

Veselinović, Ljiljan; Kulenović, Mirza; Šunje, Aziz

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## Entrepreneurial Orientation of the Companies in Bosnia and Herzegovina: The Importance of Contextual Factors

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**Ljiljan Veselinović, PhD**

School of Economics and Business, University of Sarajevo, BiH

E-mail: ljiljan.veselinovic@efsa.unsa.ba

**Mirza Kulenović, PhD student**

School of Economics and Business, University of Sarajevo, BiH

E-mail: mirza.kulenovic89@gmail.com

**Aziz Šunje, PhD**

School of Economics and Business, University of Sarajevo, BiH

E-mail: aziz.sunje@efsa.unsa.ba

## ENTREPRENEURIAL ORIENTATION OF THE COMPANIES IN BOSNIA AND HERZEGOVINA: THE IMPORTANCE OF CONTEXTUAL FACTORS

### PREDUZETNIČKA ORIJENTACIJA KOMPANIJA U BOSNI I HERCEGOVINI: ZNAČAJ KONTEKSTUALNIH FAKTORA

#### Abstract

*Entrepreneurial orientation (EO) represents a firm-level construct that captures innovativeness, proactiveness, and risk-taking of the existing companies. The main focus of this paper is to present the EO of 477 companies in Bosnia and Herzegovina and to compare EO between companies operating within different contextual factors. We used descriptive statistics and statistical testing to draw conclusions. Our paper presents the mean values of entrepreneurial orientation for each NACE industry category. In addition, our results confirm that there are statistically significant differences in entrepreneurial orientation between (a) the companies operating in a more competitive environment and the companies operating in a less competitive environment; (b) the companies with acquired ISO certificates and high level of TQM practices and the companies without ISO certificates and low level of TQM practices; (c) the companies operating in predominantly export-oriented markets and the companies operating in predominantly local markets; and finally (d) the companies located in Federation of Bosnia and Herzegovina and the companies located in Republic of Srpska. However, there are no statistically significant differences in entrepreneurial orientation between the older companies (older than two, five and ten years) and younger companies; nor between companies of different sizes. By analyzing organizational contextual factors, this paper identifies key variables that may play an important role in designing more complex structural models. Additionally, this paper presents the current state of entrepreneurial orientation of existing companies in Bosnia and Herzegovina.*

**Keywords:** entrepreneurial orientation, contextual factors, firm behavior, entrepreneurship, Bosnia and Herzegovina

**JEL:** L2

#### Sažetak

*Preduzetnička orijentacija predstavlja konstrukt na nivou firme koji najčešće obuhvata inovativnost, proaktivnost i spremnost na preuzimanje rizika. Glavni cilj ovog rada je prezentovati predzmetičku orijentaciju 477 kompanija u Bosni i Hercegovini i testirati razlike između kompanija koje posluju u okruženju s različitim kontekstualnim faktorima. Pri donošenju zaključaka koristili smo deskriptivnu statistiku i statističko testiranje. Ovaj rad daje prikaz prosječnih vrijednosti predzmetičke orijentacije po NACE industrijskim kategorijama. Pored toga, rezultati ove studije potvrđuju da postoji statistički signifikantna razlika u predzmetičkoj orijentaciji između: (a) kompanije koje posluju u više konkurentnijem*

*okruženju i kompanija koje posluju u manje konkurentnom okruženju; (b) kompanije koje imaju ISO certifikate i visok nivo TQM praksi i kompanija koje nemaju ISO certifikate i nizak nivo TQM praksi; (c) kompanija koje posluju u predominantno eksportno-orijentisanim tržištima i kompanija koje posluju na predominantno lokalnim tržištima; te konačno (d) kompanija koje posluju u Federaciji Bosne i Hercegovine i kompanija koja posluju na području Republike Srpske. Ipak, nisu pronađene statistički signifikantne razlike u preduzetničkoj orijentaciji između starijih kompanija (starije od dvije, pet i 10 godina) i mlađih kompanija, kao ni između kompanije različite veličine. Analizirajući organizacione kontekstualne faktore, ovaj rad identifikuje ključne varijable koje mogu igrati važnu ulogu u osmišljavanju kompleksnijih strukturalnih modela. Dodatno, ovaj rad prikazuje trenutno stanje preduzetničke orijentacije postojećih kompanija u Bosni i Hercegovini.*

**Ključne riječi:** preduzetnička orijentacija, kontekstualni faktori, ponašanje firme, preduzetništvo, Bosna i Hercegovina

**JEL:** L2

## 1. Introduction

For more than 30 years of research, the phenomenon of entrepreneurial orientation (EO) has been a driving force behind the organizational pursuit of entrepreneurial activities and a central focus of the entrepreneurship literature (Rauch *et al.*, 2009). As noted by Covin, Greene and Slevin (2006), knowledge accumulation about measurement, antecedents, and consequences of EO is substantial. The existing literature provides strong support that entrepreneurially-oriented firms perform better than more conservative firms (Anderson & Eshima, 2013).

An extensive meta-analysis study (Rauch *et al.*, 2009) have confirmed the positive relationship between EO construct and firm performance, emphasizing that further studies should focus their attention on the role of potential moderators: firm age, environmental dynamism, national culture, a strategy pursued, and organizational structure.

Given the importance of contingencies in explaining organizational effectiveness (Donaldson, 2001), the focus of this paper is to present the EO of 477 companies in Bosnia and Herzegovina and to examine if EO differs between companies with different contextual factors. To our knowledge, research addressing the entrepreneurial orientation of the firms in the context of Bosnia and Herzegovina is rather scarce. In line with this, and given that organizational contextual factors play an important role in predicting the behavior of the firm, in this paper we analyze and discuss the differences in entrepreneurial orientation between companies that differ in terms of a competitive environment, age, size, focus on quality, export-orientation and location. It is also worth noting that the business environment in Bosnia and Herzegovina faces several challenges (European Commission, 2019): lengthy and cumbersome market entry and exit regulations, large informal economy, high state influence on the economy, incomplete privatization process, very low labor force participation, and high unemployment rates.

## 2. Literature review

Generally, EO is seen as an organizational decision-making proclivity favoring entrepreneurial activities (Lumpkin & Dess, 1996). First devised by Miller (1983), and expanded afterward by Covin and Slevin (1989; 1991), EO relates to strategic decision-making practices, behavioral tendencies, and managerial philosophies that are entrepreneurial in nature. Under their conceptualization of EO, a firm that possesses a high level of EO is expected to exhibit similarly high levels of innovativeness, proactiveness, and a willingness to take risks (Anderson & Eshima, 2013). In that sense, three dimensions of EO introduced by Miller (1983) have been used consistently in the literature: innovativeness, risk-taking, and proactiveness. Innovativeness can be

understood as the company's desire to engage and support new ideas, novelty, experiments and creative processes that can ultimately result in new products, services or technological processes (Lumpkin & Dess, 1996). Risk-taking refers to the level of risky activities of a company, such as venturing into the unknown, borrowing heavily, or committing significant resources to ventures in uncertain environments. Proactiveness, on the other hand, can be defined as a company's relationship to market opportunities. Proactiveness refers primarily to the introduction of new products and services ahead of the competition and acting in anticipation of future demand (Rauch *et al.*, 2009).

Although a great deal of research has been done on the topic of EO globally, in the context of Bosnia and Herzegovina, we identified only two articles that address this issue. Palalić and Bušatlić (2015) analyzed the environment in which operated fast-growing enterprises and slow-growing enterprises on the small sample size (178 SMEs in Bosnia and Herzegovina), taking into account the dimensions of EO and performance (growth in sales and number of employees). Firstly, the authors have presented evidence that entrepreneurial orientation is more evident in fast-growing than in slow-growing enterprises. Researchers also reported a small to moderate significant correlation between EO dimensions and business performance. Petković and Sorak (2019) examined the level of EO and the influence of EO on business performances of SMEs in the entity Republic of Srpska. The results reveal that only 12.28% of sampled SMEs have high EO in all three dimensions; whereas risk-taking has been the least considered dimension (33.33% companies rated this dimension particularly high), followed by innovativeness (36.84%) and proactiveness (45.61%). The authors did not confirm the impact of EO on selected indicators of business performances, noting that these results should be interpreted with caution due to small sample size (57 SMEs).

Market competition is considered to be a key situational factor in the total number of factors that make up the company environment (Das *et al.*, 2000). Companies working in mature industries and hostile environments, where competition for resources and customers is intense, are more likely to benefit from EO (Lumpkin & Dess, 2001; Miller & Firesen, 1983; Covin & Slevin, 1989). Shirokova *et al.* (2016) provide evidence that companies benefit more from entrepreneurial behavior in hostile business environments with high market growth for their products and services, compared to other environmental configurations, while Kam-Sing Wong (2014) found a positive impact of environmental turbulence on three dimensions of EO. Hence, our first research question is *whether companies in a more competitive environment have a higher level of entrepreneurial orientation than companies in a less competitive environment*.

The International Organization for Standardization (ISO) first published international ISO standards in 1987 and has since become a major dimension of the quality movement and a key management framework for all types of organizations worldwide (Fonseca, 2015). With the newest version issued in 2015, ISO 9000:2015 has come close to TQM, largely eliminating the flaws and shortcomings of previous releases. Although certification of the quality management system (QMS) is optional, ISO certification plays a major role in international business and is a very visible substitute for the adoption and intensity of quality management systems. Quality certification may create a competitive advantage (Tari-Guilló & Pereira-Moliner, 2012; Wang, Chen, & Chen, 2012) or offer a means of differentiation (Walker & Johnson, 2009).

Also, Du *et al.* (2010) suggest that proactive firms tend to use legitimization via ISO certification to enhance firm growth. Hence, our second research question is *whether companies with a strong focus on quality have a higher level of entrepreneurial orientation than companies with a weak focus on quality*. In this context, ISO certification is used as a proxy for a focus on quality. But, the existing literature provides some evidence in support of a positive relationship between EO and TQM (Imran *et al.*, 2018; Sahoo & Yadav, 2017; Al-Dhaafri, Al-Swidi, & Yusoff, 2016).

Alsughayir (2016, p. 662) pointed out that “the implementation of TQM practices allowed for continuous improvements at all levels of an organization and it positively influences entrepreneurial orientation and market orientation”. Hence, our third research question is similar to the second. However, in the case of our third research questions, quality is considered as a more complex construct (TQM practices) than simply having an ISO certificate.

For the company, exports can be seen as an important factor in reducing costs, reaching new markets, and gaining experience for other forms of internationalization (Okpara, 2009). Simmonds and Smith (1968) as well as Roux (1987) have thought of the decision to export as an innovation, something similar to entrepreneurship. Ibeh and Young (2001, p. 567) suggest that exporting is an entrepreneurial act defined as “the process by which individuals either on their own or inside organizations pursue export market opportunities without regard to the resources which they currently control or environmental disincentives which they face.” By reviewing international literature, Kazem and Van der Heijden (2006) have concluded that exporters are likely to be more competitive than non-exporters. Furthermore, different authors confirmed a positive relationship between EO and export performance.

Analyzing 89 SMEs in Nigeria, Okpara (2009) has concluded that companies that adopted proactive orientation achieved higher performance, profitability, and growth compared to those that adopted a conservative orientation. On the other hand, results from Mostafa, Wheeler and Jones (2005) have revealed that companies with high entrepreneurial orientation are more committed to the Internet and have better export performance than firms with low entrepreneurial orientation. Hence, our fourth research question is *whether export-oriented companies have a higher level of entrepreneurial orientation than non-export companies.*

Regarding the age of the company as a contextual factor, Anderson and Eshima (2013) have empirically supported the argument that younger firms are better able to capture the value from entrepreneurial strategies in the form of higher organizational growth rates than their older peers. Their results are predicated on the notion that “younger firms, while lacking established routines and processes that may provide guidance and discipline in strategic decision-making, also possess structures and an organizing context that is more flexible and reactive than older firms. Furthermore, younger firms, while again perhaps lacking in quantity of market knowledge, may actually possess market knowledge of greater temporal salience. These advantages allow younger firms to pursue entrepreneurial opportunities with greater congruence to current market expectations, and therefore be better positioned to translate those opportunities into superior growth outcomes” (Anderson & Eshima, 2013, p. 413).

On the other hand, from the perspective of general ability to pursue entrepreneurial strategies, older firms may be better equipped to engage in innovation, proactiveness, and risk-taking by virtue of more established routines, structures, and processes that discipline companies actions and provide strategic purpose (Amburgey *et al.*, 1993; Henderson, 1999). However, Sørensen and Stuart (2000) note that innovation is path-dependent. By their knowledge, the company’s future entrepreneurial behavior is a function of those that occurred in the past. In that sense, older companies mostly base their entrepreneurial strategies on the previous market conditions that may be divergent to current conditions. Younger companies have more adaptability and strategic flexibility for new entrepreneurial initiatives (Van de Ven, 1986) and can exhibit greater outcomes than their older peers. Hence, our fifth research question is *whether younger companies have a higher level of entrepreneurial orientation than older companies.*

Although much more research on the topic of EO has been done in terms of small companies, the concept of entrepreneurship is valid for both SME initiatives and large corporations (Lumpkin & Dess, 1996). The entrepreneurial orientation is not only important for SMEs' survival and growth

but also affects the large companies' profitability. Generally, large companies face different challenges than SMEs, mostly because of the different organizational designs and management styles (Ambad & Wahab, 2013). The results of a meta-analysis in Rauch *et al.* (2009) study have shown that EO was significantly more important to company performance for micro-businesses than for small businesses. Large companies scored in between these two groups, but the difference was not statistically significant. Hence, our sixth research question is *whether smaller companies have a higher level of entrepreneurial orientation than larger companies*.

### 3. Research methodology

Based on the available data from the Financial–Intelligence Agency of Bosnia and Herzegovina; Agency for Intermediary, IT and Financial Services Banja Luka and Municipal Court of Brcko District, the size of the population was estimated to be 7,062 (excluding micro-enterprises). In the next phase, we gathered email addresses of 5,430 companies; whereas remaining companies had no official web site or email address. The data were collected in 2018 with a response rate of 12.6% (or 685 firms). But, our analysis was conducted on 477 usable manager responses. The sample is dominated by small companies (10 – 50 employees) with 70.4% of the total sample, followed by medium-sized companies (51 – 250 employees) with 23.7% and large companies (250+ employees) with 5.9%. In order to test the hypothesis, we used a survey design as a research strategy. The questionnaire was constructed based on the previously validated measurement models of EO (Covin & Slevin, 1989); competitive intensity (Jaworski & Kohli, 1993) and TQM (Santos-Vijande & Álvarez-González, 2007). EO represents a higher-order latent construct consisted of three first-order constructs: innovativeness, risk-taking, and proactiveness and measured by Likert scale from one to seven. The competitive intensity (CI) is a first-order latent construct consisting of six items; measured by a Likert scale from one to five. TQM is also a higher-order latent construct consisted of five first-order constructs: leadership, people, policy and strategy, processes and resources, and partnership. As EO, CI, and TQM are represented by latent constructs, we used confirmatory factor analysis (CFA) to test whether measures of constructs are consistent with a theoretical understanding of the nature of these constructs. As our aim was to analyze differences between several groups, we ran several statistical tests in STATA 15.1. Effect sizes were estimated by using Cohen's d: small effect size ( $d=0.2$ ); medium effect size ( $d=0.5$ ); large effect size ( $d=0.8$ ).

### 4. Results

The following table presents the mean values of entrepreneurial orientation for each NACE industry category. Also, this table provides mean values for each dimension of EO (innovativeness, risk-taking, and proactiveness) and competitive intensity. Industries with NACE codes of R, L, O, N and B should be interpreted with caution due to a small number of observations in these industries.

Table 1. *Entrepreneurial orientation of companies in Bosnia and Herzegovina*

Industry		Obs	INNO	PROA	RISK	EO	CI
M	Professional, Scientific and Technical Activities	23	5.0	5.0	4.6	4.9	4.2
Q	Human Health and Social Work Activities	28	5.0	4.8	4.3	4.7	3.5
H	Transportation and Storage	11	4.8	4.7	4.3	4.6	4.6
I	Accommodation and Food Service Activities	15	4.1	4.5	5.0	4.5	4.1
K	Financial and Insurance Activities	21	4.7	4.6	4.2	4.5	4.3
J	Information and Communication	44	4.5	4.6	4.3	4.5	3.9
S	Other Service Activities	50	4.4	4.5	4.4	4.4	3.9
N	Administrative and Support Service Activities	2	4.5	4.7	4.0	4.4	2.8
F	Construction	62	4.1	4.6	4.4	4.4	4.2
C	Manufacturing	94	4.5	4.4	4.2	4.4	3.8



G	Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	64	4.2	4.5	4.0	4.2	4.5
P	Education	15	3.8	4.6	4.4	4.2	4.0
R	Arts, Entertainment and Recreation	2	4.3	4.2	4.2	4.2	4.0
D	Electricity, Gas, Steam and Air Conditioning Supply	10	4.2	4.2	4.0	4.1	3.6
O	Public Administration and Defence; Compulsory Social Security	1	3.3	3.3	5.7	4.1	2.0
E	Water Supply; Sewerage, Waste Management, and Remediation Activities	18	3.7	3.8	4.1	3.9	2.5
A	Agriculture, Forestry, and Fishing	10	3.3	3.9	4.1	3.8	4.2
B	Mining and Quarrying	5	3.7	4.1	3.0	3.6	3.7
L	Real Estate Activities	2	3.2	3.7	3.5	3.4	4.6
	All Companies	477	4.3	4.5	4.3	4.4	4.0

Source: Authors' own work

Managers of the companies from Professional, Scientific and Technical Activities (M) industry rated their entrepreneurial orientation the highest, closely followed by Human Health and Social Work Activities (Q), Transportation and Storage (H), Accommodation and Food Service Activities (I), Financial and Insurance Activities (K) and Information and Communication (J). The average EO scores are very close in each of these industries. Also, the scores from these industries are higher than the industry average (4,4). On the other hand, Real Estate Activities (L), Mining and Quarrying (B), Agriculture, Forestry, and Fishing (A) and Water Supply; Sewerage, Waste Management and Remediation Activities (E) have the lowest average EO score. Overall, only 8.8% of managers indicated a very high level of EO (all observed variables within first-order EO latent constructs are above five) which is a relatively low percentage and similar to the results presented in Petković and Sorak (2019). In Table 2 we present the results of statistical tests in order to examine differences in entrepreneurial orientation between companies that differ in terms of a competitive environment, focus on quality (ISO certification and TQM practices), export-orientation, location, age, and size.

Table 2. *The results of t-test*

<i>Differences in Entrepreneurial Orientation between</i>	<i>n</i>	<i>Mean</i>	<i>SD</i>	<i>df</i>	<i>t</i>	<i>p</i>	<i>Effect-size (Cohen's d)</i>
Low competitive intensity (CI<3)	57	4.10	1.05	475	2.06**	0.04	0.29
High competitive intensity (CI>3)	420	4.41	1.06				
No ISO acquired (ISO=0)	277	4.28	1.11	475	2.21**	0.03	0.20
ISO acquired (ISO=1)	200	4.50	0.97				
Low TQM (TQM>5)	233	4.14	0.99	475	4.83** *	0.00	0.44
High TQM (TQM<5)	244	4.60	1.08				
No export-oriented (ExO=0)	241	4.25	0.95	475	2.21**	0.03	0.25
Export-oriented (ExO=1)	236	4.51	1.15				
Republic of Srpska	114	4.09	1.16	475	3.31** *	0.00	0.36
Federation of Bosnia and Herzegovina	363	4.46	1.01				
Younger company (Age <2)	468	4.37	1.06	475	0.69	0.49	0.23
Older company (Age > 2)	9	4.62	0.96				
Younger company (Age < 5)	431	4.39	1.05	475	1.22	0.22	0.18
Older company (Age > 5)	46	4.19	1.15				
Younger company (Age < 10)	380	4.37	1.06	475	0.16	0.87	0.02
Older company (Age > 10)	97	4.39	1.08				
Smaller company (10-50 employees)	336	4.33	1.11	475	1.48	0.14	0.15
Larger company (>50 employees)	141	4.49	0.93				

\*\*\* p<0.01 \*\* p<0.05 \* p<0.1

Source: Authors' own work

Table 2 shows that companies in a higher competitive environment, companies with a strong focus on quality (in terms of ISO certification and TQM practices), export-oriented companies, and companies located in the Federation of Bosnia and Herzegovina have a higher level of entrepreneurial orientation than companies in opposed groups. These results are significant at 5%. On the other hand, our results have not shown statistically significant differences in entrepreneurial orientation between companies that differ in terms of age and size.

## 5. Discussion

In this paper, we examined whether the level of entrepreneurial orientation of the companies depends on the contextual factors. Such results are particularly useful when designing more complex structural models, but also in order to understand how companies differ in terms of EO. In order to achieve significant economic growth, it is important to have more companies that lean toward EO-focused behavior and, consequently, focus their growth on innovative products and services. Hence, our results shed some light on how companies differ in EO. Our results show that companies in a higher competitive environment, companies with a strong focus on quality (in terms of ISO certification and TQM practices), export-oriented companies, and companies located in the Federation of Bosnia and Herzegovina have a higher level of entrepreneurial orientation than companies in opposed groups. A higher level of EO in a more competitive environment is in line with previous research (Shirokova *et al.*, 2016; Kam-Sing Wong, 2014). These results might indicate, as noted in Lumpkin and Dess (2001), that the benefit of adopting EO is far more important compared to the less competitive and less hostile environment. In line with the reasoning of Covin and Slevin (1989), a high entrepreneurial strategic posture might contribute to the high performance of companies in a hostile environment, creating a stronger need to adopt EO in such environments. Companies with a strong focus on quality have a higher level of entrepreneurial orientation.

As Du *et al.* (2010) suggest, proactive firms tend to use legitimation via ISO certification to enhance firm growth. Also, EO was greater in companies with a high level of TQM. These results are in line with other authors (Imran *et al.*, 2018; Sahoo & Yadav, 2017; Al-Dhaafri, Al-Swidi & Yusoff, 2016) and imply the implementation of TQM practices positively influence the entrepreneurial orientation of the company. Regarding export orientation, EO was greater for export-oriented companies. Export-oriented companies, in general, should be more proactive because of international competition and must take more risks than locally-oriented companies. These results are in line with Mostafa, Wheeler and Jones (2005): companies with high entrepreneurial orientation are more committed to the Internet and have better export performance than firms with low entrepreneurial orientation. Finally, there was a difference in EO between companies located in different entities. EO was greater in the Federation of Bosnia and Herzegovina than in RS. This indicates that the business environment might be under the influence of different market forces, creating differences in the entrepreneurial orientation between two entities of Bosnia and Herzegovina.

Our results have not shown statistically significant differences in entrepreneurial orientation between companies that differ in terms of age and size. We considered several criteria for the age variable (older/younger than two, five and ten years), but no statistically significant results were obtained. In order words, companies of all ages and sizes are considering entrepreneurial orientation equally important for achieving outstanding results.

## 6. Conclusion

Our results confirm that there are statistically significant differences in entrepreneurial orientation between (a) the companies operating in a more competitive environment and the companies



operating within a less competitive environment; (b) the companies with acquired ISO certificates and high level of TQM practices and the companies without ISO certificates and low level of TQM practices; (c) the companies operating in predominantly export-oriented markets and the companies operating in predominantly local markets; and finally (d) the companies located in the Federation of Bosnia and Herzegovina and the companies located in Republic of Srpska. However, there are no statistically significant differences in entrepreneurial orientation between the older companies (older than two, five, and ten years) and younger companies; nor between companies of different sizes. We contribute to the existing literature by identifying potential moderators that might play an important role in examining the relationship between EO construct and firm performance (Rauch *et al.*, 2009). Therefore, we confirm that a competitive environment, focus on quality, export-orientation, and location might influence the level of EO. Future studies should consider these variables in more complex research designs. As noted by Kronsbein, Meiser and Leyer (2004), researchers should be fully aware of the context when examining the measured performance of their processes. The main limitation of the research is related to self-reported dimensions of EO, which might result in over-estimation of the EO in the context of Bosnia and Herzegovina. Further studies should focus their attention on an in-depth understanding of possible causes regarding differences in EO.

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