

Strategic Entrepreneurship in Russia during Economic Crisis

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Abstract

This paper aims to explore the relationship between different components of strategic entrepreneurship (particularly, entrepreneurial mindset, innovation, managing resources strategically, and competitive advantage) and SME performance during the economic crisis. To test the theoretical model, we utilize data collected through a survey of Russian SMEs during the period of economic crisis and subsequent stagnation in 2015–2016. The findings

suggest that the entrepreneurial component of strategic entrepreneurship is positively related to SME performance during the economic crisis; moreover, a significant negative link was found between SME performance of firms outside the Central Federal Region and an interaction term of Entrepreneurial Component and Competitive Advantage that suggests the need to choose only one type of action and not to perform both simultaneously.

Keywords: strategic entrepreneurship; innovation; entrepreneurial mindset; managing resources strategically; competitive advantage; small and medium enterprise; performance; economic crisis; Russia.

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The negative impact of economic crises on businesses, especially small and medium ones, manifests itself in reduced growth rates and an increased number of bankruptcies. The introduction of economic and political sanctions against Russia in mid-March 2014 resulted in the reduction of trade between Russian companies and international partners and created the need to substitute imports with similar domestic products. The crisis has led to the simultaneous decline of a whole range of macroeconomic indicators affecting various industries, regions, and companies in different ways. In particular, according to Rosstat,¹ the GDP growth rate declined by 3.7 percentage points in 2015 and subsequently stagnated at 0.3% in 2016. The national currency depreciated by almost 50%, against the background of halving oil prices. Inflation soared to 12.9% in 2015 (5.38% in 2016) and unemployment rose to 5.6 % in 2015 (5.4% in 2016), which led to a major decline in investments and people's income. The crisis has significantly changed the needs for organizational competencies, and the overall competitive environment.

Managing small and medium enterprises (SMEs) becomes a serious challenge during crisis periods, since companies doing business on a much smaller scale than large firms face problems with attracting financial and human resources [Carreira, Silva, 2010; Schmitt et al., 2010]. SMEs' share in Russian GDP is just 21.9% while the average figure for Europe ranges between 50–60%². However, even under stable conditions, Russian SMEs tend to experience a serious shortage of the resources they need to accomplish their objectives [Chepurensko, 2015], so the recession has only aggravated the situation further.

Finding new approaches to managing companies in a turbulent economic situation therefore becomes critically important. A possible option is advancing strategic entrepreneurship (SE) by “integrating the entrepreneurial (identifying business opportunities) and strategic (identifying competitive advantages) perspectives to plan and implement value creation actions” [Hitt et al., 2001, p. 481]. SE implies combining advantage-seeking and opportunity-seeking [Ireland et al., 2003]. The issue of coordinating entrepreneurial actions (which create new opportunities) with strategic actions aimed at strengthening competitive advantages at the individual firm level has been little studied [Hitt et al., 2007].

The goal of this study is to identify and assess the connections between various SE components (such as entrepreneurial mindset, innovation, strategic management of resources, and competitive advantages) and the activities of Russian SMEs during economic crises. A configurational approach [Wiklund, Shepherd, 2005] was applied for this purpose, which helps one

understand which combination of the above components increases SE benefits for a company. The objectives of the study included the following: 1) analyze the conceptual basics of SE and approaches to their operationalization; 2) propose and theoretically substantiate hypotheses on the nature of the relationship between various SE components and companies' performance during economic crises; 3) describe the methods of the study; 4) empirically test the hypotheses; 5) describe and analyze the obtained results. Data collected through a survey of SMEs conducted between September 2015 and February 2016 was used to empirically test the suggested hypotheses. A total of 614 firms operating in various industries and various Russian Federal Districts were included in the final sample.

The Theoretical Model and Hypotheses of the Study

The Role of SE in Company Operations

The SE concept originates in both economics [Knight, 1921; Schumpeter, 1942] and management theory [Hitt et al., 2001]. A number of studies were devoted to analyzing the relationship between strategic management and entrepreneurship. It was mentioned in the special issue of the *Strategic Management Journal* for the first time in 2001, where this concept was defined as a scientific theory at the junction of entrepreneurship and strategic management [Hitt et al., 2001; Ivvonen, Shirokova, 2016]. The entrepreneurial aspect of SE is aimed at identifying business opportunities and the potential for implementing them, while the strategic one is identifying and making use of the opportunities most likely to create sustainable competitive advantages [Hitt et al., 2001]. The basic SE-related studies, and recent bibliometric research show that SE fosters mutual support and interdependence between entrepreneurship and strategic management [Hitt et al., 2002]. This includes studying the sources of opportunities, the processes of identifying, assessing, and making use of opportunities, and the circle of people who identify, assess, and make use of them [Shane, Venkataraman, 2000, p. 218].

At the initial stages of venture creation and launch, entrepreneurs often have to do more with less and use what abilities and resources they have at their disposal with a minimum of capital and a maximum of ingenuity and improvisation [Harrison et al., 2004; Miner et al., 2001].

Strategy is often likened to a process of planning that places the emphasis on improved decision-making brought about by managing resources within a framework of structures, systems and processes. Strategy provides the main advantage that differentiates firms

¹ For the details see: www.gks.ru, accessed 18.04.2019.

² For the details see: <http://ec.europa.eu/eurostat>, accessed 18.04.2019.

and gives them organizational superiority [Darling et al., 2007]. It creates a context where firms can make use of the identified opportunities thus contributing to enhanced specialization and obtaining a competitive advantage. However, entrepreneurial firms risk focusing excessively on opportunity recognition and risk-taking activities; finding new opportunities frequently involves serious risks lacking a balanced strategic focus can undermine the benefits and value entrepreneurial initiatives might generate. Excessive formalization of companies' organizational activities is also fraught with undesirable consequences. This limits the scope for rapid adaptation to changes and sensitivity to revolutionary ideas [DeSimone, Hatsopoulos, 1995], that is, it ultimately hinders one from reaping the full benefits of entrepreneurial activities. Balancing entrepreneurship and strategic management then can help firms avoid the trap of excessive risk-taking activities, while preventing inertia caused by iteratively adding to present advantages.

Earlier studies have also noted the interconnections between strategic management and entrepreneurship. Covin and Slevin (1989), following Miller's (1983) conception of an entrepreneurial firm, define strategic posture as a firm's competitive orientation on a spectrum from conservative to entrepreneurial. For example, the "entrepreneurial firm" theory [Miller, 1983] defines strategic position as a competitive orientation ranging from conservative to entrepreneurial [Covin, Slevin, 1989]. Lumpkin and Dess [Lumpkin, Dess, 1996] subsequently developed the construct of entrepreneurial orientation. The concept of entrepreneurial orientation describes companies' behaviour in terms of their innovation, proactivity, and willingness to take risks. More recent studies suggested the term "entrepreneurial strategy" [Meyer, Heppard, 2000], while strategic management was seen as providing the context for entrepreneurial activities [Ireland et al., 2001]. An analysis of the relationship between the intensity of entrepreneurship and five specific strategic management techniques revealed that the former was positively affected by focusing on the searching, flexibility, and planning locus, combined with strategic control [Barringer, Bluedorn, 1999]. Therefore the relationship between strategic management and entrepreneurial activity has emerged in an interrelated way over many years, but has only now been crystallised into a construct of SE.

Strategic management theory, epitomised by the RBV, emphasises the creation of a unique resource position for the firm to create advantages that allow it to compete effectively into the long term (Barney, 1991; Wernerfelt, 1984). The first empirical studies which have directly analysed the correlation between SE and companies' performance were published in 2009. Only a relatively small number of such studies exist (Table 1), which can be explained, among other things, by the problems with operationalizing the SE concept. Most of the studies are quantitative, based on SME statistics

from various countries. The relationship between SE and companies' productivity is often seen through the prism of external and internal conditions, and specific features of their activities. In particular, studies focusing on the role of the external environment consider factors such as national culture [Yu, Hu, 2015] and the level of the country's institutional development [Awang et al., 2015; Bjørnskov, Foss, 2013; Obeng et al., 2014; Shirokova et al., 2013]. For example, the cultural traits of Malaysian entrepreneurs, in particular, their willingness to take risks, positively affect the successful performance of the country's SMEs [Yu, Hu, 2015]. The results of a Ghanaian study [Obeng et al., 2014] confirm that SE contributes to businesses' productivity in developing economies. Data on Russian SMEs [Shirokova et al., 2013] does not show a statistically significant correlation of this kind, but still confirms that certain components of SE do play a positive role. Interactions with other firms over the course of joint innovation activities was also considered among the relevant external factors [Löfgren, 2014; Meuleman et al., 2009].

A few studies were specifically focused on the role internal factors play in the relationship between SE and business productivity [Sirén et al., 2012; Steffens et al., 2009]. It was established that strategic training directly affects this relationship [Sirén et al., 2012]. Knowledge spillovers, that is, its unintended dissemination caused by the specific qualities of this economic benefit and resource, promotes the development of SE (companies' innovation activity) and contributes to the even more efficient use of their current advantages, which leads to improved performance indicators [Kotha, 2010].

Also, the correlation between SE and companies' performance was analyzed in various sectors of the economy [Luke et al., 2011; Patzelt, Shepherd, 2009]. A positive correlation was discovered in the public [Luke et al., 2011], education [Patzelt, Shepherd, 2009], and tourism [Carlbäck, 2012] sectors. The main results of the relevant studies are summarized in Table 1.

Thus, SE implies simultaneously taking entrepreneurial and strategic actions to create value. Kyrgidou and Petridou [Kyrgidou, Petridou, 2011] include an entrepreneurial mindset and innovation in the entrepreneurial component of SE and the strategic management of resources and competitive advantage in the strategic one. *Entrepreneurial mindset* suggests focusing on creativity and modernization, the conscious effort to find, identify, and implement new opportunities [Benedict, Venter, 2010; Ireland et al., 2003]. *Innovation* allows companies use the identified opportunities in radically new, revolutionary ways, thus significantly changing the very competitive environment in the industry [Danneels, 2002; Kumaraswamy et al., 2018]. The above means that we use the term "innovation" broadly, referring to product and organizational innovations alike. *The strategic management of resources* means structuring, grouping, and reallocating the resources available to the company [Kyrgidou, Petridou,

Table 1. Empirical Studies of Correlation between SE and Company Performance

| Authors | SE components | Method | Context | Main results |
|---------------------------|--|------------|---|---|
| [Meuleman et al., 2009] | Identifying opportunities for growth to create and maintain competitive advantages. | Survey | 238 companies, UK | The more actively a company works with private investors, the more rapidly it grows. |
| [Steffens et al., 2009] | Finding new areas, advancing existing ones. | Survey | 2,662 companies, Australia | Though young companies do find growth opportunities, it is hard for them to identify and make full use of the ones most relevant for their businesses. |
| [Patzelt, Shepherd, 2009] | Identifying and making use of opportunities by developing new products and services, taking strategic action to accomplish development objectives. | Survey | 98 academic entrepreneurs, Germany | Combining internal business policies, among other things to secure financial support, improves expected SE results at universities. |
| [Kotha, 2010] | Identifying opportunities and advantages. | Case study | Four aviation companies, US | Knowledge exchanges increase the awareness of new opportunities, the potential to develop competitive advantages, and to ultimately improve company performance. |
| [Luke et al., 2011] | Combining innovations, finding opportunities for growth. | Case study | 12 state-owned companies, New Zealand | Advancing SE in state-owned companies increases their profits. |
| [Sirén et al., 2012] | Finding new areas, advancing existing ones. | Survey | 206 IT companies, Finland | Making use of existing opportunities and finding new ones does not directly affect companies' performance, strategic training fully promotes the above correlation. |
| [Carlbäck, 2012] | Finding new areas, advancing the existing ones. | Case study | 12 private hotels, Sweden | The companies value their independence, but at the same time it does not allow the hotels to apply advanced technological solutions and loyalty schemes. Membership in major hotel chains is a way to overcome these limitations, i.e., it increases the hotels' efficiency and revenues. |
| [Bjørnskov, Foss, 2013] | R&D, process, management, and organizational innovations, mobilizing and coordinating resources. | Survey | 140 entrepreneurs, OECD member states | SE positively affects overall productivity. Institutions weaken this correlation since they increase uncertainty and transaction costs entrepreneurs face. |
| [Shirokova et al. 2013] | Identifying new opportunities (entrepreneurial focus and culture), making use of existing ones (investing in internal resources and knowledge-based assets, organizational changes, training). | Survey | 500 SMEs, Russia | Identifying new opportunities and making use of existing ones positively affects companies' performance. The latter's correlation with SE turned out to be insignificant. |
| [Löfgren, 2014] | Making use of existing competitive advantages, identifying potential opportunities. | Survey | 188 SMEs, Sweden | Joint innovation promotes and strengthens the correlation between SE and companies' international growth. |
| [Obeng et al., 2014] | Identifying and making use of value creation opportunities. | Survey | 441 entrepreneurs, Ghana | There is a positive correlation between SE and small companies' growth. |
| [Yu, Hu, 2015] | Finding new areas, advancing existing ones. | Case study | One hospitality SME (HoReCa), Taiwan | Cognitive entrepreneurial processes (decision-making, opportunity assessment) help identify opportunities and promote growth. |
| [Sun, 2015] | Sensitivity to new opportunities, finding resources, strategic training. | Case study | Four railway companies and affiliates, China | The effect of "entrepreneurial state" on the emergence of SE is manifested in the creation of technological innovations (as opposed to imitating them), which improves businesses' performance. |
| [Awang et al., 2015] | Entrepreneurial mindset, combining the search for new opportunities with the use of existing ones, ongoing innovation. | Survey | 46 SMEs, Malaysia | Malaysian entrepreneurs' traits, such as risk tolerance, striving for success, the ability to efficiently deal with problems, and the willingness to learn positively affect the correlation between SE and companies' performance. |
| [Kantur, 2016] | Sustainable regeneration, organizational rejuvenation, strategic modernization, redefining domains. | Survey | 114 production (automotive and food industry) and service companies (telecommunications, banking), Turkey | SE is positively connected with company performance. |

Source: composed by the authors.

2011]. Finally, *competitive advantages* allow companies to secure a market position protected from action by the competition by using their existing advantages in combination with newly found opportunities [Ireland et al., 2003; Maury, 2018].

The Entrepreneurial Component of SE and SMEs' Performance during Economic Crises

Most of the empirical studies on SE were based on data for developed (i.e. sustainable) or emerging markets [Boone et al., 2013; Dhliwayo, 2014; Ireland, Webb, 2007; Ketchen et al., 2007; Löfgren, 2014; Meuleman et al., 2009; Mihalache et al., 2014], which puts into doubt this concept's applicability to developing markets during economic crises [Knudsen, Lien, 2016].

A crisis is frequently defined as a situation of an uncertain external environment which poses a serious threat to the organization's survival [Kunc, Bhandari, 2011; Pearson, Clair, 1998], while the reasons for and consequences of this situation remain unpredictable [Dutton, 1986]. The time for finding an adequate response is limited and the results of the decisions made may turn out to be favorable or unfavorable [Grewal, Tansuhaj, 2001; Marcus, Goodman, 1991]. Economic crises stand out among various others such as those caused by political developments, anthropogenic disasters, or mismanagement. They are manifested in the acutely negative dynamics of a whole range of economic indicators, from gross domestic product, inflation, and unemployment to financial market indices, currency rates, and so on. Economic crises affect various industries, regions, and companies differently [Connaughton, Madsen, 2009]. They radically change the requirements for organizational competencies and the very competitive environment [Knudsen, Lien, 2016]. Along with a sharp decline in demand and the growth rate [Pearson, Clair, 1998], companies frequently encounter risks and uncertainty in their strategic planning, which is fraught with reduced market share and profit margins. Successfully managing a company during a crisis period, which is a serious challenge for any company [Schmitt et al., 2010], requires particular skills from SMEs whose situation is further aggravated by the "liability of smallness" effect [Aldrich, Auster, 1986] which makes it harder for such firms to survive, and increases the likelihood of their bankruptcy [Aldrich, Auster, 1986; Mellahi, Wilkinson, 2004]. In particular, they face problems with attracting financial capital [Carreira, Silva, 2010], have to compete for workers with large companies, and face high administrative costs [Aldrich, Auster, 1986]. Plus, SMEs are more dependent on external resources [Baum, Oliver, 1996] and become hostages to the modest scale of their operations [Audretsch, Mahmood, 1994].

However, crises also open potential opportunities for SMEs [Beliaeva et al., 2018; Soininen et al., 2012]. During crisis periods small companies may find it easier to operate, offer new products and services due to their inherent maneuverability and find they can rapidly

react to the emergence of new opportunities [Alonso-Almeida et al., 2015; Hodorogel, 2009; Laskovaia et al., 2019]. Such firms have the flexibility that allows them to quickly reallocate resources, restructure processes, adjust prices, and adapt products to the crisis conditions [Reid, 2007]. They are more willing to take risks and invest to improve their performance since they are aware that all their current achievements are temporary by default. A survey of US software companies conducted during the crisis of 2001-2003 revealed that in such a situation, young small firms chose a new product development strategy over cost-cutting much more often than larger companies did [Latham, 2009]. A study of small companies' behavior in the Italian Emilia-Romagna region showed that during a period of economic recession they tended to be more innovative than larger players [Antonionioli et al., 2010]. Those who focused on developing new products and finding new markets in most cases dealt with crises better than others. A survey of 172 Turkish companies [Köksal, Özgül, 2007] yielded similar results: firms focused on product development to secure new market niches tended to be more productive during periods of recession than their competitors. All this allows one to suggest the first hypothesis:

Hypothesis 1: *During an economic crisis, a positive correlation is observed between the entrepreneurial component of SE and SME performance.*

The Strategic Component of SE and SME Performance during Economic Crises

The strategic component of SE is focused on making use of competitive advantages and on the strategic management of available resources [Kyrgidou, Petridou, 2011]. Effective strategic action is seen as the key to making the company competitive [Makadok, Coff, 2002; Luke et al., 2011], while maintaining competitiveness (and the profit margins) requires the efficient management of corporate resources. In a situation of severe limitations SMEs have to improvise to find new or allocate available resources, which makes them less transparent to potential competitors [De Oliveira Teixeira, Werther, 2013]. The consequences of economic crises that threaten companies at the same time increase their motivation to take strategic action, which smooths over the fluctuations of companies' revenue by optimizing their operations and helping them to better adapt to the current situation [March, 1991; Uotila et al., 2009].

Economic crises primarily manifest themselves in the significantly reduced availability of resources for companies since customers cut their spending, creditors cut lending, while pressure from the competition increases [Pearce, Michael, 2006]. In such circumstances, many players focus on strategic action which provides short-term visible results [Schmitt et al., 2010] and secures more predictable and more immediate profits [He, Wong, 2004; Levinthal, March, 1993; March, 1991]. Focusing on the strategic management of resources

and making use of competitive advantages increases SMEs' chances of maintaining profit margins despite the falling sales and financial instability. Though most companies see economic crises as a threat, some, especially those in the SME group, use them to take advantage of newly emerging opportunities and expand their operations [Beliaeva et al., 2018; Kunc, Bhandari, 2011]. They see turbulence as a source of new business opportunities, including maintaining their competitiveness or identifying new sources of competitive advantages, for example, by procuring their competitors or suppliers [Wan, Yiu, 2009]. This allows us to suggest a second hypothesis:

Hypothesis 2: *During an economic crisis a positive correlation exists between the strategic component of SE and SME performance.*

The Synergy between the Entrepreneurial and Strategic Components of SE

Entrepreneurship involves applying new solutions on the market [Zahra et al., 2006]. Strategy, in its turn, amounts to applying structured, calculated approaches to efficiently using resources in order to obtain competitive advantages and create value [Eisenhardt, Martin, 2000]. Entrepreneurship and strategy are conceptually inseparable: as two sides of the same coin, they are complementary in nature [Luke et al., 2011] and combining them creates synergy [Dhliwayo, 2014]. Placing one's chips on just one behavior type turns out to be less productive than simultaneously taking entrepreneurial and strategic action, which helps SMEs deal with a wider range of unforeseen circumstances emerging during economic crises [Dhliwayo, 2014; Smolka et al., 2016].

Previous empirical studies confirm that a positive correlation exists between simultaneously taking entrepreneurial and strategic action and companies' performance [Gibson, Birkinshaw, 2004; He, Wong, 2004; Lubatkin et al., 2006]. Some researchers believe that during a recession the need for combining these approaches only increases [Jansen et al., 2006]. To promote further growth, companies should combine taking steps to increase productivity with creating innovations. During economic crises such "ambidexterity" frequently ensures the business's survival [Raisch et al., 2009]. Combining entrepreneurial and strategic behavior positively affects performance in a volatile environment [McGrath, 2001; Siggelkow, Levinthal, 2003]. Companies capable of simultaneously increasing productivity and finding new business opportunities have a better chance of improving their positions during a recession. Both these strategies help one remain flexible in an uncertain situation [Volberda, 1996], alleviate the consequences of economic shocks to businesses, maintain development potential, and market transparency. This allows us to suggest the third hypothesis:

Hypothesis 3: *During an economic crisis, the combination of the entrepreneurial and strategic components of SE positively affects SME performance.*

The theoretical model of the study is presented in Figure 1.

Methodology of the Study

Context of the Study and the Sample Description

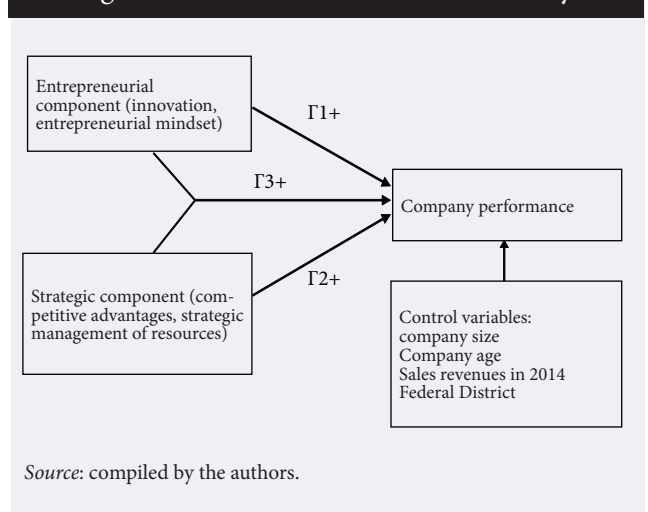
To test the hypotheses of the study, we have used data collected through a survey of representatives of Russian SMEs conducted during the economic crisis and political sanctions between September 2015 and February 2016. The survey was conducted by the Entrepreneurship Centre of the St. Petersburg State University Graduate School of Management jointly with the School of Economics and Management of the Far-Eastern Federal University.

The sample of private Russian companies was randomly generated using main state registration numbers (MSRN). The MSRN codes were subsequently uploaded into the Professional Market and Company Analysis System (SPARK-Interfax) to verify their accuracy, collect information about the companies and their key financial indicators, and filter out data not meeting the selection criteria adopted for the study. The final sample included 10,359 firms.

A standardized questionnaire was used to conduct the survey. The methodology combined online survey tools and telephone interviews. A total of 656 returned questionnaires out of 2,583 sent out mean that the effective response rate was 25.2%. After clearing the data of missing values, 614 Russian companies were included in the final sample.

The predominant share of the companies in the sample were classified as small businesses (less than 100 employees). Most of them specialize in wholesale trade (21.82%), services (21.50%), and retail (17.43%). Somewhat fewer companies operate in the manufacturing (16.94%) and construction (11.56%) industries. The companies in the sample are distributed throughout the country, but mainly concentrated in

Figure 1. Theoretical Model of the Study



Source: compiled by the authors.

the Central (27.85%), Volga (19.54%), and Siberian (18.08%) Federal Districts, followed by the North-West (11.89%) and Urals (11.73%) Federal Districts.

Measurements of the Variables

Dependent Variable

The “Company performance” variable is a subjective indicator measured using an adapted 7-point Likert scale described in [Stam, Elfring, 2008]. Its Cronbach’s alpha value is 0.9021 and the final values were calculated as the average of all components of this multivariable.

Independent Variable

The entrepreneurial component of SE was calculated as the average value of the indicators “Entrepreneurial mindset” and “Innovation”. Both these indicators were measured using the adapted 7-point Likert scale described in [Kyrgidou, Petridou, 2011] with Cronbach’s alpha value at 0.8504 for the first, and 0.8797 for the second. Cronbach’s alpha for the whole entrepreneurial component was 0.9024.

The strategic component of SE was calculated as the average of the “Strategic management of resources” and “Competitive advantage” indicator values. Both were measured using the same 7-point Likert scale as in the previous case. Cronbach’s alpha in the first case was 0.7099, and in the second 0.5844. Cronbach’s alpha for the whole strategic component was 0.6694.

The following control variables were applied to ensure internal validity: company size, company age, location (federal district), industry, and sales revenue in 2014.

The regression models applied in the study, with the interpretation of the main variables, are presented in Table. 2.

Descriptive statistics and the correlation matrix are presented in Tables 3 and 4, respectively. The average age of the companies in the sample is 12.65 years, the average number of full-time employees is 41, the average sales revenues in 2014 amounted to 9.093 million rubles. The average indicator values measured using the Likert scale were as follows: company performance – 4.35, entrepreneurial mindset – 4.377, innovation – 4.929, strategic management of resources – 4.2, and competitive advantage – 5.185.

Data Analysis Results

The results of testing the hypotheses using regression analysis (which was carried out in several stages) are presented in Table 4. The first model includes only control variables. In the second model the independent variables “Entrepreneurial component” and “Strategic component” were added, whose combined indicator is reflected in the third model. The variables (except for the binary and dependent ones) were standardized to exclude multicollinearity, which can distort statistically significant indicators to the point of changing coefficients’ signs [Dawson, 2014]. Dispersion inflation factors do not exceed 2. Although [Neter et al., 1990] suggest the maximum allowable value should be 10, we rely on a more conservative threshold value [O’Brien, 2007]. Also, the possibility that a corre-

Table 2. Regression Models

| Models | Regression equation |
|---------|--|
| Model 1 | $Y_i = b_0 + b_1 \times SIZE_i + b_2 \times AGE_i + b_3 \times REV_i + b_4 \times IND_i + b_5 \times SFO_i + b_6 \times NFO_i + b_7 \times FFO_i + b_8 \times SibFO_i + b_9 \times UFO_i + b_{10} \times VFO_i + b_{11} \times NCFO_i + b_{12} \times CRIMEA_i$ |
| Model 2 | $Y_i = b_0 + b_1 \times SIZE_i + b_2 \times AGE_i + b_3 \times REV_i + b_4 \times IND_i + b_5 \times SFO_i + b_6 \times NFO_i + b_7 \times FFO_i + b_8 \times SibFO_i + b_9 \times UFO_i + b_{10} \times VFO_i + b_{11} \times NCFO_i + b_{12} \times CRIMEA_i + b_{13} \times STR_i + b_{14} \times ENT_i$ |
| Model 3 | $Y_i = b_0 + b_1 \times SIZE_i + b_2 \times AGE_i + b_3 \times REV_i + b_4 \times IND_i + b_5 \times SFO_i + b_6 \times NFO_i + b_7 \times FFO_i + b_8 \times SibFO_i + b_9 \times UFO_i + b_{10} \times VFO_i + b_{11} \times NCFO_i + b_{12} \times CRIMEA_i + b_{13} \times STR_i + b_{14} \times ENT_i + b_{13} \times b_{14} \times STR_i \times ENT_i$ |
| Model 4 | $Y_i = b_0 + b_1 \times SIZE_i + b_2 \times AGE_i + b_3 \times REV_i + b_4 \times IND_i + b_5 \times SFO_i + b_6 \times NFO_i + b_7 \times FFO_i + b_8 \times SibFO_i + b_9 \times UFO_i + b_{10} \times VFO_i + b_{11} \times NCFO_i + b_{12} \times CRIMEA_i + b_{14} \times ENT_i + b_{15} \times CA_i + b_{14} \times b_{15} \times ENT_i \times CA_i$ |
| Model 5 | $Y_i = b_0 + b_1 \times SIZE_i + b_2 \times AGE_i + b_3 \times REV_i + b_4 \times IND_i + b_5 \times SFO_i + b_6 \times NFO_i + b_7 \times FFO_i + b_8 \times SibFO_i + b_9 \times UFO_i + b_{10} \times VFO_i + b_{11} \times NCFO_i + b_{12} \times CRIMEA_i + b_{14} \times ENT_i + b_{16} \times RS_i + b_{14} \times b_{16} \times ENT_i \times RS_i$ |
| Model 6 | $Y_i = b_0 + b_1 \times SIZE_i + b_2 \times AGE_i + b_3 \times REV_i + b_4 \times IND_i + b_5 \times SFO_i + b_6 \times NFO_i + b_7 \times FFO_i + b_8 \times SibFO_i + b_9 \times UFO_i + b_{10} \times VFO_i + b_{11} \times NCFO_i + b_{12} \times CRIMEA_i + b_{13} \times STR_i + b_{17} \times I_i + b_{13} \times b_{17} \times STR_i \times I_i$ |
| Model 7 | $Y_i = b_0 + b_1 \times SIZE_i + b_2 \times AGE_i + b_3 \times REV_i + b_4 \times IND_i + b_5 \times SFO_i + b_6 \times NFO_i + b_7 \times FFO_i + b_8 \times SibFO_i + b_9 \times UFO_i + b_{10} \times VFO_i + b_{11} \times NCFO_i + b_{12} \times CRIMEA_i + b_{13} \times STR_i + b_{18} \times EM_i + b_{13} \times b_{18} \times STR_i \times EM_i$ |

Legend:

Y_i — performance; b_0, \dots, b_{18} — regression coefficients; ENT_i — entrepreneurial component; STR_i — strategic component; EM_i — entrepreneurial mindset; I_i — innovation; RS_i — strategic management of resources; CA_i — competitive advantage; $SIZE_i$ — company size; AGE_i — company age; REV_i — sales revenue in 2014; IND_i — high-technology industries and services; CFO_i — Central Federal District; SFO_i — Southern Federal District; NFO_i — North-Western Federal District; FFO_i — Far-Eastern Federal District; $SibFO_i$ — Siberian Federal District; UFO_i — Urals Federal District; VFO_i — Volga Federal District; $NCFO_i$ — North Caucasus Federal District; $CRIMEA_i$ — Crimea Federal District

Source: compiled by the authors.

Table 3. Descriptive Statistics

| Variable | Average | Standard deviation | Minimum | Maximum |
|---|---------|--------------------|---------|---------|
| <i>Dependent variable</i> | | | | |
| Performance (Y_i) | 4.350 | 1.017 | 1 | 7 |
| <i>Independent variables</i> | | | | |
| Entrepreneurial component (ENT_i) | 4.653 | 1.414 | 1 | 7 |
| Strategic component (STR_i) | 4.692 | 1.181 | 1 | 7 |
| Entrepreneurial mindset (EM_i) | 4.377 | 1.533 | 1 | 7 |
| Innovation (I_i) | 4.929 | 1.528 | 1 | 7 |
| Strategic management of resources (RS_i) | 4.200 | 1.511 | 1 | 7 |
| Competitive advantage (CA_i) | 5.185 | 1.358 | 1 | 7 |
| <i>Control variables</i> | | | | |
| Company size (number of full-time employees) ($SIZE_i$) | 41 | 62 | 3 | 426 |
| Company age, years (AGE_i) | 12.653 | 14.469 | 0 | 122 |
| Sales revenue in 2014, thousand roubles (REV_i) | 9.093 | 1.973 | 1.791 | 16.714 |
| High-technology industries and services (IND_i) | — | — | 0 | 1 |
| <i>Federal Districts</i> | | | | |
| Central Federal District (CFO _i) | — | — | 0 | 1 |
| Southern Federal District (SFO _i) | — | — | 0 | 1 |
| North-Western Federal District (NFO _i) | — | — | 0 | 1 |
| Far-Eastern Federal District (FFO _i) | — | — | 0 | 1 |
| Siberian Federal District (SibFO _i) | — | — | 0 | 1 |
| Urals Federal District (UFO _i) | — | — | 0 | 1 |
| Volga Federal District (VFO _i) | — | — | 0 | 1 |
| North Caucasus Federal District (NCFO _i) | — | — | 0 | 1 |
| Crimea Federal District (CRIMEA _i) | — | — | 0 | 1 |

Source: compiled by the authors.

lation value ranging from low to moderate (Table 5) indicates a distortion of the results due to multicollinearity is unlikely. The results of the Ramsey test for erroneous specification of the regression model confirm the absence of missing variables in all models applied [Ramsey, 1969]. The results of the Breusch-Pagan heteroskedasticity test indicate constant random error variance in all applied models [Breusch, Pagan, 1979].

All regression models are statistically significant. The control variables (Model 1) demonstrate a positive correlation between company size and their performance ($b=0.104$, $p<0.05$) and a negative correlation between performance and company age ($b=-0.206$, $p<0.5$). The industry variable is insignificant ($b=-0.043$, $p=0.697$). In the *Urals* and *Crimea Federal Districts*, a negative correlation with companies' performance was discovered.

In Model 2, the SE entrepreneurial component's coefficient turned out to be positive and significant ($b=0.107$, $p<0.05$), which allows one to reject the zero hypothesis and accept the alternative, in line with working hypothesis 1: during economic crises a positive correlation exists between the *entrepreneurial component* of SE and SME performance. This component remains significant and its coefficient remains positive even when a combined indicator with the *strategic component* is included in the model ($b=0.269$, $p<0.05$; model 3).

Hypothesis 2 was also tested in Model 2. The coefficient of the *strategic component* of SE turned out to be positive but statistically insignificant ($b=0.037$, $p=0.494$), that is, this hypothesis has not been confirmed.

In Model 3, the coefficient of the combined *strategic and entrepreneurial components* of SE indicator turned out to be negative and insignificant ($b=-0.036$, $p=0.233$; model 3), accordingly, the “working” hypothesis 3 about the positive synergy between the *entrepreneurial* and *strategic components* in relation to SME performance was not confirmed in a statistically significant way. However, to analyze the matter more comprehensively, the combined indicators of the *strategic component* of SE and disaggregated parts of the *entrepreneurial component* (entrepreneurial mindset and innovation) were tested in the Models 4 and 5, respectively, while the *entrepreneurial component* and disaggregated parts of the *strategic component* (competitive advantage and strategic management of resources) were tested in the Models 6 and 7, respectively. It was found that the combined application of the *entrepreneurial component* and *competitive advantage* negatively affected companies' performance ($b=-0.035$, $p<0.1$; Model 4), and so did the combined use of the *strategic component* and *innovation* ($b=-0.052$, $p<0.05$; Model 6). The remaining combined indicators turned out to be statistically insignificant.

Table 4. Correlation Matrix

| № | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----|
| 1 | 1 | | | | | | | | | | | | | | | | | | | |
| 2 | 0.4678 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 0.5227 | 0.6355 | 1 | | | | | | | | | | | | | | | | | |
| 4 | 0.3931 | 0.9241 | 0.5339 | 1 | | | | | | | | | | | | | | | | |
| 5 | 0.4713 | 0.9236 | 0.6404 | 0.7070 | 1 | | | | | | | | | | | | | | | |
| 6 | 0.4544 | 0.6038 | 0.8430 | 0.5391 | 0.5766 | 1 | | | | | | | | | | | | | | |
| 7 | 0.4036 | 0.4335 | 0.8013 | 0.3288 | 0.4723 | 0.3537 | 1 | | | | | | | | | | | | | |
| 8 | -0.0162 | 0.0265 | -0.0338 | 0.0258 | 0.0231 | 0.0013 | -0.0602 | 1 | | | | | | | | | | | | |
| 9 | -0.0525 | 0.0325 | 0.0445 | 0.0083 | 0.0518 | 0.0723 | -0.0024 | 0.0021 | 1 | | | | | | | | | | | |
| 10 | 0.0979 | 0.0772 | 0.0557 | 0.0888 | 0.0538 | 0.0935 | -0.0071 | 0.0360 | 0.3451 | 1 | | | | | | | | | | |
| 11 | 0.0569 | 0.0016 | -0.0077 | 0.0194 | -0.0164 | -0.0067 | -0.0059 | -0.1352 | 0.1866 | 0.5559 | 1 | | | | | | | | | |
| 12 | -0.0498 | -0.0110 | -0.0265 | 0.0134 | -0.0337 | -0.0105 | -0.0344 | 0.0374 | 0.0232 | 0.0205 | -0.0418 | 1 | | | | | | | | |
| 13 | -0.0236 | 0.0012 | -0.0152 | -0.0126 | 0.0148 | 0.0179 | -0.0463 | 0.0328 | 0.1279 | 0.0067 | 0.0939 | -0.1726 | 1 | | | | | | | |
| 14 | 0.1236 | 0.0396 | 0.0884 | 0.0245 | 0.0488 | 0.0516 | 0.0963 | -0.0507 | -0.0652 | -0.0498 | -0.1035 | -0.2315 | -0.1810 | 1 | | | | | | |
| 15 | 0.0180 | -0.0500 | -0.0429 | -0.0300 | -0.0624 | -0.0386 | -0.0316 | -0.0178 | 0.0418 | -0.0387 | -0.0178 | -0.0573 | -0.0448 | -0.0601 | 1 | | | | | |
| 16 | 0.0362 | 0.0514 | 0.0071 | 0.0433 | 0.0517 | -0.0199 | 0.0345 | -0.0344 | 0.0008 | -0.0125 | 0.0595 | -0.2919 | -0.2282 | -0.3062 | -0.0758 | 1 | | | | |
| 17 | 0.0041 | 0.0594 | -0.0116 | 0.0674 | 0.0423 | -0.0017 | -0.0182 | 0.0015 | 0.0245 | 0.0506 | 0.0792 | -0.0947 | -0.0741 | -0.0994 | -0.0246 | -0.1253 | 1 | | | |
| 18 | 0.0273 | -0.0241 | 0.0192 | -0.0319 | -0.0126 | -0.0005 | 0.0341 | -0.0241 | -0.0769 | 0.0729 | 0.0094 | -0.1120 | -0.0875 | -0.1175 | -0.0291 | -0.1481 | -0.0481 | 1 | | |
| 19 | -0.1418 | -0.1082 | -0.0616 | -0.1007 | -0.0992 | -0.0249 | -0.0795 | 0.0474 | -0.0612 | -0.0267 | -0.0499 | -0.1712 | -0.1339 | -0.1796 | -0.0445 | -0.2264 | -0.0735 | -0.0869 | 1 | |
| 20 | 0.0020 | -0.0044 | -0.0066 | -0.0011 | -0.0070 | -0.0054 | -0.0055 | 0.0635 | 0.0594 | 0.0557 | 0.0196 | -0.0190 | -0.0148 | -0.0199 | -0.0049 | -0.0251 | -0.0081 | -0.0096 | -0.0147 | 1 |

Legend

- 1 — performance (Y)
- 2 — entrepreneurial component (ENT_i)
- 3 — strategic component (STR_i)
- 4 — entrepreneurial mindset (EM_i)
- 5 — innovation (I)
- 6 — strategic management of resources (RS_i)
- 7 — competitive advantage (CA)
- 8 — high-technology industries and services (IIND_i)
- 9 — company age* (AGE_i)
- 10 — company size (number of full-time employees)* (SIZE_i)
- 11 — sales revenue in 2014 (REV)
- 12 — Siberian Federal District (SibFO)
- 13 — North-Western Federal District (NFO)
- 14 — Volga Federal District (VFO)
- 15 — North Caucasus Federal District (NCFO)
- 16 — Central Federal District (CFO)
- 17 — Far-Eastern Federal District (FFO)
- 18 — Southern Federal District (SFO)
- 19 — Urals Federal District (UFO)
- 20 — Crimea Federal District (CRIMEA)

* natural logarithm

Source: compiled by the authors.

Table 5. Regression Analysis Results

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 |
|---|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|
| Entrepreneurial component (ENT _i) | | 0.107** (0.045) | 0.269** (0.114) | 0.311*** (0.117) | 0.179** (0.082) | | |
| Strategic component (STR _i) | | 0.037 (0.054) | 0.190* (0.113) | | | 0.303*** (0.115) | 0.116 (0.100) |
| Entrepreneurial component × Strategic component (ENT _i × STR _i) | | | -0.036 (0.023) | | | | |
| Competitive advantage (CA _i) | | | | 0.131 (0.092) | | | |
| Entrepreneurial component × Competitive advantage (ENT _i × CA _i) | | | | -0.035* (0.021) | | | |
| Strategic management of resources (RS _i) | | | | | 0.150 (0.095) | | |
| Entrepreneurial component × Strategic management of resources (ENT _i × RS _i) | | | | | -0.023 (0.019) | | |
| Innovation (I _i) | | | | | | 0.291*** (0.103) | |
| Strategic component × Innovation (STR _i × I _i) | | | | | | -0.052** (0.022) | |
| Entrepreneurial mindset (EM _i) | | | | | | | 0.175 (0.114) |
| Strategic component × Entrepreneurial mindset (STR _i × EM _i) | | | | | | | -0.017 (0.023) |
| Company age (AGE _i), natural logarithm | -0.206** (0.082) | -0.210*** (0.081) | -0.214*** (0.081) | -0.210*** (0.081) | -0.219*** (0.081) | -0.220*** (0.081) | -0.205** (0.081) |
| Company size (number of full-time employees) (SIZE _i), natural logarithm | 0.104** (0.053) | 0.088* (0.053) | 0.086 (0.053) | 0.085 (0.053) | 0.083 (0.053) | 0.090* (0.052) | 0.084 (0.053) |
| Sales revenue in 2014 (REV _i), natural logarithm | 0.040 (0.031) | 0.047 (0.031) | 0.046 (0.031) | 0.046 (0.031) | 0.048 (0.031) | 0.045 (0.031) | 0.046 (0.031) |
| High-technology industries and services (IND _i) | -0.043 (0.111) | -0.046 (0.110) | -0.039 (0.110) | -0.040 (0.110) | -0.046 (0.110) | -0.029 (0.110) | -0.042 (0.110) |
| Siberian Federal District (SibFO _i) | -0.186 (0.149) | -0.163 (0.147) | -0.154 (0.147) | -0.149 (0.147) | -0.166 (0.147) | -0.147 (0.147) | -0.169 (0.147) |
| North-Western Federal District (NFO _i) | -0.028 (0.171) | -0.014 (0.170) | -0.012 (0.170) | -0.019 (0.170) | -0.020 (0.170) | -0.018 (0.170) | -0.010 (0.170) |
| Volga Federal District (VFO _i) | -0.085 (0.145) | -0.090 (0.144) | -0.088 (0.144) | -0.074 (0.144) | -0.095 (0.144) | -0.098 (0.144) | -0.089 (0.144) |
| North Caucasus Federal District (NCFO _i) | -0.510 (0.416) | -0.422 (0.413) | -0.408 (0.412) | -0.406 (0.412) | -0.421 (0.412) | -0.393 (0.413) | -0.444 (0.412) |
| Far-Eastern Federal District (FFO _i) | -0.042 (0.265) | -0.069 (0.263) | -0.090 (0.263) | -0.088 (0.263) | -0.091 (0.263) | -0.084 (0.263) | -0.083 (0.263) |
| Southern Federal District (SFO _i) | -0.030 (0.232) | 0.001 (0.231) | -0.009 (0.230) | 0.012 (0.230) | -0.013 (0.231) | -0.029 (0.230) | -0.001 (0.231) |
| Urals Federal District (UFO _i) | -0.295* (0.171) | -0.228 (0.171) | -0.211 (0.171) | -0.206 (0.171) | -0.233 (0.171) | -0.219 (0.170) | -0.223 (0.171) |
| Crimea Federal District (CRIMEA _i) | -2.221* (1.222) | -2.154* (1.211) | -2.191* (1.210) | -2.184* (1.210) | -2.175* (1.210) | -2.217* (1.209) | -2.184* (1.211) |
| Constant (b ₀) | 3.043*** (0.324) | 2.352*** (0.379) | 1.725*** (0.555) | 1.764*** (0.565) | 2.065*** (0.453) | 1.460*** (0.550) | 2.085*** (0.533) |
| R-squared | 0.039 | 0.061 | 0.064 | 0.064 | 0.064 | 0.065 | 0.063 |

Note: n = 614; *** p<0.001, ** p<0.05, * p<0.1.
Source: compiled by the authors.

Given that almost 30% of the sample firms are located in the Central Federal District (CFD), we decided to conduct additional analysis using the same regression models but excluding this district. The CFD is far ahead of other Russian districts in terms of most socioeconomic indicators (total gross regional product, the development of production and social infrastructure, etc.), and its economic structure is closer to that of post-industrial economies [Ministry of Economic Development, 2013]. The

regression models' results are presented in Table 6. Among the control variables, company age ceases to have a significant correlation with company performance. For independent variables and their interactions, all previous results remained unchanged, but the combined indicator of the *entrepreneurial* and *strategic components* of SE became statistically significant, indicating a negative correlation between their simultaneous application and company performance outside the CFD.

Table 6. Regression Analysis Results (with companies located in CFD excluded)

| | Model 8 | Model 9 | Model 10 | Model 11 | Model 12 | Model 13 | Model 14 |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|---------------------|
| Entrepreneurial component (ENTi) | | 0.141*** (0.051) | 0.381*** (0.130) | 0.472*** (0.130) | 0.215** (0.094) | | |
| Strategic component (STRi) | | 0.014 (0.061) | 0.229* (0.123) | | | 0.388*** (0.126) | 0.119 (0.109) |
| Entrepreneurial component x Strategic component (ENTi x STRi) | | | -0.053** (0.026) | | | | |
| Competitive advantage (CAi) | | | | 0.214** (0.101) | | | |
| Entrepreneurial component x Competitive advantage (ENTi x CAi) | | | | -0.060** (0.023) | | | |
| Strategic management of resources (RSi) | | | | | 0.142 (0.107) | | |
| Entrepreneurial component x Strategic management of resources (ENTi x RSi) | | | | | -0.024 (0.022) | | |
| Innovation (Ii) | | | | | | 0.416*** (0.117) | |
| Strategic component x Innovation (STRi x Ii) | | | | | | -0.076*** (0.025) | |
| Entrepreneurial mindset (EMi) | | | | | | | 0.233* (0.128) |
| Strategic component x Entrepreneurial mindset (STRi x EMi) | | | | | | | -0.023 (0.025) |
| Company age (AGEi), natural logarithm | -0.130 (0.095) | -0.145 (0.094) | -0.147 (0.094) | -0.146 (0.093) | -0.154 (0.094) | -0.148 (0.094) | -0.141 (0.094) |
| Company size (number of full- time employees) (SIZEi), natural logarithm | 0.133** (0.060) | 0.116* (0.059) | 0.115* (0.059) | 0.110* (0.059) | 0.115* (0.059) | 0.120** (0.059) | 0.113* (0.059) |
| Sales revenues in 2014 (REVi), natural logarithm | 0.018 (0.035) | 0.025 (0.034) | 0.023 (0.034) | 0.024 (0.034) | 0.024 (0.034) | 0.022 (0.034) | 0.023 (0.034) |
| High-technology industries and services (INDi) | -0.003 (0.125) | -0.003 (0.123) | 0.013 (0.123) | 0.020 (0.123) | 0.002 (0.123) | 0.032 (0.123) | 0.007 (0.123) |
| North-Western Federal District (NFOi) | 0.159 (0.180) | 0.151 (0.177) | 0.141 (0.177) | 0.118 (0.177) | 0.151 (0.177) | 0.122 (0.177) | 0.166 (0.177) |
| Volga Federal District (VFOi) | 0.111 (0.155) | 0.084 (0.154) | 0.076 (0.153) | 0.083 (0.153) | 0.079 (0.153) | 0.056 (0.153) | 0.094 (0.154) |
| North Caucasus Federal District (NCFOi) | -0.323 (0.409) | -0.245 (0.403) | -0.239 (0.402) | -0.241 (0.401) | -0.237 (0.403) | -0.229 (0.402) | -0.265 (0.403) |
| Far-Eastern Federal District (FFOi) | 0.155 (0.266) | 0.090 (0.263) | 0.045 (0.263) | 0.044 (0.262) | 0.072 (0.264) | 0.041 (0.263) | 0.080 (0.263) |
| Southern Federal District (SFOi) | 0.172 (0.235) | 0.185 (0.232) | 0.160 (0.232) | 0.175 (0.231) | 0.170 (0.232) | 0.126 (0.231) | 0.190 (0.233) |
| Urals Federal District (UFOi) | -0.098 (0.178) | -0.046 (0.176) | -0.033 (0.176) | -0.038 (0.175) | -0.045 (0.176) | -0.053 (0.175) | -0.032 (0.176) |
| Crimea Federal District (CRIMEAi) | -2.153* (1.187) | -2.101* (1.170) | -2.175* (1.167) | -2.177* (1.163) | -2.126* (1.169) | -2.235* (1.165) | -2.133* (1.169) |
| Constant (b0) | 2.791*** (0.359) | 2.089*** (0.415) | 1.205** (0.604) | 1.049* (0.608) | 1.745*** (0.504) | 0.816 (0.598) | 1.738*** (0.580) |
| R-squared | 0.039 | 0.070 | 0.079 | 0.085 | 0.074 | 0.081 | 0.074 |

Notes: n = 413; *** p<0.001, ** p<0.05, * p<0.1.
Source: compiled by the authors.

Discussion of the Results

An analysis of the relationship between the SE components (in particular, entrepreneurial and strategic ones) and Russian SMEs' performance during the economic crisis allowed us to make the following conclusions. A positive correlation exists between the entrepreneurial component of SE and the performance of Russian SMEs during economic crises. In such periods, entrepreneurs face serious threats that affect

their financial situation and, ultimately, their very survival [Kunc, Bhandari, 2011; Pal et al., 2014]. However, deep economic shocks also create new opportunities [Beliaeva et al., 2018; Laskovaia et al., 2019; Pearce, Michael, 2006] and promote the application of new technologies and business models [Rae-Dupree, 2008]. Thus, Russian companies that experiment with new products, services, and business models tend to be less affected by crises. Studies based on data about devel-

oped and emerging markets indicate that increased economic pressure often helps a firm make creative decisions that positively affect companies' financial performance [Beliaeva et al., 2018; Hausman, Johnston, 2014]. Players who rely on innovation also strengthen their market positions and leadership [Drickhamer, 2003; Guellec, Wunsch-Vincent, 2009; Pearce, Michael, 2006]. Thus, entrepreneurial decisions play a critical role in crisis situations and turn into key success factors for SMEs [Periz-Ortiz et al., 2008]. On the contrary, no statistically significant relationship was discovered between the strategic component of SE and companies' performance, nor between the industry-specific behavior of Russian SMEs during economic crises.

A negative correlation between the combined indicator of the entrepreneurial component and competitive advantage and the performance of Russian SMEs located outside the CFD indicates that companies have a limited resource base during economic crises. In such circumstances, companies located outside the CFD have to choose between entrepreneurial or strategic action since they cannot afford to carry out both at the same time [Ireland et al., 2003]. Including the CFD in the sample eliminates this effect, which serves as another confirmation of the unequal availability of resources in the central and other regions of the country. When this availability is further limited by a crisis, small companies focus on implementing only one SE component, since trying to combine entrepreneurial and strategic efforts can be fatal.

The theoretical originality of the study is in the proposed strategic concept of entrepreneurship in the framework of strategic management theory, with an emphasis placed upon individual SE components (entrepreneurial mindset, innovation, strategic management of resources, and competitive advantage), and in the analysis of small and medium enterprises' activities in the context of economic crises. In particular, we tried to demonstrate that the relationship between SE and SME performance during turbulent periods is notably different from stable economic conditions. For example, analyzing SMEs' strategic behavior in a sustainable context allows one to conclude that to achieve the best results, entrepreneurs should combine several strategic approaches (see, e.g., [Atuahene-Gima, Ko, 2001; Deutscher et al., 2016; Ho et al., 2016]). On the other hand, when resources are limited due to a crisis, combining several SE components results in decreased corporate performance indicators for SMEs.

Our study also makes a unique contribution regarding Russian SMEs during the economic crisis of 2014–2016 given the time when it was conducted and the nature of the sample. Studying post-crisis business strategies is fraught with the conclusions being biased and unreliable due to the management's cognitive distortions in the perception of companies' past behavior [Bao et al., 2011]. Furthermore, since the sample of domestic firms was random, the results obtained are applicable to all companies that meet the selection criteria.

The practical importance of this study for top managers, corporate decision makers, and those responsible for developing and implementing strategies lies in the identified approaches to company management that guarantee an organization's best performance during periods of economic crisis. It is important for SME managers to realize that combining specific SE components (which leads to improved performance under stable conditions) can have negative consequences during economic crises. In the latter case, they should focus on advancing entrepreneurial behavior, which normally involves innovation, willingness to take risks in developing new products and services, and the proactive search for and implementation of new business opportunities [Covin, Slevin, 1989; Soininen et al., 2012].

Limitations of the Study and Future Directions for Research Areas

These findings should be evaluated with certain provisos. First, the cross-sectional data used reflects short-term company performance. A possible subject for further (longitudinal) research is the long-term impact of SE on SME performance. Second, the main dependent variable used in the study was a subjective indicator of companies' activities, namely their individual perception by managers. Despite the reliability of this approach, clarification of the obtained results requires further research. Third, we considered only the direct effects of specific SE components or their combinations. Authors of subsequent studies may choose to focus on other moderators of the correlation between SE and companies' performance. Replication studies using various samples (e.g., those comprising large firms and state-owned companies) may also be in order.

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