Importance of Strategy and Aspects of Strategic Development in Small and Medium-Sized Entrepreneurship¹

Veronika SVATOŠOVÁ*

Abstract

The main aim of this research is to identify how important the strategy and determinants of strategic development and strategic management are for the selected research sample of small and medium-sized enterprises (SMEs). The main research methods are selected methods of financial analysis and personal interview with manager-owners of selected SMEs. The research confirmed that not all strategic development determinants are considered among SMEs as equally important. The monitored SMEs consider strategy for business development as important, although only 47% of them have a formulated strategy. Individual functional and corporate strategies and defined areas of strategic management are not considered by SMEs as equally important. The size of the SME has a direct impact on strategy formulation – the bigger the enterprise, the higher the probability that a strategy is formulated. The research also confirmed formulating and implementing a strategy has a positive effect on the economic results of the SME.

Keywords: small and medium-sized entrepreneurship, strategy, strategic management, determinants of strategic development, methods of statistical induction

JEL Classification: M00, M10, M19

Introduction

Small and medium-sized entrepreneurship is an interesting phenomenon to study, particularly as they are not a homogenous group and come in many sizes, shapes and structures. These enterprises are exciting as many are highly

^{*} Veronika SVATOŠOVÁ, Mendel University in Brno, Faculty of Regional Development and International Studies, Třída Generála Píky 2005/7, 613 00 Brno, Czech Republic; e-mail: veronika.svatosova@mendelu.cz

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entrepreneurial and are often involved in exploiting new innovations (Lewy and Powell, 2005). In the Czech Republic, the role of strategy and strategic management is underestimated. Large and multinational corporations use this concept to a greater or lesser extent, but strategic management is an important part of their business activities. For small and medium-sized companies, some weaknesses have been shown in this area (Blažková, 2007, p. 12). Strategy can be recognized as an important factor that contributes to business success. Despite the potential benefit of strategy for sustaining entrepreneurship, this area has been under researched in SME literature (Karami, 2012). Strategy is the long-term objective derived to ensure business success. Strategies are link between the requirements of the market and the ability of companies to satisfy them (Amonini, 2013). Strategy is the overall concept of organizational behaviour, especially the method of organization and allocation of resources needed to achieve the intended purposes (Veber et al., 2009). According to Zich (2010), strategic continuity of level of goals has several important aspects. Defining goals must be based on the overall imagination of the development of company. In small-sized enterprises, operational management usually prevails over the strategic one, while oral communication prevails over the written one and medium-sized enterprises typically do not set out a vision or detailed strategy (Srpová and Řehoř, 2010). The main aim of this paper is therefore to identify how important the strategy and determinants of strategic development and strategic management are for the selected research sample of small and medium-sized enterprises (SMEs).

1. Theoretical Framework – Strategy in SME

The area of small and medium-sized entrepreneurship (hereinafter SME) is emerging and gaining popularity with its increasing importance across the whole business field and economy (Cravo, Becker and Gourlay, 2015). It is often argued that governments should promote SMEs because of their greater economic benefits compared to larger firms – in terms of job creation, efficiency and growth (Hallberg, 2000). North and Varvakis (2016) highlight the manifold effect of low productivity among SMEs that makes it impossible for them to expand. Research (Andries et al., 2016) has revealed that credit supply factors played the most important role in credit availability to small firms and also SMEs from Eurozone countries that were mostly affected by the crisis have been more restricted in access to finance than those from non-stressed countries. These firms are more likely to be affected by financing constraints than large, listed firms (Lamont, Polk and Saá-Requejo, 2001). Other research (Koráb and Poměnková, 2014) investigates whether small and medium-sized enterprises in the Czech

Republic, Slovakia, Poland and Hungary experienced a decline in access to external financing during the financial crisis. The authors concluded that economic recession was the driving factor of financing constraints in Slovakia and the Czech Republic. Nicolescu (2009) (taking into account internal and external variables) identifies 10 general features of the systems of SMEs: (1) low size and complexity; (2) high typological diversity; (3) intensive human dimension; (4) low degree of formalization; (5) strong interconnection of the formal and informal elements; (6) relative procedural and structural simplicity; (7) high flexibility; (8) strong entrepreneurial personalization; (9) intensive decisional centralization, and (10) relatively frequent use of the authoritarian and, respectively, participative approach.

Thus SMEs play a decisive role in emerging economies which have few multinational corporations (Segal-Horn and Faulkner, 2010). According to Duygulu et al. (2016), SMEs are increasingly compelled to develop strategies to increase their effectiveness and sustainability, in order to gain financial and performance goals. According to Šebestová and Nowáková (2013), we can distinguish companies (including both SMEs and big firms) in terms of business strategy development into three categories: (1) Companies that have a well-planned and detailed written primary strategic document (business plan); (2) Companies that have a strategic document drawn up in some written but concise form, with insufficient details in all important parts; (3) Companies that have no written strategic document; it is never clear if the strategy is kept in the mind of top management, some parts are the subject of company culture or do not exist at all.

Research (Stokes and Wilson, 2010; Analoui and Karami, 2003; Deakins and Freel, 2012; Pavlák, 2013) into successful small and medium-size enterprise provides evidence that the success of the SME depends more upon the policies it adopts than the buoyancy of the markets in which it operates. According to research (Holátová, Březinová and Kantnerová, 2015), the majority of examined Czech small and medium-sized enterprises (60%) had a formulated strategy. From the business activity point of view there is a distinctly lower frequency of formulated strategy by wood processing companies, strategy is formulated most often by trading and service enterprises. Based on tested data the most frequently followed strategy is quality and stabilization, regardless of the category by employee numbers or business activity.

The Quality Council of the Czech Republic and the Association of Small and Medium-Sized Enterprises in the CR (ASMP ČR, 2011) introduced a survey (realised in 2011) among 541 Czech SMEs focusing on their opinion on competitiveness, barriers to entrepreneurship and innovation and the use of modern management methods. Almost half of SMEs see the greatest obstacle to business

as strong competition. 98% of respondents considered strategic business management for its long-term competitiveness as important. On the other hand, 77% of SMEs actively do not know any modern method of management and almost the same percentage of SMEs do not use any modern method of management. Other research focused on typical features of project management among selected SMEs. Project management in SMEs is primarily focused on the search and acquisition of new material and financial resources. These results closely relate to strategy creation and implementation (Kozlowski and Matejun, 2016).

Other research (Skokan, Pawliczek and Piszczur, 2013) performed among 677 SME from the Czech Republic and Slovakia confirmed that bigger companies pay more attention to strategic management and more often have made a full detailed strategy (strategic document). It was also verified here that the existence of a detailed written strategy of the organization has a definite positive effect on selected business performance indicators, confirmed by 80% of evaluated performance parameters and the existence of a brief, concise, insufficiently detailed written strategy of the organization does not have a positive effect on 60% of selected business performance. Aragon-Correa et al. (2008) confirmed the existence of a direct and positive relationship between financial performance and environmental strategies concerned with the development of preventive and innovative practices and eco-efficient practices. Strategy in SME is defined as a set of (Burke and Jarratt, 2004): planned activities being carried out to achieve stated objectives, resources and capabilities being deployed to action strategic decisions, market being entered, explored and learned from, competitor being engaged and benchmarked, environments providing signals filtered through personal and entrepreneurial networks.

Critical factors in SME strategies in the form of a model are the following (Stokes and Wilson, 2010): Entrepreneurial management behaviour – opportunity identification, resource leveraging, networking, effectual decision-making, creativity and innovation; Knowledge/technical skills – product/service knowledge, market/industry understanding, IP knowledge; Personal attributes – innovative, determined, external focus, team leader; Strategic management competencies – marketing, finance, human relations; Critical internal factors – motivations; Critical external factors – market sector, barriers to entry, adjustments. Strategy is important part of strategic management that consists of research, review, assessment and selection efforts required for planning strategies; putting into action any kind of precautions within the organization in order for these strategies to be implemented and all activities related with controlling the works performed (Halici and Erhan, 2013). There are many benefits in adapting strategy and strategic management in SME (Carter and Jones-Evans, 2012; Analoui and Karami, 2003): it helps

strategists to understand the current situation of the enterprise and have a clear sense of vision and mission; it enables managers to assess the strengths and weaknesses and focus on what is strategically important; it helps to establish proper goals and prepare the means to achieve them; it allows an enterprise to be more proactive than reactive and to be ready to face any controlled and uncontrolled issues and situations.

Some SMEs still avoid using strategic management. The reasons are the following (Carter and Jones-Evans, 2012; Analoui and Karami, 2003; Frost, 2003): lack of knowledge of strategic management techniques, lack of time and/or inability to plan; SME managers may be unaware of the importance of strategic management for their business; the lack of information and knowledge about strategic planning and its advantages will lead to an inability to establish a strategic management system within their enterprises; lack of attention paid to financial indicators such as cash flow; lack of necessary managerial skills; excessive involvement in daily and routine operations; anxiety about the uncertain future; low number of employees or poor management information system.

2. Material and Methods

The main aim of the research survey is to identify how important the strategy and determinants of strategic development and strategic management are for the selected research sample of small and medium-sized enterprises. The first partial aim is to find out whether there exists a relationship between the importance of strategy and the financial position of the selected SMEs. The second partial aim is to find out whether there is a relationship between the size and type of the SME and the importance of strategy attributed by the SMEs.

The main research methods are: the method of personal polling in the form of quantitative research (i.e. questionnaire survey with the main managers or owners of the enterprises). The supplementary methods are selected methods of financial analysis (focused on profitability) based on the study of financial statements. Confirmation and rejection of the formulated hypotheses is performed by using selected methods of statistical induction (multiple regression analysis, Kruskal-Wallis test, Friedman test). Details about hypotheses formulation see next part. Research was carried out among the selected SME sample from March to June 2017. Due to the defined research objective, the nature of the research is considered to be an exploratory study, i.e. trying to better understand the potential for development of small and medium-sized enterprises in the Czech Republic. Although the research results cannot be considered as representative and generalizing, they allow the fulfilment of the objectives of the

inductive method of qualitative and quantitative research. These findings have been used for identification of determinants of strategic development as the result of my own research (Svatošová, 2016). These determinants are distinguished by three main categories: *general aspects of strategic management, internal factors of strategic development and external factors of strategic development.* These determinants have been identified based on the literature review and brainstorming with selected SMEs.

3. Research Sample

The survey of respondents included enterprises that meet the following criteria: enterprises belonging to SMEs (i.e. enterprises with 1 to 249 employees), headquarters in the Czech Republic in South Moravian Region, scope of business: CZ-NACE: Section C + D + E (Manufacturing industry), Section F (Building industry), Section G (Business industry) and Section L + S (Market services), such as the most frequent categories of SMEs based on (MPO, 2016), legal form of enterprise: joint-stock company.

Enterprises were selected with the help of the ARES database. Business activities according to CZ-NACE such as section A, B, I – accommodation, catering and restaurants, were eliminated from the research because of their different perception and management of company processes. The reason for selecting these restrictive criteria is the presumption of the stability of these enterprises and the availability of information from annual reports and financial statements. In the South Moravian Region (2016), 309,786 entities were registered in the Register of Economic Entities (CSO, 2017). By the end of 2015, the number of businesses increased by 5,057 units, or 1.7%. From the territorial point of view in the South Moravian Region, the most economic entities were located in Brno city (43.0% of the total number of subjects). The number of economic entities in the South Moravian Region was the 3rd highest among the regions and accounted for 11.0% of the whole republic. The number of joint stock SMEs in 2016 in Brno city was 1,199 (ARES, 2017). Based on restrictive criteria, the size of the research sample consisted of 766 enterprises (SMEs having 1 - 249 employees) and at the required 95% confidence interval and a maximum permissible error of 5% the representative sample was 257 enterprises (based on RAOSOFT, 2017). In summary, 601 SMEs from the selected research sample were addressed, finally 278 of them were willing to participate in the research, i.e. the representative research sample was fulfilled. The structure of the research sample involved in the research is shown in the following Table 1 (in absolute and relative values of SMEs).

Table 1
Research Sample Characterization

Characterization of enterprise	Absolute value	Relative value (%)	Micro 1 – 9 employees	Small 10 – 49 employees	Medium 50 – 249 employees
Manufacturing industry	155	56	74	53	28
Building industry	6	2.3	3	3	0
Business industry	61	19.8	35	20	6
Market services	56	21.8	23	17	16
Total	278	100	135	93	50

Source: Own work.

4. Results

The research explored whether the selected sample of SMEs had formulated a corporate strategy. Only 47% (i.e. 131 of SMEs) had a formulated corporate strategy, of which only 27.5% (i.e. 36 of them) had formulated the strategy in written form. The highest number is recorded in the building industry (66.67%) and manufacturing industry (59.35%) with any formulated corporate strategy. Medium-sized enterprises reached the highest percentage in strategy formulation (58%, from which 65.52% had a formulated strategy in written from). Unsurprisingly, the lowest score was attained by micro enterprises (37.04%, from which only 16% had a formulated strategy in written form). Details about strategy formulation are given in Table 2. The research also found out the importance and role of corporate strategy in strategic and business development (for details see Table 3). The selected SMEs consider corporate strategy in strategic development to be important (46.76%) or very important (46.40%). The highest number is reached in the case of medium-sized enterprises (52% such as very important) compared to micro enterprises (25.56%) and small enterprises (30.11%).

 $T\,a\,b\,l\,e\,2$ Formulated Strategy in Written or Non-written Form According to Size and Type of SME

	Formulated corporate strategy			Corporate strategy in written form			
	Number of SMEs	Yes (%)	No (%)	Number of SMEs	Yes (%)	No (%)	
Manufacturing industry	155	59.35	40.65	92	25.00	75.00	
Building industry	6	66.67	33.33	4	25.00	75.00	
Business industry	61	24.59	75.41	15	33.33	66.67	
Market services	56	35.71	64.29	20	35.00	65.00	
Total	278	47.12	52.88	131	27.48	72.52	
Micro	135	37.04	62.96	50	16.00	84.00	
Small	93	55.91	44.09	52	17.31	82.69	
Medium	50	58.00	42.00	29	65.52	34.48	

Source: Own work.

Table 3

Role of Strategy Business Development According to Size and Type of SME

Enterprises	Number of SMEs	None (%)	Less important (%)	Important (%)	Very important (%)
Manufacturing industry	155	1.29	6.45	49.03	43.23
Building industry	6	16.67	0.00	33.33	50.00
Business industry	61	0.00	3.28	49.18	47.54
Market services	56	3.57	3.57	39.29	53.57
Total	278	1.80	5.04	46.76	46.40
Micro	135	22.96	23.70	17.78	35.56
Small	93	16.13	23.66	30.11	30.11
Medium	50	8.00	16.00	24.00	52.00

Source: Own work.

The most common formulation of corporate strategy is in total oriented towards stabilization (28.24%), development (25.19%) and profit maximization (21.37%), (for details see Table 4). In the case of manufacturing industry the orientation is towards stabilization (33.70%), in the building industry the orientation is on quality and profit maximization, in the case of business industry it is profit maximization (40%) and in market services the strategy is oriented primarily on development (25%). According to the size of SMEs the most common strategy is stabilization (in micro enterprises 30%), development (in small enterprises 34.62%) and quality (in medium-sized enterprises 51.72%). It could be stated that in the smaller enterprise the most probable orientation of strategy is towards stabilization and development. When the enterprise is stabilized the strategy is transformed into the quality priority.

Table 4

Formulation of Corporate Strategy According to Size and Type of SME

Enterprises	Number of SMEs	Not specified (%)	Quality (%)	Stabilization (%)	Development (%)	Profit maximization (%)
Manufacturing industry	92	5.43	20.65	33.70	23.91	16.30
Building industry	4	0.00	50.00	0.00	0.00	50.00
Business industry	15	6.67	13.33	13.33	26.67	40.00
Market services	20	5.00	15.00	20.00	35.00	25.00
Total	131	5.34	19.85	28.24	25.19	21.37
Micro	50	10.00	8.00	30.00	22.00	30.00
Small	52	1.92	13.46	32.69	34.62	17.31
Medium	29	3.45	51.72	17.24	13.79	13.79

Source: Own work.

Table 5 provides the importance of the different functional and business strategies attributed by SMEs in the range 1-5 (1 – the least important, 5 – the most important), divided into the size and type of SME. On average, the highest score was reached in the case of corporate strategy (3.93), followed by production

strategy (3.61), marketing strategy (3.51) and financial strategy (2.99). On average, the least important form of strategy is considered to be HR (Human Resources) strategy (2.78). According to the type of SME, corporate strategy is considered to be the most important in market services (4.21) and manufacturing industry (3.98). Unsurprisingly, the most important strategy is considered to be production strategy in the case of manufacturing industry (4.08) and building industry (3.50). Financial strategy reached average valuation in all types of SME except market services (on average only a score of 2.57). Human resources strategy is evaluated among all types of SME as the least important, especially in the building industry (1.83) and market services (2.70). According to the size of SME, the most important is considered to be corporate strategy among small enterprises (4.09) and micro enterprises (4.01). Repeatedly, financial strategy reached an average valuation according to the size of SME. The lowest score was attained by HR strategy (2.56 in medium-sized enterprises and 2.69 in small enterprises). It could be concluded that corporate strategy and production strategy are considered to be the important forms for strategic development, while conversely the least important strategies are considered to be HR strategy and financial strategy.

Table 5 Importance of Corporate and Functional Strategies for Strategic Development (average values)

	Mean (total)	Manufacturing industry	Building industry	Business industry	Market services	Micro	Small	Medium
Corporate strategy	3.93	3.98	3.17	3.61	4.21	4.01	4.09	3.42
Financial strategy	2.99	3.08	3.00	3.13	2.57	3.00	2.91	3.10
Marketing strategy	3.51	3.10	2.50	4.03	4.18	3.54	3.51	3.42
HR strategy Production	2.78	2.74	1.83	3.07	2.70	2.93	2.69	2.56
strategy	3.61	4.08	3.50	2.80	3.21	3.76	3.43	3.56

Source: Own work.

The other part of the research focused on the importance of identified determinants for strategic development based on previous research (Svatošová, 2016). Repeatedly, individual determinants and their importance for strategic development were ranked in the range 1-5 (1 – the least important, 5 – the most important), divided into the size and type of SME. Average valuations of individual determinants are given in Table 6. The category *general aspects of strategic management* is evaluated by an average valuation of 2.79. The least important determinants are considered to be on average Situational analysis (2.12) and

Mission and vision (2.41). Conversely, the most important determinants are considered to be Corporate strategy formulation (3.58) and Strategic planning (3.14). In the category *internal factors of strategic development* (with a total average valuation of 2.73) the highest score was reached on average in Quality of management (2.98), Innovation ability (2.92), Financial condition (2.78) and Corporate culture (2.79). The least important determinant in this category is considered to be Flexibility (2.37). In the category *other external factors of strategic development* (with an average valuation of 2.78) the highest score is given in Struggle with competition (3.17) and Ability to work with legislation (2.88). Details are given in Table 6. Valuation according to size and type of SME is not expressively different from the total average valuation.

T a b l e 6 **Importance of Determinants for Strategic Development** (average values)

	Mean (total)	Manufactur- ing industry	Building industry	Business industry	Market services	Micro	Small	Medium
Gene	ral aspec	cts of stra	tegic ma	nagemen	t			
Mission and vision Situational analysis	2.41 2.12	2.50 2.13	2.00 1.67	2.30 2.26	2.34 1.96	2.54 1.99	2.32 2.20	2.24 2.30
Strategic planning	3.14	3.15	2.17	3.11	3.27	3.44	2.77	3.04
Corporate strategy formulation Strategy implementation	3.58 3.08	3.85 3.14	2.67 2.67	3.38 3.10	3.14 2.93	3.87 3.15	3.71 3.05	2.52 2.92
Strategy control	2.39	2.42	2.00	2.56	2.18	2.44	2.66	1.76
Inter	rnal facto	ors of stra	itegic dev	elopmen	t		ı	
Corporate culture Ouality of management	2.79 2.98	2.75 3.06	4.00 3.83	2.77 2.49	2.82 3.20	2.80 3.17	3.10 2.83	2.24 2.78
Marketing strategy and management	2.49	2.71	2.00	1.82	2.66	2.50	2.22	2.96
Financial strategy and management HR strategy and management	2.66 2.79	2.90 2.75	2.67 3.00	2.07 2.59	2.64 3.11	2.21 2.57	3.26 2.77	2.76 3.48
Production strategy and policy	2.59	2.80	2.33	2.28	2.38 3.25	2.30	3.11	2.40
Competitive advantage Flexibility	2.92 2.37	2.72 2.25	3.00 3.00	3.15 2.08	2.95	3.27 2.39	2.79 2.54	2.22 1.98
Innovation ability Financial condition	2.92 2.78	2.99 2.88	3.33 3.00	2.57 2.57	3.05 2.71	3.16 3.27	2.67 2.31	2.74 2.38
		actor of s						
Orientation in industry Ability to work with legislation	2.47 2.88	2.59 2.59	1.83 4.00	2.13 3.21	2.57 3.21	2.50 2.93	2.40 2.81	2.52 2.94
Negotiations with customers	2.65	2.57	3.67	2.26	3.18	2.55	2.59	3.08
Negotiations with suppliers Struggle with competition	2.71 3.17	2.78 3.45	2.67 2.83	2.11 2.74	3.14 2.89	2.33 2.67	2.90 3.66	3.36 3.60

Source: Own work.

Table 7 shows the average values for the order of importance of selected key elements for strategic development identified based on previous research (Svatošová and Svobodová, 2014). The selected SMEs should rank these key

elements from 1 to 9 according to their importance for strategic development (1 – the most important, 9 – the least important). The least important key element for strategic development is considered to be Crisis management (6.68) and Flexibility and change management (6.22). Conversely, the most important key element is considered to be Strategic thinking (3.39) and Innovation product (4.18). According to the type and size of SME, the average valuations do not differ from the total average valuation.

Table 7

Order of Importance of Selected Key Elements for Strategic Management

	Mean (total)	Manufactur- ing industry	Building industry	Business industry	Market services	Micro	Small	Medium
Innovation product	4.18	3.95	5.17	4.43	4.46	4.09	4.21	4.46
Customer service	4.67	4.50	4.67	4.82	4.95	4.61	4.64	4.88
Key staff	4.24	4.33	3.67	4.33	3.98	4.28	4.14	4.38
Corporate culture	4.52	4.71	3.17	4.49	4.16	4.59	4.43	4.50
Strategic thinking	3.39	3.65	2.50	3.07	3.11	3.56	3.15	3.24
Financial management	5.60	5.54	6.33	5.49	5.79	5.59	5.71	5.38
Marketing management	5.45	5.57	5.50	5.28	5.29	5.48	5.47	5.30
Flexibility and change management	6.22	6.12	6.83	6.26	6.36	6.14	6.41	6.08
Crisis management	6.68	6.52	7.17	6.84	6.91	6.66	6.71	6.70

Source: Own work.

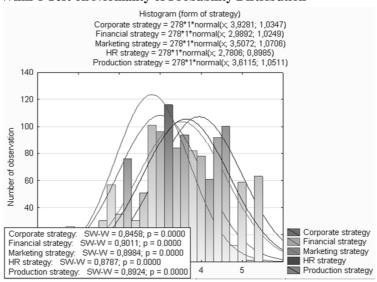
5. Hypotheses Formulation and Verification

Subsequently, hypotheses are formulated and verified to support the main purpose of the whole survey (see Table 8). Verification of hypotheses is performed at the significance level $\alpha=0.05$. Confirmation or rejection of the hypotheses is decided on the basis of a comparison of the p-value, which is the minimum level of significance for which the zero hypothesis can be rejected.

Using the Shapiro-Wilk test, Figure 1 confirmed that the selection does not come from the normal probability distribution at a significance level $\alpha=0.05$, since $p \leq \alpha$. Because the normality condition is not met, scatter analysis and correlation tests cannot be performed. For hypothesis testing, these nonparametric tests are selected: multiple regression analysis, Kruskal-Wallis test, and Friedman test. Verification of the hypotheses is carried out by using the Statistica program.

Details of the verification of the hypotheses are described below which support fulfilling the main purpose of this survey (see Table 8).

Figure 1
Shapiro-Wilks's Test on Normality of Probability Distribution



Source: Own work.

Table 8 **Hypotheses Formulation and Verification**

Hypothesis	Hypothesis formulation	Method of hypothesis verification	Results of hypothesis verification
H1	There is a relationship between ROE and ROA and the importance of corporate and functional strategies for strategic development	Multiple Regression Analysis	Not rejected
H2	There is a relationship between the size and type of SME and determinants of strategic management and strategic development	Kruskall-Wallis ANOVA	Rejected
Н3	There is a relationship between the size and type of SME and the importance of corporate strategy and functional strategy for strategic development.	Kruskall-Wallis ANOVA	Rejected
H4	There is a relationship between type and size of SME and the role of strategy for strategic development.	Kruskall-Wallis ANOVA	Not rejected
Н5	All determinants of strategic development are equally important for SMEs under review	Friedman's test	Rejected
Н6	Key elements of strategic management are equally important for SMEs under review	Friedman's test	Rejected

Source: Own work.

The hypothesis H1 is verified with the help of multiple regression analysis. The purpose of this hypothesis is to explore whether there is any relationship between the importance that SMEs attribute to strategy for business and strategic

development and selected indicators of economic prosperity. The indicators ROA a ROE were selected because they are considered as the best representative indicators for measuring economic results and performance of the company. This hypothesis was tested with the help of multiple regression analysis (for results see Tables 9 and 10). In the case of ROA, the indicator is p = 0.40611 and in the case of ROE, the indicator is p = 0.40611, this means that H1 is statistically important. We can conclude that there is a relationship between ROE and ROA and the importance of corporate and functional strategies for strategic development, i.e. the value of profitability of the SME has an influence on posture to the importance of corporate and functional strategy.

Table 9 Multiple Regression Analysis for ROA

		Regression Results with Dependent Variable: ROA R = 0.13566685 R2 = 0.01840549 Modified R2 = 0.00036148 F (5.272) = 1.0200 p < 0.40611 . Error estimate: 2566.7						
	b*	b* Standard error from b Standard error from b b error from b p-value						
Absolute value			1471.956	1104.555	1.33262	0.183771		
Corporate strategy	0.014179	0.064045	35.180	158.900	0.22139	0.824951		
Financial strategy	-0.119667	0.060418	-299.741	151.335	-1.98064	0.048639		
Marketing strategy	0.019636	0.062611	47.085	150.136	0.31362	0.754052		
HR strategy	-0.047083	-0.047083 0.061202 -134.527 174.868 -0.76931 0.442379						
Production strategy	-0.038545	0.065241	-94.140	159.340	-0.59081	0.555138		

Source: Own work in Statistica program.

Table 10 Multiple Regression Analysis for ROE

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	Regression Results with Dependent Variable: ROE R = 0.13589441 R2 = 0.01846729 Modified R2 = 0.00042441 F (5.272) = 1.0235 p < 0.40405 . Error estimate: 2583.2						
	b*	b* Standard error from b* Standard error from b b p-value					
Absolute value Corporate strategy Financial strategy Marketing strategy	0.013581 0.064043 33.912 159.922 0.21206 0.832222 -0.119749 0.060416 -301.884 152.309 -1.98205 0.048480 0.019890 0.062609 48.003 151.101 0.31769 0.750964						
HR strategy Production strategy	-0.047633 -0.038212	0.061200 0.065239	-136.978 -93.929	175,992 160,365	-0.77832 -0.58572	0.437059 0.558550	

Source: Own work in Statistica program.

The hypothesis H2 is generated as a result of previous research (Svatošová, 2016), in which three main categories of determinants for strategic and business development were identified. This hypothesis is tested with the help of the Kruskal-Wallis ANOVA. For the category *General Aspects of Strategic*

Management and the relationship with type of SME, all the factors in this category are statistically important except Corporate strategy formulation. In this category, we can conclude that Corporate strategy formulation is not dependent on the size and type of SME. The example of the Kruskal-Wallis ANOVA for situational analysis is given in Table 11. Finally, we can conclude that there is no relationship between the type of SME and general aspects of strategic management.

Table 11 Kruskal-Wallis ANOVA for Situational Analysis

	Kruskal-Wallis ANOVA based on order; Situational analysis (Determinants of strategic development) Independent (collation) variable: Type of SME Kruskal-Wallis test: H (3, N = 278) = 7.415543 p = 0.2181					
Dependent: Situational analysis	Number of valid Summary of order Average order					
Manufacturing industry	155	21 860.00	141.0323			
Building industry	6 600.00 100.0000					
Business industry	61 9 187.00 150.6066					
Market services	56	7 134.00	127.3929			

Source: Own work in Statistica program.

For the category General Aspects of Strategic Management and the relationship with size of SME, Corporate strategy formulation and Strategic control are statistically unimportant, therefore we can conclude that there is no relationship between the size of SME and general aspects of strategic management. For the category Internal factors of strategic development and the relationship with type of SME, only the factors HR strategy and management and Financial condition are statistically important for this hypothesis (for an example of the tested hypothesis for Financial condition see Table 12). We can conclude that there is no relationship between the type of SME and internal factors of strategic development.

Table 12 Kruskal-Wallis ANOVA for Financial Condition

	Kruskal-Wallis ANOVA based on order; Financial condition (Determinants of strategic development) Independent (collation) variable: Type of SME Kruskal-Wallis test: H (3, N = 278) = 2.847608 p = 0.4157						
Dependent: Situational analysis	Number of valid Summary of order Average order						
Manufacturing industry	155 22 528.50 145.3452						
Building industry	6 937.50 156.2500						
Business industry	61	7 756.00	127.1475				
Market services	56	7 559.00	134.9821				

Source: Own work in Statistica program.

For the category *Internal factors of strategic development and the relation-ship with size of SME*, only Corporate culture in this category is statistically important for this hypothesis. We can conclude that *there is no relationship between the size of SME and internal factors of strategic development*. For the category *Other external factors of strategic development and the relationship with type of SME*, all the factors in this category are statistically unimportant (for details see Table 13). We can conclude that *there is no relationship between the type of SME and other external factors of strategic development*.

Table 13 Kruskal-Wallis ANOVA for Struggle with Competition

Kruskal-Wallis ANOVA based on order; Struggle with competition (Determinants of strategic development) Independent (collation) variable: Type of SME Kruskal-Wallis test: H (3, N = 278) = 19.48762 p = 0.0002			
mber of valid	Summary of order	Average order	
155 6 61	24 388.00 723.50 6 639.50	157.3419 120.5833 108.8443 125.5357	
	155 6	Kruskal-Wallis test: H (3, N = 278) = 19.4876 umber of valid Summary of order 155 24 388.00 6 723.50 61 6 639.50	

Source: Own work in Statistica program.

For the category Other external factors of strategic development and the relationship size type of SME, all the factors in this category are statistically unimportant. We can conclude that there is no relationship between the size of SME and other external factors of strategic development. From all of the above we can conclude that there is no relationship between the size and type of SME and determinants of strategic development.

The hypothesis H3 is tested with the help of the Kruskal-Wallis test in the case of the type of SME (manufacturing, building, business industry and market services). Table 14 shows the test results for corporate strategy as an example, for which the p-value is 0.0013. For financial strategy p=0.0027, for marketing strategy p=0.0000, for HR strategy p=0.0047. The H3 hypothesis has been rejected because in all cases $p \le \alpha$. It can be therefore stated that there is no relationship between the type of SME and the importance of corporate and functional strategy for strategic development.

Hypothesis H3 also tested the relationship between the size of SME and the importance of corporate and functional strategy for strategic development with the help of the Kruskal-Wallis test, for which p=0.0042 (corporate strategy), p=0.5597 (financial strategy), p=0.8182 (marketing strategy), p=0.0088 (HR strategy), p=0.1579 (production strategy). This part of the hypothesis was

also rejected, because $p \le \alpha$. An example of this calculation is given in Table 15 (for marketing strategy). We can state that there is no relationship between the size and type of SME and the importance of corporate strategy and functional strategies for strategic development.

Table 14 Kruskal-Wallis ANOVA for Corporate Strategy

	Kruskal-Wallis ANOVA based on order; Corporate strategy Independent (collation) variable: Type of SME Kruskal-Wallis test: H (3, N = 278) = 15.66459 p = 0.0013			
Dependent: Corporate strategy	Number of valid Summary of oro		Average order	
Manufacturing industry	155	22 322.50	144.0161	
Building industry	6	490.50	81.7500	
Business industry	61	6 920.00	113.4426	
Market services	56	9 048.00	161.5714	

Source: Own work in Statistica program.

Table 15

Kruskal-Wallis ANOVA for Marketing Strategy

	Kruskal-Wallis ANOVA based on order; Marketing Strategy Independent (collation) variable: Type of SME Kruskal-Wallis test: H (2, N = 278) = 0.4012829 p = 0.8182			
Dependent: Marketing strategy	Number of valid	Summary of order	Average order	
Manufacturing industry Building industry Business industry	135 93 50	18 885.50 13 216.00 6 679.50	139.8926 142.1075 133.5900	

Source: Own work in Statistica program.

The hypothesis H4 was also tested using the Kruskal-Wallis ANOVA. In the case of the type of SME and the role of strategy for strategic development (no importance, less important, important, and very important) the p-value was 0.3916 in all observed cases (for details see Table 16). In the case of size of the SME and the role of strategy for strategic development the p-value is 0.3679. Hypothesis H4 was not rejected because $p > \alpha$, i.e. there is a relationship between the type and size of SME and the role of strategy for strategic development.

To verify the H5 hypothesis, the Friedman test is used, which is tested at a significance level of $\alpha = 0.05$. After comparing the level of significance α with the p-value of 0.00168 (see Table 17), the zero hypothesis was rejected as $p \le \alpha$. It can be argued that not all determinants of strategic development are equally important for the SMEs.

Table 16 Kruskal-Wallis ANOVA for No Importance of Strategy for Strategic Development

	Kruskal-Wallis ANOVA based on order; No importance Independent (collation) variable: Type of SME Kruskal-Wallis test: H $(3, N = 4) = 3.0000 p = 0.3916$			
Dependent: No importance	Number of valid	Summary of order	Average order	
Manufacturing industry	1	3.50000	3.50000	
Building industry	1	2.00000	2.00000	
Business industry	1	1.00000	1.00000	
Market services	1	3.50000	3.50000	

Source: Own work in Statistica program.

Table 17 Friedman's ANOVA (Determinants of Strategic Development)

	Friedman's ANOVA and Kendall Matching Coefficient (Determinants of strategic development) ANOVA chi-kv. $(N=278,sv=20)=444.7892p=0.00168$ Coefficient of Conformity = 0.08000 Avg. R = 0.07668			
Variable	Average order	Summary of order	Mean	Standard deviation
Mission and vision	9.12050	2 535.500	2.413669	0.989891
Situational Analysis	7.76439	2 158.500	2.115108	0.863032
Strategic planning	12.94964	3 600.000	3.143885	1.177780
Corporate strategy formulation	15.05576	4 185.500	3.579137	1.054060
Strategy implementation	12.67266	3 523.000	3.075540	1.170352
Strategy control	8.98201	2 497.000	2.392086	0.942886
Corporate culture	11.41367	3 173.000	2.794964	1.176351
Quality of management	12.00540	3 337.500	2.982014	1.238536
Marketing strategy and management	9.76799	2 715.500	2.489209	1.145494
Financial strategy and management	10.68885	2 971.500	2.658273	1.178226
HR strategy and management	11.29676	3 140.500	2.794964	1.145251
Production strategy and policy	10.23741	2 846.000	2.589928	1.191504
Competitive advantage	11.61151	1.61151 3 228.000 2.924460 1.17		1.176505
Flexibility	9.14209	2 541.500	2.366906	1.144088
Innovation ability	11.78237	3 275.500	2.917266	1.096593
Financial condition	11.16007	3 102.500	2.780576	1.201105
Orientation in industry	9.49640	2 640.000	2.471223	1.096877
Ability to work with legislation	11.56475	3 215.000	2.884892	1.202159
Negotiations with customers	10.36871	2 882.500	2.651079	1.212383
Negotiations with suppliers	10.73561	2 984.500	2.705036	1.123772
Struggle with competition	13.18345	3 665.000	3.165468	1.243595

Source: Own work in Statistica program.

The hypothesis H6 derives from previous research activities about strategic management in SME (Svatošová and Svobodová, 2014). To verify the H6 hypothesis, the Friedman test is used the basis for this hypothesis is evaluating the order of importance of selected key elements of strategic management for SME. After comparing the level of significance α with the p-value of 0.0000 (see Table 18), the zero hypothesis was rejected as $p \le \alpha$. It can be argued that *key elements of strategic management are not equally important for the SMEs*.

Table 18
Friedman's ANOVA (Order of Importance Selected Determinants)

	Friedman's ANOVA and Kendall Matching Coefficient (Order of importance) ANOVA chi-kv. (N = 278, sv = 8) = 333.2620 p = 0.0000 Coefficient of Conformity = 0.14985 Avg. R = 0.14678			
Variable	Average order	Summary of order	Mean	Standard deviation
Innovation product	4.190647	1 165.000	4.183453	2.779271
Customer service	4.679856	1 301.000	4.665468	2.129294
Key staff	4.258993	1 184.000	4.244604	1.986749
Corporate culture	4.532374	1 260.000	4.517986	1.959343
Strategic thinking	3.388489	942.000	3.388489	2.876547
Financial management	5.604317	1 558.000	5.597122	2.200162
Marketing management	5.449640	1 515.000	5.449640	2.786504
Flexibility and change				
management	6.215827	1 728.000	6.215827	2.402654
Crisis management	6.679856	1 857.000	6.679856	2.053884

Source: Own work in Statistica program.

Discussion and Conclusion

The area of small and medium-sized entrepreneurship forms all business markets and is a significant driver for developing the economy. Theory and practice show that a key factor of long-term business success is based on creating and implementing a unique and competitive strategy. However, this factor is highly underestimated among small and medium-sized enterprises. Corporate strategy is formulated only by 47% of SMEs, of which only 27.5% formulated the strategy in written form. Based on hypotheses formulation and verification, we can conclude that the values of profitability of the SME has an influence on posture to the importance of corporate and functional strategies, i.e. formulating and implementing strategy has a positive effect on the economic results of the SME. Although most SMEs are aware of the importance of strategy for strategic development, only a minority of them have any formulated strategy. This finding could be a possible reason for the impossibility of SMEs for other strategic development. The selected SMEs consider corporate strategy in strategic development to be important or very important. We can conclude that the size of the SME has a direct impact on strategy formulation – the bigger the enterprise, the higher the probability that strategy is formulated. It could be also stated that the smaller the enterprise, the higher the probability of strategy orientation on stabilization and development. When an enterprise is stabilized the strategy is transformed into the quality priority. On average, the highest score was reached in the case of corporate strategy, followed by production strategy, marketing strategy and financial strategy. On average, the least important form of strategy is

considered to be HR strategy. It may be concluded that corporate strategy and production strategy are considered to be the most important forms for strategic development, while on the other hand the least important strategies are considered to be HR strategy and financial strategy. We can also conclude that there is no relationship between the size and type of SME and the importance of corporate strategy and functional strategies for strategic development. The research also found that there is a relationship between the type and size of SME and the role of strategy for strategic development. Another part of the research focused on the importance of identified determinants for strategic development. The research also found that there is no relationship between the size and type of SME and the importance of determinants for strategic development. Although all determinants are equally important for other strategic development, the selected SMEs do not consider them as equally important.

On average, the least important key elements for strategic development are considered to be crisis management and flexibility and change management. However, the most important key element is considered to be strategic thinking and innovation product. Although the key elements for strategic development should be considered as equally important, based on the hypothesis verification it can be argued that the key elements of strategic management are not equally important for the SMEs.

Finally, we can conclude the research confirmed strategy is considered among SMEs as important the individual components of strategy and strategy management are not considered as important and are underestimated. The defined determinants of strategic development are not considered as equally important too. However, the same priority for each components and elements of strategy and strategic management is a key factor for long-term strategic development in SME, this area is deeply underestimated. Research also confirmed the formulation of strategy has a positive effect on growing economic performance. We can conclude in practice that the SMEs do not use comprehensive insight in implementing principles of strategic management and practically no strategic approach to the process of strategic management is implemented. The priority impact of strategy formulation and implementation is not given among SMEs. This may be a decisive factor of SMEs for their stagnation and impossibility to be developed. It is therefore recommended a long-term and tight cooperation of business sphere and academic field on strong strategic management principles formulation and implementation in SMEs including unique and competitive strategy that enables strategic growth and strengthening the strategic position of SMEs, i.e. explaining and implementing the same priority focus on defined determinants of strategic development and components and key elements of strategic

management specified for the area of SME. It is also important to propose efficient path and model that will enable realize main purpose and idea of strategy and strategic management in SME into practice. The other research activities focuses on strategic management model in SME proposal and its simulation and verification into practice.

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