "Entrepreneurial orientation, network resource acquisition, and firm performance: A network approach", Journal of Business Research, Vol. 87, pp. 46-57.
- 20. Jones, O., Macpherson, A. (2006), "Inter-organizational learning and strategic renewal in SMEs: Extending the 4I framework", Long Range Planning, Vol. 39 No. 2, pp. 155-175.
- 21.Ketchen D. J., Thomas, J. B., Snow, C. C. (1993), "Organizational configurations and performance: a comparison of theoretical approaches", Academy of Management Journal, Vol. 36 No. 6, pp. 1278-1313.
- 22.Kohtamäki, M., Heimonen, J., Parida, V. (2019), "The nonlinear relationship between entrepreneurial orientation and sales growth: The moderating effects of slack resources and absorptive capacity", Journal of Business Research, Vol. 100, pp. 100-110.
- 23.Kollman, T., Stockmann, C. (2014), "Filling the entrepreneurial orientation Performance gap: The mediating effects of exploratory and exploitative innovations", Entrepreneurship Theory and Practice, Vol. 38 No. 5, pp. 1001-1026.
- 24.Kreiser, P. M., Davis, J. (2010), "Entrepreneurial orientation and firm performance: The unique impact of innovativeness, proactiveness, and risk-taking", Journal of Small Business Entrepreneurship, Vol. 23 No. 1, pp. 39-51.

- 25.Lee, C., Lee, K., Pennings, J. M. (2001), "Internal capabilities, external networks, and performance: A study on technologybased ventures", Strategic Management Journal, Vol. 22 No. 6-7, pp. 615-640.
- 26.Lee, T., Chu, W. (2013), "How entrepreneurial orientation, environmental dynamism, and resource rareness influence firm performance", Journal of Management & Organization, Vol. 19 No. 2, pp. 167-187.
- 27.Li, Y., Liu, Y., Liu, H. (2011), "Co-opetition, distributor's entrepreneurial orientation and manufacturer's knowledge acquisition: Evidence from China", Journal of Operations Management, Vol. 29 No. 1-2, pp. 128-142.
- 28.Lumpkin, G. T., Dess, G. G. (1996), "Clarifying the entrepreneurial orientation construct and linking it to performance", Academy of Management Review, Vol. 21 No. 1, pp. 135-172.
- 29.Lumpkin, G. T., Dess, G. G. (2001), "Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle", Journal of Business Venturing, Vol. 16 No. 5, pp. 429-451.
- 30.Lumpkin, G. T., Martin, W. L., Sloat, C. B. (2001), "The role of entrepreneurial orientation in the performance of family firms in dynamic and hostile environments", paper presented at the Babson College Entrepreneurship Research Conference, Glasgow, Scotland.
- 31.March, J. G. (1991), "Exploration and exploitation in organizational learning", Organization Science, Vol. 2 No. 1, pp. 71-87.
- 32.March, J. G., Simon, H. (1963), Organizations, Wiley, New York, NY.
- 33.Martinez-Conesa, I., Soto-Acosta, P., Carayannis, E. G. (2017), "On the path towards open innovation: Assessing the role of knowledge management capability and environmental dynamism in SMEs", Journal of Knowledge Management, Vol. 21 No. 3, pp. 553-570.
- 34.McGrath, R. G. (2010), "Business models: A discovery driven approach", Long Range Planning, Vol. 43 No. 2, pp. 247-261.
- 35.Meyer, A. D., Tsui, A. S., Hinings, C. R. (1993), "Configurational approaches to organizational analysis", Academy of Management Journal, Vol. 36 No. 6, pp. 1175-1195.
- 36.Miller, D. (1983), "The correlates of entrepreneurship in three types of firms", Management Science, Vol. 29 No. 7, pp. 770-791.
- 37.Miller, D. (1987), "Strategy Making and Structure: Analysis and Implications for Performance", Academy of Management Journal, Vol. 30 No. 1, pp. 7-32.
- 38.Miller, D. (1988), "Relating Porter's business strategies to environment and structure: Analysis and performance implications", Academy of Management Journal, Vol. 31 No. 2, pp. 280-308.
- 39. Miller, D. (1990), "Organizational configurations: Cohesion, change, and prediction", Human Relations, Vol. 43 No. 8, pp. 771-790.
- 40.Miller, D. (1996), "Configurations revisited", Strategic Management Journal, Vol. 17 No. 7, pp. 505-512.
- 41.Miller, D., Friesen, P. H. (1978), "Archetypes of strategy formulation", Management Science, Vol. 24 No. 9, pp. 921-933.
- 42.Moreno, A. M., Casillas, J. C. (2008), "Entrepreneurial orientation and growth of SMEs: A causal model", Entrepreneurship Theory and Practice, Vol. 32 No. 3, pp. 507-528.
- 43.Morgan, R. E., Strong, C. A. (2003), "Business performance and dimensions of strategic orientation", Journal of Business Research, Vol. 56 No. 3, pp. 163-176.
- 44.Mu, J., Thomas, E., Peng, G., Di Benedetto, A. (2017), "Strategic orientation and new product development performance: The role of networking capability and networking ability", Industrial Marketing Management, Vol. 64, pp. 187-201.
- 45.Obeng, B.A. (2018), "Strategic networking and small firm growth in an emerging economy", Journal of Small Business and Enterprise Development, Vol. 26 No. 1, pp. 43-66.
- 46.Parida, V., Westerberg, M., Ylinenpää, H., Roininen, S. (2010), "Exploring the effects of network configurations on entrepreneurial orientation and firm performance: an empirical study of new ventures and small firms", Annals of Innovation & Entrepreneurship, Vol. 1 No. 1, pp. 1-13.
- 47.Pateli, A. G., Giaglis, G. M. (2005), "Technology innovation-induced business model change: A contingency approach", Journal of Organizational Change Management, Vol. 18 No. 2, pp. 167-183.

- 48.Schneider, S., Spieth, P. (2013), "Business model innovation: Towards an integrated future research agenda", International Journal of Innovation Management, Vol. 17 No. 1, pp. 1-34.
- 49.Schumpeter, J. A. (1934), The theory of economic development, Harvard University Press, Cambridge, MA.
- 50.Smart, D. T., Conant, J. S. (1994), "Entrepreneurial orientation, distinctive marketing competencies and organizational performance", Journal of Applied Business Research, Vol. 10 No. 3, pp. 28-38.
- 51.Soto-Acosta, P., Popa, S., Palacios-Marque's, D. (2016), "E-business, organizational innovation and firm performance in manufacturing SMEs: an empirical study in Spain", Technological and Economic Development of Economy, Vol. 22 No. 6, pp. 885-904.
- 52.Teng, B. S. (2007), "Corporate entrepreneurship activities through strategic alliances: A resource-based approach toward competitive advantages", Journal of Management Studies, Vol. 44 No. 1, pp. 119-142.
- 53.Venkatraman, N., Ramanujam, V. (1986), "Measurement of business performance in strategy research: A Comparison of approaches", Academy of Management Review, Vol. 11 No. 4, pp. 801-814.
- 54.Waldner, F., Poetz, M. K., Grimpe, C., Eurich, M. (2015), "Antecedents and consequences of business model innovation: The role of industry structure", in BadenFuller, C., Mangematin, V. (Eds.), Advances in strategic management: Vol. 33, Business models and modelling, Emerald Group Publishing Limited, Bingley, pp. 347-386.
- 55.Wales, W. J., Covin, J. G., Monsen, E. (2020), "Entrepreneurial orientation: The necessity of the multilevel conceptualization", Strategic Entrepreneurship Journal, Vol. 14, pp. 639-660.
- 56.Wales, W. J., Patel, P. C., Lumpkin, G. T. (2013), "In pursuit of greatness: CEO narcissism, entrepreneurial orientation, and firm performance variance", Journal of Management Studies, Vol. 50 No. 6, pp. 1041-1069.
- 57.Wiklund, J. (1999), "The sustainability of the entrepreneurial orientation–performance relationship", Entrepreneurship Theory and Practice, Vol. 24 No. 1, pp. 37-48.
- 58.Wiklund, J., Shepherd, D. (2003), "Knowledge-based resources, entrepreneurial orientation, and the performance of small and medium-sized businesses", Strategic Management Journal, Vol. 24 No. 13, pp. 1307-1314.
- 59.Wiklund, J., Shepherd, D. (2005), "Entrepreneurial orientation and small business performance: A configurational approach", Journal of Business Venturing, Vol. 20 No. 1, pp. 71-91.
- 60.Zahra, S. A., Covin, J. G. (1995), "Contextual influences on the corporate entrepreneurshipperformance relationship: A longitudinal analysis", Journal of Business Venturing, Vol. 10 No. 1, pp. 43-58.
- 61.Zahra, S., (1991), "Predictors and financial outcomes of corporate entrepreneurship: an explorative study", Journal of Business Venturing, Vol. 6 No. 4, pp. 259-285.
- 62.Zahra, S.A. (1993), "Environment, corporate entrepreneurship, and financial performance: a taxonomic approach", Journal of Business Venturing, Vol. 8 No. 4, pp. 319-340.
- 63.Zajac, E. J., Kraatz, M. S., Bresser, R. K. F. (2000), "Modeling the Dynamic of Strategic Fit: A Normative Approach to Strategic Change", Strategic Management Journal, Vol. 21 No. 4, pp. 429-453.

About the authors

Bojan Morić Milovanović is an Associate Professor at the Institute of Public Finance (Croatia). Bojan holds a Ph.D. in Business Administration and Management from the University of Zagreb (Croatia), an MBA from the University of Illinois (USA), and an MS in Strategic Design and Management from Parsons School of Design – The New School (USA). He was also educated at and held fellowship positions at Cornell University (USA), University of Hong Kong (China), City University of New York (USA), University of Udine (Italy), and London School of Economics and Political Science (UK). Bojan held various sales, operational, and executive roles in managing and developing the supply side of high-profile oil and gas projects within the CIS region. The author can be contacted at **bojan.moric@ijf.hr**.

Mihaela Mikić is an Associate Professor at the Department for Managerial Economics, Faculty of Economics and Business, University of Zagreb, Croatia, where she teaches Entrepreneurship, Business plans, Fundamentals of Entrepreneurship, and Small Business Management. Her research interests include Entrepreneurship, Social Entrepreneurship, Women Entrepreneurship, Internationalization, Small Business Management, and Small Business Financing. She is the author of several articles published in refereed international journals and three books. Additionally, she is serving a few journals as a reviewer/editorial board member. The author can be contacted at **mmikic@efzg.hr**.

Zoran Bubaš is a Researcher at the Institute of Public Finance with fields of interest in public sector economics, local government finances, and budget and budgetary processes. Zoran holds a Ph.D. from Vienna University of Economics and Business. Zoran was a Deputy CEO at University Hospital Centre Zagreb, Deputy State Secretary (Central Office for Development Strategy), Adviser to the Prime Minister (Government of the Republic of Croatia), a Member of the Coordinating Body for the preparation and supervision of the Pre-accession economic program implementation (PEP), and a Senior Economist (USAID Project 'Assistance to the Deputy Prime Minister', Croatia). The author can be contacted at zoran.bubas@ijf.hr.