

## ENTREPRENEURS' CHARACTERISTICS AS DETERMINANTS OF THE INTERNATIONALIZATION OF BULGARIAN SMALL AND MEDIUM-SIZED ENTERPRISES

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### Abstract

*The internationalization of Bulgarian Small and Medium-sized Enterprises (SMEs) is mostly seen as predetermined by external factors, such as the country's participation in economic unions, lowering barriers to international trade, technology development, etc. Less attention is paid by researchers to the entrepreneurs' characteristics as a determinant of internationalization. One of the study's objectives presented here is to analyze the impact of these characteristics on SMEs' internationalization success. To achieve this objective, applied methods involve review and analysis of available research and information sources, an empirical survey of 468 Bulgarian SMEs, statistical processing, analysis, and synthesis of results. The empirical results prove the importance of entrepreneurs' characteristics for the internationalization and competitive performance of Bulgarian SMEs. The findings show that the length of overall professional experience gained by entrepreneurs is a significant determinant of SMEs' internationalization while managerial knowledge and skills acquired by entrepreneurs could not be considered as such. The surveyed sample excludes micro-enterprises due to the low share of internationalized companies and their strong dependence on factors beyond the control of the entrepreneur-manager. The originality of the study lies in revealing the potential of an adequate managerial training of entrepreneurs for the internationalization of Bulgarian SMEs - mostly small and family and thereby with restricted use of professional managers.*

**Key words:** Internationalization; Bulgarian SMEs; entrepreneurs; competitive performance; determinants; owner-manager

**JEL:** D22, M16, L25, L26

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## **Introduction**

It is well-known that Small and Medium-sized Enterprises (SMEs) play a major role in today's economy. That is the reason why their performance is of primary importance for the economic development. The management and ownership of SMEs are concentrated in a tight circle of persons and often in a single individual, and there is an overlap of implemented functions. These peculiarities determine the necessity to study individual characteristics and their relationship with performance. SMEs' performance is dependent on the internal capacity to develop competitive strategies and accumulate resources, which is related to the personal characteristics of a key player – the entrepreneur-manager. By attempting to improve general performance, a major problem in front of Bulgarian SMEs is how to deal with the limitations of the domestic market in terms of size and demand patterns. And internationalization appears to be a beneficial opportunity for firms to deal with that issue and to improve performance. To utilize this opportunity, the competencies of SMEs' key player – the entrepreneurial manager are of primary importance. This study is aimed at analyzing the impact of entrepreneurs' characteristics on the SMEs' decision to internationalize and the outcome of this decision which can be measured by the degree of internationalization success. The focus is on internal determinants of SMEs' internationalization that have a key role in the management decision for the development of international activities, in the subsequent operation of a firm in international markets and related competitive performance. The study is targeted at the question of which individual characteristics determine SMEs' internationalization and competitive performance. It attempts to address a gap found in the literature that individual-level antecedents have received comparatively less attention by researchers than firm-level and environmental antecedents (Martineau and Pastoriza, 2016).

This study contributes to the extant literature on international entrepreneurship and competitive performance of SMEs by attempting to explain the characteristics of the entrepreneur-founder of small business as a determinant of SMEs' international activities and performance on a representative sample of 468 Bulgarian SMEs. The findings view some entrepreneurs' characteristics as an important determinant of internationalization and competitive performance of Bulgarian SMEs, while others are found to be less significant. According to the gathered and summarized empirical data, the length of overall professional experience gained by entrepreneurs is a significant determinant of SMEs' internationalization while managerial knowledge and skills acquired by entrepreneurs could not be considered as such.

The results of the study are associated with revealing the potential of the adequate managerial training of entrepreneurs for the internationalization of Bulgarian

SMEs – mostly small and family firms with a restricted use of professional management. This additional preparation and training of entrepreneurs can be used as a compensation for their lacking or insufficient professional management by acquiring relevant entrepreneurial and strategic management competencies by the entrepreneur-manager. Such competencies can be beneficial for their competitive performance and the development of international activities.

### **Literature review**

The literature review encompasses internal determinants of competitive performance, as a source of a company competitive advantage in an international business environment. On an individual level, these determinants encompass general variables such as age, gender, managerial background, professional and international experience, and other previous experience, education of the entrepreneur - type and degree, etc. An integrative framework of SMEs' international involvement summarizes three groups of individual-level determinants (antecedents): the manager's socio-cognitive properties (proactivity, risk-aversion), demographics, and personal networks (Martineau and Pastoriza, 2016). A distinction is made in the literature between the general human capital effects – education and labor experience from those of the entrepreneurial human capital - experience as a business owner, management skills and technical abilities which presumably relate to the identification and exploitation of business opportunities (Ucbasaran, Westhead and Wright, 2008). Some studies on the SMEs' internationalization have tried to establish demographic characteristics of successfully exporting SMEs with largely inconclusive results leading to the assumption that demographic characteristics are not of key importance for the SMEs' internationalization (Achtenhagen, 2011). We try to avoid this limitation by combining general human capital and entrepreneurial human capital characteristics to determine what their relation is with internationalization.

International opportunities are a central concept in the international entrepreneurship research and entrepreneurial behaviors focused on international opportunities are critical for international entrepreneurship (Mainela, Puhakka and Servais, 2014). In some enterprises, the entrepreneur seizing the opportunities is an individual agent, while in others the entrepreneurial function is carried out by various people, be it the key staff or the management team (O'kean and Menudo, 2008). In this study, we follow the understanding that the entrepreneur is the one who performs one or all of the entrepreneurial functions that result in capturing international business opportunities and development and implementation of the firm's internationalization strategy leading to competitive performance.

Among the main variables in the research, considered as determinants of the internationalization of SMEs are the so-called antecedents of internationalization,

such as training and experience, skills, competences, and managerial know-how of the entrepreneur (Ruzzier, Hisrich and Antoncic, 2006; Ratten et al., 2007). The owner-manager's higher education, opportunity-oriented motivation, new technology use, and activities related to extractive sectors (e.g., farming, forestry, fishing, and mining) lead to a greater likelihood of early firm internationalization (Amorós, Basco and Romani, 2016). International orientation is determined by characteristics such as cross-cultural communication skills; proficiency in foreign languages; experience gained from international travels, work, or stays (Achtenhagen, 2011). More specifically, international experience, previous business experience of entrepreneurs and knowledge of foreign languages are positively related to an earlier start of internationalization (Zucchella, Palamara and Denicolai, 2007). Besides the antecedents of internationalization and performance, entrepreneurial characteristics can be studied also as moderators in the internationalization-performance relationship. For example, based on a sample of Taiwanese SMEs that expanded abroad it is found that age, educational level, international experience, and the duality of the CEO<sup>5</sup> have moderating effects on the relationship between internationalization and firm performance (Hsu, Chen and Cheng, 2013). Another recent study (Wasowska, 2019) shows that "at the individual level, an entrepreneur's age, gender and work experience abroad proved to be insignificant in predicting self-efficacy in internationalization" but "an entrepreneur's export experience prior to the firm's founding, education and command of foreign languages were significant".

The individual entrepreneur with their managerial competence, level of innovativeness, risk tolerance, and firm-level entrepreneurial behavior, is expected to influence internationalization patterns and profiles (the composition of business modes and countries), both together and separately (Jones and Coviello, 2005). And the outcome of that behavior is firm performance. The results from a survey conducted on 1,612 managers of 420 Chinese international enterprises show that "there is a significant negative relationship between perceived international risk and international performance" (Xu *et al.*, 2015). The researchers that conducted this survey found that "the influence on the international performance from perceived international risk is moderated by international experience". An interesting concept to explain the international performance of SMEs is the so-called "global mindset". The findings of an empirical study based on a cross-sectional sample of Finnish SMEs led to the conclusion that "global mindset seems to be linked to both effectual decision-making logic and improved international performance" (Torkkeli, Nummela and Saarenketo, 2018). Besides, the findings from a study conducted by Langseth, O'Dwyer and Arpa (2016) demonstrate

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<sup>5</sup> CEO duality - situation in which a person holds the positions of both CEO and chairperson of the board

that “four forces, in particular, are found to be strongly significant to the speed of internationalization among the case SMEs: the enabling force of technology, the mediating force of entrepreneurial actor perceptions/owner-managers' global vision and the moderating forces of foreign market knowledge and tie strength in networks”. Entrepreneurial networks and foreign language capabilities of owners/managers are found to be good predictors of internationalization degree while entrepreneurial and managerial competencies of owners/managers are not significant for internationalization success, and no relationship is found between owners/managers' education abroad and internationalization (Korsakienė, Bekešienė and Hošková-Mayerová, 2019). An internationally experienced person able to attract a moderate amount of capital can compete internationally and even new ventures with limited resources may achieve success in the global market (Oviatt and McDougall, 2005). Professional training in the field of management for example and education abroad leads to greater readiness for internationalization (Child, Hong and Wong, 2002). At the same time, limited company resources and international contacts, as well as the lack of required managerial knowledge about internationalization are critical constraints to the internationalization of SMEs (OECD, 2009). Love et al. (2016) conclude in their study that “business and managerial knowledge and skills can assist firms to develop their export capabilities, and the managers' education and experience have strong positive effects on export performance”. An integrated model of international entrepreneurship lists characteristics of the top management first among the influencing organizational factors, and competitive advantage which is dependent on the internationalization pattern is measured by the achieved financial and non-financial outcomes (Zahra and George, 2002). Another group of researchers (Villar, Linares-Navarro and Toral, 2010) found that “more innovative strategies (for internationalization) are associated with managers with intermediate experience in business, higher education levels, and a more realistic perception of the severity of the situation, the influence of the environment, and its strategic capabilities”.

Management and ownership in SMEs are most often concentrated, ownership and control functions are united. In many cases, the strategy is rather a line of behavior of the entrepreneur-manager and a common strategy is imitation and survival. SMEs' employees perform complex functions and enjoy greater freedom of action, while written job descriptions are rare, creating favorable conditions for creativity and entrepreneurship (Todorov, 2011). Bulgarian SMEs operating in the European internal market enjoy various opportunities for their internationalization. Within this market, smaller companies may also be competitive outside the EU, growing and becoming global players, under certain conditions, of course. This is one of the reasons why SMEs have a key role to

play in economic stability and their internationalization is seen as a key driver of competitiveness and growth (European Commission, 2007).

Management experience, international experience, and education are important determinants that play a diverse role in shaping the internationalization pattern – including its scope, speed, revenue from the international market, the choice of a (first) foreign country, location of target international markets in terms of distance from the domestic market and internationalization mode. Their influence depends on various contextual and sample characteristics. However, the internationalization of Bulgarian SMEs is mostly seen as predetermined by external factors while entrepreneurs' characteristics as a determinant of internationalization remain in the background as less explored. Still, few national studies address the issue. It is found, for example, that entrepreneurs with no previous experience or those occupied as employees before their own business are rather oriented towards a smaller number of countries which are geographically and culturally proximate, while experienced entrepreneurs are targeted at traditional trade partners of Bulgaria, regardless of geographic and cultural distances and managerial experience and training act as a prerequisite in choosing active and direct internationalization approaches which can be riskier but more effective (Kolarov, Ivanova and Todorov, 2018). International experience is positively linked to the degree, scope, and speed of internationalization, especially in non-family enterprises, while the entrepreneur's experience is positively associated with the internationalization scope and degree with no significant differences found between the groups of family and non-family firms (Ivanova, 2016). In family SMEs, in particular, the unwillingness to involve outsiders in the business including professional non-family managers combined with insufficient or lacking experience in an international environment can serve as an indicator of a preference of simpler and low-risk internationalization modes, countries with lower physical and psychic distance and later start or slower implementation of the internationalization process (Ivanova and Kolarov, 2015). Based on the entrepreneur's gender, differences are observed in Bulgarian SMEs for the following categories: international entry modes, the importance of profit and growth goals and management motivation, realized versus planned profit, fostering technological innovation, searching for new international markets and support needed for internationalization. Age differences relate to the first and top three foreign markets, the importance of profit and growth goals, attracting customers by innovation, and fitting with foreign markets. Internationally active Bulgarian women entrepreneurs mostly operate in production unlike other women entrepreneurs – mostly in services and trade and tend to be highly educated, mainly over 40 years (Georgieva and Ivanova, 2019).

What characteristics determine superior performance is a fundamental research question. In a globalized economy, SMEs' performance is strongly linked to internationalization, especially in post-transition, emerging economies due to two main reasons. International activities can contribute to superior performance in a limited domestic market and enterprises performing better domestically have a better starting point to find growth opportunities and succeed internationally (Ivanova and Todorov, 2019). The propensity for international involvement shows internationalized versus non-internationalized firms, the speed of propensity is the time that it takes for SMEs to start export; the intensity of international involvement is measured by the ratio of total international sales to total sales and speed of intensity is the speed of export sales growth relative to total sales (Martineau and Pastoriza, 2016). Performance can be measured by revenue growth for a couple of years before interviewing respondents. The variable revenue growth is calculated as the sum of the percentage of revenue growth divided by the number of revenue years (Batjargal *et al.*, 2013). Among the most used measures of internationalization is revenue from international activities. The increase in international sales is measured by sales generated by exports and other international activities (Autio, Sapienza and Almeida, 2000). This measure can be specified according to the form of international activity - for example, the company's revenue from exporting its products. In case of lacking access to publicly available data and an unwillingness of entrepreneurs for disclosure of financial information, so-called perceptual measures of performance are also used and those are typical in studies of SMEs. Such measures suggest an estimated rate on a scale, based on individual perceptions, of the international performance of the company in the "best-seller" foreign market in comparison with the direct competitors over a definite period, for example in the areas of return on investment, profitability, and overall performance (Brouthers, Nakos and Dimitratos, 2015).

### **Research questions and hypotheses**

Previous research on the relationship between the characteristics of entrepreneurs and the internationalization of their business and the purpose of this study draws attention to the search for answers to the following questions:

- Are there relationships between the timing of starting internationalization activities, on one hand, the measures of success of the internationalization of the activity of SMEs (considered as result variables), on the other, and the following characteristics of entrepreneurs (considered as factor variables):
  - the demographic characteristics of entrepreneurs?
  - the educational degree and type of education?

- the duration and type of professional experience of the entrepreneur?
- the type of experience of entrepreneurs abroad?
- When establishing such relationships, what is the direction and degree of influence of the factor variables?

The hypotheses that could be formulated as answers to the questions asked are the following:

H1. *There are no significant relations between the demographic characteristics of entrepreneurs, on one hand, and the timing and success of the internationalization of enterprises, on the other.*

H2a. *Entrepreneurs with a higher level of education are more successful in the internationalization of their activities.*

H2b. *The type of education (technical, economic, etc.) has no significant relation with the timing and success of the internationalization of SMEs.*

H3a. *Entrepreneurs with longer professional experience start international activities earlier and achieve greater success in the internationalization of their activities.*

H3b. *There is a significant relationship between the type of professional experience of the entrepreneur and the timing and success of internationalization.*

H4. *There is a significant relationship between the possession of management training by entrepreneurs and the timing and success of internationalization.*

## **Methodology**

### ***Sample and procedures***

The survey is based on a sample of 468 SMEs that have internationalized their activity or part of their activities to varying degrees, i.e. which carry out at least one of the known forms of internationalization (import, export, international subcontracting). In terms of size, micro-enterprises (up to 9 people) are excluded due to the extremely low share of those who have internationalized their activities. In the selection of enterprises, regional and sectoral representation of the sample was sought. The research tool is a survey conducted by associates of one of the well-known agencies for sociological and economic research, who make direct contact with the respondents. The survey was conducted in the period February - May 2018.

The questionnaire used is organized in several modules, which reveal sequentially:

- the basic information about the enterprises;
- international activity and competitive performance of the surveyed enterprises;
- the characteristics of the entrepreneur, manager/successor of the surveyed companies;
- management and competitive performance, including networking and support for international activities

The SMEs included in the sample, have an average of 35,28 employees (with a standard deviation of 33,685, range 10-240). The categories “independent company”, “partner company”, “affiliated companies” are also considered. According to the Small and Medium Enterprises Act in Bulgaria, an independent enterprise is a non-partner or affiliated enterprise. The data show that almost all of the surveyed companies are independent, i.e. entrepreneurs can independently decide for the company development, including concerning their internationalization. 57,7% of them are defined as family enterprises, 41,1% - as non-family, and 1,1% - indefinite. In total, 48.8% of the sample are enterprises engaged mainly in production, 18,5% - trade, 29,3% - services, and the rest indicated more specific activities such as IT, engineering, construction, R&D, social activities, transport, and others. The companies from all planning regions (Northwest, North Central, Northeast, Southeast, South Central, and Southwest) were surveyed throughout the country.

Respondents who participated in the survey should meet at least two of the three pre-defined criteria: to own at least 10% of the business; to participate in the management of the enterprise; to actively participate in the international activities of the enterprise. These criteria guarantee the competence of the respondent regarding the processes of internationalization. Besides, the experience of the respondent was evaluated.

### ***Measures, result and factor (independent) variables***

For the needs of the analyses, the following measures of the success of the internationalization of the activity were used in the testing of the formulated hypotheses:

- size of the enterprise (based on the number of employees);
- share of sales revenues on foreign markets;
- number of countries in which SMEs operate;
- assessment of the potential of SMEs for development on international markets.

These measures were used as result variables in the statistical methods used to prove the research hypotheses.

The timing of internationalization is measured by the number of years after the start-up of the enterprise.

It should be noted that the assessment of the potential of SMEs for development on international markets is made in several directions using a Likert scale, which are:

- financing for international activities;
- level of technology;
- production operations and facilities;
- technological expertise;
- technical skills;
- engineering skills;
- organizational skills.

The assumption is that higher success in internationalization is associated with a higher assessment of the potential of the enterprise.

The independent variables used in the analyses are:

- age and gender of entrepreneurs;
- degree and type of education;
- duration and type of professional experience;
- type of experience of the entrepreneur in an international environment.

### *Analyses*

Depending on the analysed types of resultant and factor variables, the methods of Chi-square analysis and analysis of variance are used in the analysis.

Due to the qualitative nature of the factor variables expressing the characteristics of entrepreneurs and the quantitative nature of most of the result variables, through which we measure the success of the internationalization of SMEs, analysis of variance (ANOVA) was chosen as a method to test most hypotheses. The risk of error used in the analysis is  $\alpha = 0,05$ . Accordingly, for factor variables having a quantitative character (such as age and duration of professional experience), the analysis of variance is also preferred due to the formation of groups on these features, having qualitative rather than quantitative distinctive characteristics.

### **Results**

The summary picture of the results of the performed analyses is presented in Table 1.

**Table 1.** Summary of results

Entrepreneur's characteristics	Timing of internationalization (Pearson Chi-Square)	Enterprise size	Share of foreign markets income	Number of countries a SME works with	Evaluation of SME potential for development in a foreign market by a set of indicators <sup>c</sup> (Pearson Chi-Square) Asym. Sig. (2-sided)							Research Hypotheses
					Asym. Sig. (2-sided)	Sig.	Sig.	Sig.	1	2	3	
Age	0,401	0,055 <sup>a</sup> 0,63 <sup>b</sup>	0,010 <sup>a</sup> 0,252 <sup>b</sup>	0,000 <sup>a</sup> 0,000 <sup>b</sup>	0,001	0,007	0,419	0,168	0,711	0,008	0,138	H1 - partially supported (supported for age and rejected for gender) only for the part concerning the success of internationalization
Gender	0,142	0,063 <sup>a</sup> 0,055 <sup>b</sup>	0,252 <sup>a</sup> 0,055 <sup>b</sup>	0,000 <sup>a</sup> 0,055 <sup>b</sup>	0,198	0,885	0,012	0,171	0,621	0,051	0,346	
Degree of education	-	-	-	-	-	-	-	-	-	-	-	H2a – untested due to lack of diversity of answers
Type of education	0,709	0,877 <sup>a</sup> 0,525 <sup>b</sup>	0,655 <sup>a</sup> 0,997 <sup>b</sup>	0,002 <sup>a</sup> 0,190 <sup>b</sup>	Not tested due to the rejection of the hypothesis tested by objective measures of the success of internationalization.							H2b – not supported
Length of overall experience	0,902	0,570 <sup>a</sup> 0,514 <sup>b</sup>	0,007 <sup>a</sup> 0,003 <sup>b</sup>	0,000 <sup>a</sup> 0,064 <sup>b</sup>	0,349	0,028	0,074	0,359	0,157	0,045	0,010	H3a – supported in the part concerning the success of internationalization
Type of experience	0,000	0,647 <sup>a</sup> 0,813 <sup>b</sup>	0,500 <sup>a</sup> 0,750 <sup>b</sup>	0,669 <sup>a</sup> 0,987 <sup>b</sup>	Not tested due to the rejection of the hypothesis tested by objective measures of the success of internationalization.							H3b – not supported
Managerial training and qualification	0,098	0,168 <sup>a</sup> 0,008 <sup>b</sup>	0,351 <sup>a</sup> 0,483 <sup>b</sup>	0,663 <sup>a</sup> 0,974 <sup>b</sup>	0,000	0,009	0,001	0,000	0,004	0,008	0,005	H4 – not supported in terms of objective measure of internationalization success

The risk of error is at the commonly accepted level -  $\alpha = 0,05$

<sup>a</sup> Test of Homogeneity of Variances

<sup>b</sup> One-Way ANOVA

<sup>c</sup> Indicators for evaluation are: 1 – Financing for international activities; 2 – Level of technology; 3 – Production operations and equipment; 4 – Technological expertise; 5 – Technical skills; 6 – Engineering skills; 7 – Organizational skills.

The analyses performed with the chi-square method sought answers to the questions related to the characteristics of the entrepreneur and the timing of his decision to internationalize his business, make evident that only the type of professional experience of the entrepreneur is related to the moment of starting the international activity of the enterprise. This relation shows that the first to internationalize their business are entrepreneurs who were such before the creation of their current enterprise (Table 2). It is interesting to note that those entrepreneurs who were employees before starting their own business also start their international business earlier, while those who were managers later decided to internationalize their business. One probable, but not sufficient, explanation may be the well-known discussions about the significant differences in the nature and behavior of entrepreneurs and managers.

**Table 2:** Type of previous professional experience and timing of internationalization

		When do the international activities of the company start?						Total	
		from the startup	up to 1 year after the startup	from 1 to 2 years after the startup	from 2 to 3 years after the startup	from 3 to 5 years after the startup	more than 5 years after the startup		
Occupation, position of the previous job	Entrepreneur	Count	2	4	2	0	0	1	9
		Expected Count	1,3	3,7	2,8	,6	,5	,0	9,0
		% within occupation	22,2%	44,4%	22,2%	,0%	,0%	11,1%	100,0%
		% of Total	,4%	,9%	,4%	,0%	,0%	,2%	2,0%
	Manager	Count	43	131	108	21	21	0	324
		Expected Count	46,6	134,0	101,2	23,3	18,2	,7	324,0
		% within occupation	13,3%	40,4%	33,3%	6,5%	6,5%	,0%	100,0%
		% of Total	9,7%	29,4%	24,3%	4,7%	4,7%	,0%	72,8%
	Employee	Count	18	48	28	11	3	0	108
		Expected Count	15,5	44,7	33,7	7,8	6,1	,2	108,0
		% within occupation	16,7%	44,4%	25,9%	10,2%	2,8%	,0%	100,0%
		% of Total	4,0%	10,8%	6,3%	2,5%	,7%	,0%	24,3%
	Worker	Count	1	0	0	0	1	0	2
		Expected Count	,3	,8	,6	,1	,1	,0	2,0
		% within occupation	50,0%	,0%	,0%	,0%	50,0%	,0%	100,0%
		% of Total	,2%	,0%	,0%	,0%	,2%	,0%	,4%
	Other	Count	0	1	1	0	0	0	2
		% within occupation	,0%	50,0%	50,0%	,0%	,0%	,0%	100,0%
		Expected Count	,3	,8	,6	,1	,1	,0	2,0
		% of Total	,0%	,2%	,2%	,0%	,0%	,0%	,4%
Total	Count	64	184	139	32	25	1	445	
	Expected Count	64,0	184,0	139,0	32,0	25,0	1,0	445,0	
	% of Total	14,4%	41,3%	31,2%	7,2%	5,6%	,2%	100,0%	

Using the ANOVA method in the analysis of the impact of age and gender of entrepreneurs, it was ascertained that the age of the entrepreneur significantly affects the number of countries in which it operates (Sig. 0,000), as well as the share of sales revenue in other countries (Sig. 0,010). At a level of significance slightly higher than the risk of error (Sig. 0,055), it is found that age also significantly affects the size of the enterprise. What is striking is that the impact of age on the resultative variables within a certain limit – it is positive from the age of earliest years to 60 years and decreases after 60 years (Table 3). Here we can point out that the age distribution of entrepreneurs in the sample has shifted to the right by a full decade if compared to the age distribution found in representative surveys of entrepreneurs in Bulgaria. This shift could be explained by the initial constraints placed on the selection of enterprises, namely the exclusion of micro-enterprises, hence it can be assumed that larger enterprises have reached their size over a longer period, or that those entrepreneurs who established them have already reached an older age. A second explanation is that the internationalization of business requires time to gain the necessary experience.

**Table 3:** Descriptives by age groups

Age group	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	
					Lower Bound	Upper Bound			
Size of enterprise - number of employees in 2017	31-40	20	23,05	21,552	4,819	12,96	33,14	10	90
	41-50	122	34,37	24,225	2,193	30,03	38,71	10	120
	51-60	178	39,45	31,198	2,338	34,83	44,06	10	200
	61+	26	31,73	39,028	7,654	15,97	47,49	10	138
	Total	346	36,13	29,314	1,576	33,03	39,23	10	200
Share of sales revenues from foreign markets	31-40	17	30,59	31,207	7,569	14,54	46,63	2	100
	41-50	102	38,02	27,538	2,727	32,61	43,43	1	100
	51-60	166	43,38	29,536	2,292	38,85	47,91	0	100
	61+	25	40,70	38,924	7,785	24,63	56,77	1	100
	Total	310	40,70	29,894	1,698	37,36	44,04	0	100
Number of countries in which SMEs operate	31-40	14	2,57	2,472	,661	1,14	4,00	0	10
	41-50	78	3,17	4,117	,466	2,24	4,09	1	28
	51-60	138	3,48	8,589	,731	2,03	4,92	0	76
	61+	20	21,20	59,268	13,253	-6,54	48,94	0	258
	Total	250	4,75	18,381	1,163	2,46	7,04	0	258

An interesting result is the discovery of a correlation, albeit weak, between the age of the entrepreneur and the assessment score of the technology level and engineering skills as indicators of the enterprise's potential for development in international markets.

Regarding the influence of gender, the analysis of variance shows that gender is related to both: the size of the enterprise and the number of countries in which the activity is internationalized – predominantly males. However, this effect turned out to be statistically insignificant due to the high value of Sig., as well as the unfulfilled condition for equality of dispersions with the Levene test. As for the influence of gender on the share of sales revenues on foreign markets, such correlation has not been established. In conclusion, we can assume that, unlike age, gender is not a factor of success in the internationalization of the enterprises' activities.

In the analysis of the impact of education, it was not possible to make a statistical test of the hypotheses, as almost all surveyed entrepreneurs have a master's degree or equivalent degree. This fact could be interpreted as an advantage of education in the process of internationalization if we take into account the educational structure of entrepreneurs established by the national statistics.

In the analysis of the impact of the type of education (economic, technical, law or other) on the examined measurements of success, only one correlation was found - in terms of the number of countries in which activities are carried out, but its statistical significance is questionable (Sig. 0,190). It turns out that entrepreneurs with technical education (38,1% of all those who provided this information) work with an average of twice more countries. However, the more important variables for success are the size of the enterprise and revenues from sales abroad and the type of education does not have an impact.

The variance analysis of the impact of the duration of professional experience showed that this factor has the most significant impact on the success of internationalization, measured as a share of revenues from sales abroad (Sig. 0,003). That is to say that, entrepreneurs with longer professional experience are able to realize a larger share of sales in foreign countries or achieve a higher degree of internationalization. With low reliability (Sig. 0,064) it is found that the longer experience is associated with a higher number of countries in which the company operates. Table 4 presents the duration of professional experience, grouped and distributed by different types of experience.

**Table 4:** Professional experience of entrepreneurs

	Position, position in the previous job					Total
	Entrepreneur	Manager	Employee	Worker	Other	
Under 5 years' experience	0,3%	26,8%	7,0%	0,0%	0,0%	34,1%
5 - 10 years' experience	0,6%	15,9%	4,0%	0,0%	0,0%	20,4%
11 - 15 years' experience	0,3%	10,4%	1,8%	0,3%	0,0%	12,8%
Over 15 years' experience	1,2%	22,9%	7,6%	0,3%	0,6%	32,6%
Total	2,4%	75,9%	20,4%	0,6%	0,6%	100,0%

The results, ascertaining a correlation between the duration of the entrepreneur's experience and the assessment of the firm's potential for development in international markets are interesting. The results are obtained with the help of Chi-square analysis. This analysis shows a weak correlation between the duration of the experience and the assessment score of the technology level, engineering, and organizational skills.

No impact was found from the type of professional experience (both as a type of job and as a position before starting one's own business) on the success of internationalization. Probably, the professional experience contains other, more significant elements, which the present research has not been able to cover. In the research there are questions about the availability of specific experience in a foreign country, but the analysis of variance did not find significant correlations either between the relevant types of experience in an international environment and the success of internationalization.

The managerial preparation and training of entrepreneurs has been also a subject of analysis of variance as a factor variable, but the results of the analysis did not show statistically significant correlations between its presence and the objective quantitative measurements of the internationalization success. Only 30.5% of entrepreneurs stated that they have managerial training, which corresponds to some extent to the share of those with economic education. Remarkably, the presence or absence of management training proved to be significant in terms of assessing the potential for development of the company in international markets. For example, entrepreneurs with managerial training assess with a higher score the potential of the enterprise, which is clearly expressed in the indicator "Financing for international activities". This discrepancy could be explained with the greater confidence that entrepreneurs with management training have. Of course, a review of the answers to the question about the content of management training shows a very general understanding of entrepreneurs about its nature. In some cases, they associate it with their education, in which management disciplines were present, and in most cases, entrepreneurs refrain from giving details about this training.

## Conclusions

Internationalization is seen as an appropriate even necessary strategy for SMEs in a limited domestic market such as Bulgaria in the attempts to achieve success defined by their competitive performance. This study contributes to the extant literature on international entrepreneurship and SMEs' competitive performance by attempting to explain the individual characteristics of Bulgarian entrepreneurs as a determinant of their internationalization and performance.

The management implications of this study suggest that an in-depth knowledge of the internal determinants would allow the crafting of an appropriate set of management approaches, methods, and tools, based on developed management competencies to use it for a more effective internationalization of the enterprise and improved competitive performance.

Entrepreneur's characteristics have a key role in the theory of effectuation. Effectuation processes start from a given set of entrepreneurs' characteristics (traits, abilities), what they know (knowledge), and who they know (social networks) (Andersson, 2011). A direction for future research in this regard is to link the effectuation processes with general firm performance and how they contribute to the timely identification and capture of international business opportunities, development of international activities, and managing the uncertainties and dynamic changes in the international market. Another research avenue is to study context-specific external determinants and how they affect performance in case of global disruptive events. Studies could also be aimed at exploring how external determinants interact with, are moderated or mediated by firm-level and individual-level determinants, and how those determinants ultimately relate to SMEs' internationalization and performance.

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## References

Achtenhagen, L. (2011) *Internationalization competence of SMEs, Entreprenorskapsforum*. Jönköping International Business School.

Amorós, J. E., Basco, R. and Romani, G. (2016) 'Determinants of early internationalization of new firms: the case of Chile', *International*

*Entrepreneurship and Management Journal*, 12(1), pp. 283–307. doi: 10.1007/s11365-014-0343-2.

Andersson, S. (2011) 'International entrepreneurship, born globals and the theory of effectuation', *Journal of Small Business and Enterprise Development*, 18(3), pp. 627–643. doi: 10.1108/14626001111155745.

Autio, E., Sapienza, H. J. and Almeida, J. G. (2000) 'Effects of Age at Entry, Knowledge Intensity, and Imitability on International Growth', *Academy of Management Journal*. Academy of Management, 43(5), pp. 909–924. doi: 10.2307/1556419.

Batjargal, B. *et al.* (2013) 'Institutional Polycentrism, Entrepreneurs' Social Networks, and New Venture Growth', *Academy of Management Journal*, 56(4), pp. 1024–1049.

Brouthers, K. D., Nakos, G. and Dimitratos, P. (2015) 'SME Entrepreneurial Orientation, International Performance, and the Moderating Role of Strategic Alliances', *Entrepreneurship Theory and Practice*, 39(5), pp. 1161–1187. doi: 10.1111/etap.12101.

Child, J., Hong, S. and Wong, C. (2002) 'Psychic Distance and Internationalization Evidence from Hong Kong Firms', *International Studies of Management and Organization*, 32(1), pp. 36–56.

European Commission (2007) *Supporting the Internationalisation of SMEs*, European Commission. Brussels.

Georgieva, S. and Ivanova, Y. (2019) 'Gender, Age, Support and Performance of SMEs in a Transition Economy—Evidence from Bulgaria', in Todorov, K. and Degadt, J. (eds) *Conference Proceedings Chapters, Ninth International Conference 'Youth and Women Entrepreneurship in Challenging International (Global) Business Environment'*. Bulgarian Association for Management Development and Entrepreneurship, pp. 95–115.

Hsu, W.-T., Chen, H.-L. and Cheng, C.-Y. (2013) 'Internationalization and firm performance of SMEs: The moderating effects of CEO attributes', *Journal of World Business*. doi: 10.1016/j.jwb.2012.06.001.

Ivanova, Y. (2016) *Organizational and individual factors influencing the internationalization pattern of family firms*. University of National and World Economy; Vrije Universiteit Brussel.

Ivanova, Y. and Kolarov, K. (2015) 'Managerial Issues of Family Enterprises in the Process of Internationalization of Their Activities', in *Conference Proceedings. Volume 1. XII International Scientific Conference 'Management and Engineering '15'*. Sozopol: Technical University - Sofia; Scientific-Technical Union of Mechanical Engineering, p. 674.

Ivanova, Y. and Todorov, K. (2019) 'Toward a Dynamic Model of International Performance of Family SMEs: Determinants and Measures', in *4th Regional Helix 'Regional Entrepreneurial Ecosystems and Sustainability - Rethinking the Helix' - Book of abstracts*. Porto: School of Management and Technology, Porto, pp. 78–85.

Jones, M. V and Coviello, N. E. (2005) 'Internationalisation: conceptualising an entrepreneurial process of behaviour in time', *forthcoming in Journal of International Business Studies*, 36(3). doi: 10.1057/palgrave.jibs.8400138.

Kolarov, K., Ivanova, Y. and Todorov, P. (2018) 'Role of Managerial Experience of Entrepreneurs in Choosing Approaches to Internationalization of Their Business', in Todorov, K. and Kolarov, K. (eds) *Proceedings of the Eighth International Conference 6 – 9 June 2017, Varna, Bulgaria 'The International Entrepreneurship: Trends, Challenges, Achievements'*. Varna: Bulgarian Association for Management Development and Entrepreneurship., pp. 135–150.

Korsakienė, R., Bekešienė, S. and Hošková-Mayerová, Š. (2019) 'The effects of entrepreneurs' characteristics on internationalisation of gazelle firms: a case of Lithuania', *Economic Research-Ekonomska Istraživanja*. Taylor and Francis Ltd., 32(1), pp. 2864–2881. doi: 10.1080/1331677X.2019.1655658.

Langseth, H., O'Dwyer, M. and Arpa, C. (2016) 'Forces influencing the speed of internationalisation', *Journal of Small Business and Enterprise Development*, 23(1), pp. 122–148. doi: 10.1108/JSBED-10-2013-0155.

Love, J. H., Roper, S. and Zhou, Y. (2016) 'Experience, age and exporting performance in UK SMEs', *International Business Review*, 25(4), pp. 806–819.

Mainela, T., Puhakka, V. and Servais, P. (2014) 'The Concept of International Opportunity in International Entrepreneurship: A Review and a Research Agenda', *International Journal of Management Reviews*, 16(1), pp. 105–129. doi: 10.1111/ijmr.12011.

Martineau, C. and Pastoriza, D. (2016) 'International involvement of established SMEs: A systematic review of antecedents, outcomes and moderators', *International Business Review*, 25(2), pp. 458–470. doi: 10.1016/j.ibusrev.2015.07.005.

O'kean, J. M. and Menudo, J. M. (2008) 'Entrepreneurial Tools', in Congregado, E. (ed.) *Measuring entrepreneurship building a statistical system*, *International studies in entrepreneurship*. Boston, MA: Springer US (International Studies In Entrepreneurship), pp. 21–36. doi: 10.1007/978-0-387-72288-7.

OECD (2009) *Top barriers and drivers to SME internationalisation*.

Oviatt, B. M. and McDougall, P. P. (2005) 'Toward a theory of international new ventures', *Journal of International Business Studies*, 36(1), pp. 29–41. doi: 10.1057/palgrave.jibs.8400128.

Ratten, V. *et al.* (2007) 'Internationalisation of SMEs: European comparative studies', *International Journal of Entrepreneurship and Small Business*, 4(3), pp. 361–379. doi: 10.1504/IJESB.2007.013257.

Ruzzier, M., Hisrich, R. D. and Antoncic, B. (2006) 'SME internationalization research: past, present, and future', *Journal of Small Business and Enterprise Development*, 13(4), pp. 476–497. doi: 10.1108/14626000610705705.

Todorov, K. (2011) *Business Entrepreneurship - part I. Basics. New Business Development*. 1st edn. Sofia: BAMDE.

Torkkeli, L., Nummela, N. and Saarenketo, S. (2018) 'Chapter 1: A Global Mindset – Still a Prerequisite for Successful SME Internationalisation?', in, pp. 7–24. doi: 10.1108/S1876-066X20180000034001.

Ucbasaran, D., Westhead, P. and Wright, M. (2008) 'Opportunity identification and pursuit: Does an entrepreneur's human capital matter?', *Small Business Economics*. Springer, 30(2), pp. 153–173. doi: 10.1007/s11187-006-9020-3.

Villar, C., Linares-Navarro, E. and Toral, D. (2010) 'New models of internationalization in small traditional manufacturing firms', in, pp. 75–96. doi: 10.1108/S1745-8862(2010)0000005008.

Wasowska, A. (2019) 'Social-cognitive antecedents of new venture internationalization', *Baltic Journal of Management*, 14(3), pp. 462–479.

Xu, H. *et al.* (2015) 'Examining causal relationships among international experience, perceived environmental uncertainty, market entry mode, and international performance', in *Advances in International Marketing*. Emerald Group Publishing Ltd., pp. 135–156. doi: 10.1108/S1474-797920150000026007.

Zahra, S. A. and George, G. (2002) 'International entrepreneurship: The current status of the field and future research agenda', in Hitt, M. A. *et al.* (eds) *Strategic Entrepreneurship: Creating a New Mindset*. Oxford: Blackwell Publishing Ltd., pp. 255–288. doi: 10.1111/b.9780631234104.2002.00012.x.

Zucchella, A., Palamara, G. and Denicolai, S. (2007) 'The drivers of the early internationalization of the firm', *Journal of World Business*, 42(3), pp. 268–280. doi: 10.1016/j.jwb.2007.04.008.