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Thesis manuscript

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**SYSTEMIC MODEL OF THE ENTREPRENEUR AND ENTREPRENEURIAL
ACTIVITY**

Field of study 08.00.05 - Economics and National Economy Management
(Entrepreneurship Economics)

Abstract of the thesis submitted
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SYSTEMIC MODEL OF THE ENTREPRENEUR AND ENTREPRENEURIAL ACTIVITY

Relevance of the research. The theory of entrepreneurship is currently one of the most developed areas of economic science. Entrepreneurship has a centuries-old history. It has been changing together with the development of civilization and acquiring new forms and characteristics. Responding to this dynamics, the theory of entrepreneurship is also developing and expanding its scope.

Scientists have identified the properties of an entrepreneur and entrepreneurial activity, some of which, upon careful comparison and comparative analysis, do not agree with each other or even contradict each other, since the theory of the economics of entrepreneurship was developed in a situation where the concept of economic person dominated in economic science. In accordance with this concept, a person always acts wisely, carrying out a thorough comparison of options and striving to choose the best one. For a long time, the concept of economic person remained the cornerstone in economic theory, although, since the middle of the 20th century, its role in marketing, management and other practice-oriented branches of economic science has become less and less significant. Behavioral economics, which grew out of psychology and sociology, successfully used in management and marketing, has penetrated into economic theory.

Nobel Prize winners in economics Herbert Simon (1978), Garry Becker (1992), George Akerlof (2001), Daniel Kahneman (2002), Robert Schiller (2013) and Richard Thaler (2017) turned behavioral economics into the mainstream of economic theory, convincingly proving that irrational behavior is characteristic of the human being, since in addition to economic factors, he is influenced by many factors of a non-economic nature, mainly by psychological and social ones. Choice architecture, irrational behavior of investors, formation of “market bubbles”, volatility of markets - these and other irrational actions of entrepreneurs can be explained using behavioral economics.

Any entrepreneur is, first of all, a manager. Therefore, the theory of business economics and management theory are interrelated and complementary. Itzhak Adizes successfully applied the elements of behavioral economics in management (PAIE-code of a manager). The application of his methodology in the economy of entrepreneurship opens up its new perspectives, but the first attempts in this direction are carried out outside the general system of the theory of business economics. The identification of stable, repeating connections in the dynamics of entrepreneurial activity, as well as the study of the properties of this dynamics that change over time and the discovery of the patterns of entrepreneurial behavior can allow us to systematize the main results obtained by scientists in this scientific field. Such a dynamic approach should be applied not only to

identifying the influence of external factors on entrepreneurial activity, but also to the very change in entrepreneurial activity, which is realized within a fairly short period of the entrepreneur's life cycle.

Thus, the time has come to systematize the main provisions of the theory of entrepreneurship, taking into account the new achievements of behavioral economics, modern management and new developments in the field of business economics. All this predetermines the relevance of the dissertation topic.

Research problem

The research problem lies in the “growth of social economic tension that is caused primarily by the unprecedented rate of spread of the latest technologies - in time and space”¹. Modern Russian entrepreneurship is transformed under the influence of economic globalization, the formation of digital structures and the acceleration of scientific and technological progress. The theory of business economics does not keep pace with these changes, since its main sections are based on the traditional concept of economic person and are not able to explain numerous facts of irrational behavior of entrepreneurs. At the same time, both the axiomatic core of the theory and many of the theory of business economics arising from this provision.

Entrepreneurs, as elements of the economic system, have always been in the field of vision of scientists. Moreover, the first economic methodology was developed by the entrepreneurs themselves (mercantilism). The founders of economic science did not specifically study the phenomenon of entrepreneurship, and only after Jean-Baptiste Say had identified three interrelated classes in economics: scientists, entrepreneurs and workers, the interest of economic science in entrepreneurship and entrepreneurial activity was determined, which made it possible to form a general theory of economics entrepreneurship.

In the 19th and especially in the 20th century, entrepreneurship became the object of careful research not only by economists, but also by sociologists and psychologists. Studies by sociologists, primarily Auguste Comte and Karl Marx, revealed the leading role of the entrepreneur in the development of civilization. V. Sombart suggested that the entrepreneur is a special psychotype of personality, which gave rise to interest in the phenomenon of entrepreneurship from the side of psychology. The latter considered personality traits of an entrepreneur, trying to highlight the properties inherent in an entrepreneur as a psychotype.

The accumulated store of knowledge and theoretical doctrines about entrepreneurship turned out to be so great that today it does not fit into the tight framework of the classical concept of economic person. Entrepreneurship and the entrepreneur are viewed statically, although eminent scholars such as Max Weber, Alfred Marshall and Joseph Schumpeter proposed introducing a dynamic and behavioral component into this theory, showing how an entrepreneur transforms into a capitalist and how his behavior changes in the process. But these ideas of a dynamic and behavioral approach were not further developed by

¹ Mau V. Why economic competition is replaced by political // Forbes, 2020, 07-08, c. 22.

researchers, and this, in the opinion of the candidate for the degree, is one of the reasons for the somewhat eclectic nature of modern entrepreneurship theory.

The object of the research is the methodology and theory of entrepreneurship, its patterns and development trends, as well as new approaches in the theory of business economics from the standpoint of behavioral economics.

The subject of research is the process of formation, functioning and development of an entrepreneur and entrepreneurial activity, considered from the standpoint of a dynamic approach and principles of behavioral economics.

The goal and objectives of research. The main goal of the dissertation research is to develop the theoretical and methodological foundations of a systematic understanding of the entrepreneur and entrepreneurial activity in the form of a single model.

In accordance with this goal, the thesis pursued and accomplished the following objectives:

- to identify patterns, features and stages of the development of entrepreneurship of different economic structures and the corresponding transformation of the business economy as a separate section of economic science;
- scientifically substantiate new groupings and classifications of types of entrepreneurs, types of entrepreneurial activity, as well as the properties of entrepreneurs and factors of entrepreneurial activity, using behavioral classification criteria;
- to clarify the terminological apparatus of the theory of entrepreneurship, and to systematize it;
- to develop main provisions of the theory and methodology of a dynamic approach in the business economy;
- to determine elements of the systemic model of an entrepreneur and entrepreneurial activity. The formation of these elements makes it possible to obtain a balanced and harmonious idea of entrepreneurship;
- to identify conditions and reasons for the unification of entrepreneurs in various business networks and their socialization in the form of business cooperatives.

Theoretical and methodological framework of the research. Research methods.

The theoretical and methodological basis of the dissertation research lies in scientific works of classic economists, sociologists and psychologists, as well as in modern scientific works in the field of the theory of business economics and behavioral economics. The methodological basis is hypothetical-deductive and empirical-deductive approaches. In addition to general scientific research methods, the dissertation applied special research methods, such as cognitive models of entrepreneurial activity, in-depth interviews, expert assessments and expert polls.

The information base of the study was made up of statistical data and materials of the International Bank for Reconstruction and Development, the Federal State Statistics

Service of the Russian Federation, the Ministry of Economic Development of the Russian Federation, an expert poll of 486 Russian entrepreneurs; analysis of information on the activities of LLC Trading House "Semya", NPO Union of Independent Networks of Russia, LLC Federal Procurement Union and Spar Russia BV.

The scientific novelty of the results of the dissertation work lies in the theoretical substantiation of a new systemic model of an entrepreneur and entrepreneurial activity based on the concept of behavioral economics, synthesizing the provisions of economic, social and psychological theories of entrepreneurship.

Main scientific results obtained by the author:

1. Systematization of the main contradictions in the properties of an entrepreneur, identified by economic science, such as: attitude to innovation; risk appetite; creative attitude to business; the influence of ethics and religion on the nature of business; the influence of parents and the surrounding world on the development of a propensity for entrepreneurial activity, etc.

(clauses 8.2, 8.5 Passports of specialty 08.00.05)

2. The author developed a model of the life cycle of entrepreneurial activity, which is proposed as the main one when using behavioral economics in systematizing the provisions of the economics of entrepreneurship. It is proved that this model takes into account the dynamics of the entrepreneur's properties with the growth of the entrepreneur's capital, including the stages of his irrational behavior.

(clauses 8.1, 8.3, 8.5, 8.9 Passports of specialty 08.00.05)

3. The conceptual apparatus of the theory of business economics has been clarified. A new interpretation of the concepts of "entrepreneur", "entrepreneurial activity", "entrepreneurial spirit", "entrepreneurial strength", "entrepreneurial capital" and "entrepreneurial talent" is given, and a new concept is substantiated - "entrepreneurial substance" as an exceptional ability to succeed in business through concentration of the entrepreneur's personal strengths and his entrepreneurial abilities.

(clause 8.1. Passports of specialty 08.00.05)

4. The three-factor model of classification of business persons of the modern market economy presented in matrix form is scientifically substantiated. In this model, the entrepreneur (entrepreneur-owner and small entrepreneur-co-owner), capitalist, rentier and craftsman are distinguished in accordance with the assessment of their attitude to three factors: capital, personal labor, as well as the ability to manage risk and willingness to make risky decisions.

(clauses 8.2, 8.3 Passports of specialty 08.00.05)

5. Proposed by the author TERIS code of an entrepreneur represents the author's classification of entrepreneur types complementing the existing classifications. With the help of the TERIS code of an entrepreneur, the concepts of "entrepreneurial capital", "entrepreneurial ability", "business ability" and "entrepreneurial strength" are

systematized and specified. The TERIS code of an entrepreneur is defined by five components: (merchant (T), engineer (E), warrior (R), innovator (I) and (S) schemer).

(clauses 8.1, 8.5, 8.12, 8.16 Passports of specialty 08.00.05)

6. 5×5 model of a successful entrepreneur was developed, represented by 5 basic resources (time, labor, technology, money and information) and an entrepreneurial substance in the form of 5 entrepreneurial forces (willpower, accuracy, curiosity, responsibility, millionaire instinct). The methodology of using this model in researching success of an entrepreneur has been scientifically substantiated.

(clauses 8.1, 8.5, 8.19 Passports of specialty 08.00.05)

7. The author substantiated the concept of the entrepreneurship pyramid, the purpose of which is to diagnose the effectiveness of support for entrepreneurial activity in the region, industry, country. The practical value of this concept lies in expanding the analytical tools for studying the structure and state of entrepreneurship at the regional, sectoral and federal levels.

(clauses. 8.1, 8.8 Passports of specialty 08.00.05)

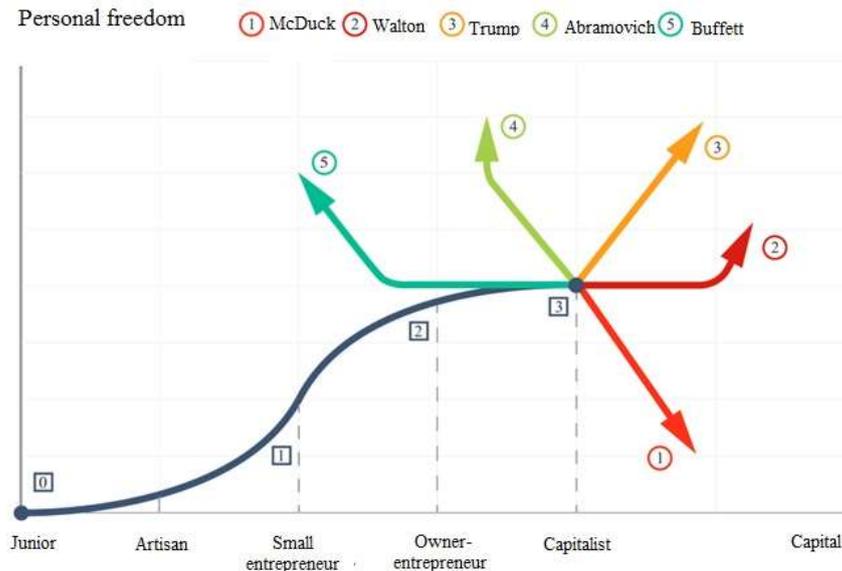
8. For the first time, the author presents eight main cohorts of Russian entrepreneurs, giving an idea of the structure of entrepreneurial activity in modern Russia.

(clause 8.17 of Passports of specialty 08.00.05)

Results to be defended in the viva voce:

1. The author substantiates the use of approaches and methods of behavioral economics to eliminate the identified inconsistencies and contradictions in the properties of an entrepreneur. In the dissertation, for the first time, the basic theories of sociology and psychology related to behavioral economics and to the theory of entrepreneurship were used to systematize the provisions of business economics. An entrepreneur, viewed from these positions, is presented as the most important participant in the economic system, whose business style and economic outlook evolve with the growth of capital.

2. The model of the life cycle of an entrepreneur is scientifically substantiated, which is based on the principles of behavioral economics, in particular, the effect of endowment.



The life cycle model acts as a systemic one in building a model of an entrepreneur and entrepreneurial activity, since it allows explaining evolution of an entrepreneur and transformation of his types of activity. The entrepreneur's life cycle model is based on two factors: 1) the entrepreneur's capital, which increases over time, 2) personal freedoms that the entrepreneur achieves through accumulated capital.

3. The author proposes to use the basic principles of behavioral economics in order to consider the transformation of the properties of an entrepreneur in the dynamics of life cycle from the "junior" stage to the "capitalist" stage. It is shown that with the growth of the entrepreneur's personal capital, his personal attitude to the tools of entrepreneurial activity, to the style and nature of entrepreneurial activity develop.

In accordance with the theory of diminishing marginal utility of wealth, with the accumulation of capital, the vital interests of the entrepreneur, his attitude to business, and his business style change. The greater the amount of accumulated wealth and the higher the level of achieved freedoms, the less an entrepreneur is inclined to make risky business decisions. Such a dynamic approach to an entrepreneur allows you to systematize his properties depending on the life cycle stage.

4. A new interpretation of the concepts of "entrepreneur", "entrepreneurial activity", "entrepreneurial spirit", "entrepreneurial strength", "entrepreneurial ability" and "entrepreneurial talent", "entrepreneurial capital" is substantiated, and a new concept is proposed for the first time - "entrepreneurial substance".

The dissertation suggests that an entrepreneur is a business person who seeks to increase the degree of personal freedom through the growth of the capital of his own business at his own peril and risk. The entrepreneurial spirit is a type of business spirit, defined by the zeal for independent economic activity aimed at the continuous development of one's own business. Entrepreneurial strength should be defined as a measure of the impact of an entrepreneur on the economic system in which he works. Entrepreneurial potential is the degree of a business person's ability to engage in independent entrepreneurial activity, which is also determined by external conditions.

Entrepreneurial ability is a set of qualities, skills and abilities of a person that allow him to organize an independent business, find and use the best combination of resources, take non-standard business decisions that allow him to get maximum profit. It is the ability to correctly assess the risks from making these decisions and to achieve their implementation. Entrepreneurial talent is outstanding entrepreneurial ability. Entrepreneurial capital is a synergy of 5 types of resources: time, labor, technology, information and financial capital, which, in combination with entrepreneurial substance, create a new quality of business. Entrepreneurial substance - the exceptional ability to succeed in business through the concentration of 5 personal forces: will, precision, curiosity, millionaire instinct and responsibility. For the first time, the author presents a systemic relationship between these concepts.

5. The model of analysis of the main business persons of the modern market economy is scientifically substantiated: an entrepreneur (an entrepreneur-owner and a small entrepreneur-co-owner), a capitalist, a rentier and an artisan, presented in tabular form.

Factor	Owner-entrepreneur	Small entrepreneur co-owner	Capitalist	Rentier	Artisan
Disposable capital	2	1	3	3	1
Decision-taking risk	3	3	2	1	0
Own labor	3	3	1	0	2
Total	8	7	6	4	3

With the help of a written poll of Russian entrepreneurs, this model has been successfully verified.

6. The author substantiates a new classification of entrepreneurial psychotypes, which complements the existing classifications (I. Adizes, A.I. Prigogine and A.P. Prokhorov), specifying the systemic model of the entrepreneur and entrepreneurial activity. The author, following the behavioral economics and highlighting the set of entrepreneurial competencies, identifies the psychotypes of entrepreneurs without which it is impossible to be an entrepreneur: warriors, combiners, traders, engineers and inventors. The expressiveness of these five psychotypes of an entrepreneur is his personal TERIS-code. Here: T - Trader (trader), E - Engineer (engineer), R - Raider (warrior), I - Inventor (inventor), S - Schemer (combinator, communicator, organizer, lobbyist).

It has been proven that the TERIS Entrepreneur Code is an entrepreneur model reflecting the dominant type of personal entrepreneurial substance which predetermines the strategy and style of competition.

The methodology for assessing the TERIS code of an entrepreneur has been substantiated, where each component of the code is diagnosed from 0 to 10. According to the results of a survey of more than 486 successful entrepreneurs in Russia, the TERIS code of an average Russian entrepreneur was determined: T6E6R8I8S10.

The TERIS code describes 14 possible groups of entrepreneurs, but the dissertation identifies eight main entrepreneurial cohorts in relation to modern Russia: merchants, privatizers, power entrepreneurs, bankers, government contractors, innovators, new industrialists and Westerners.

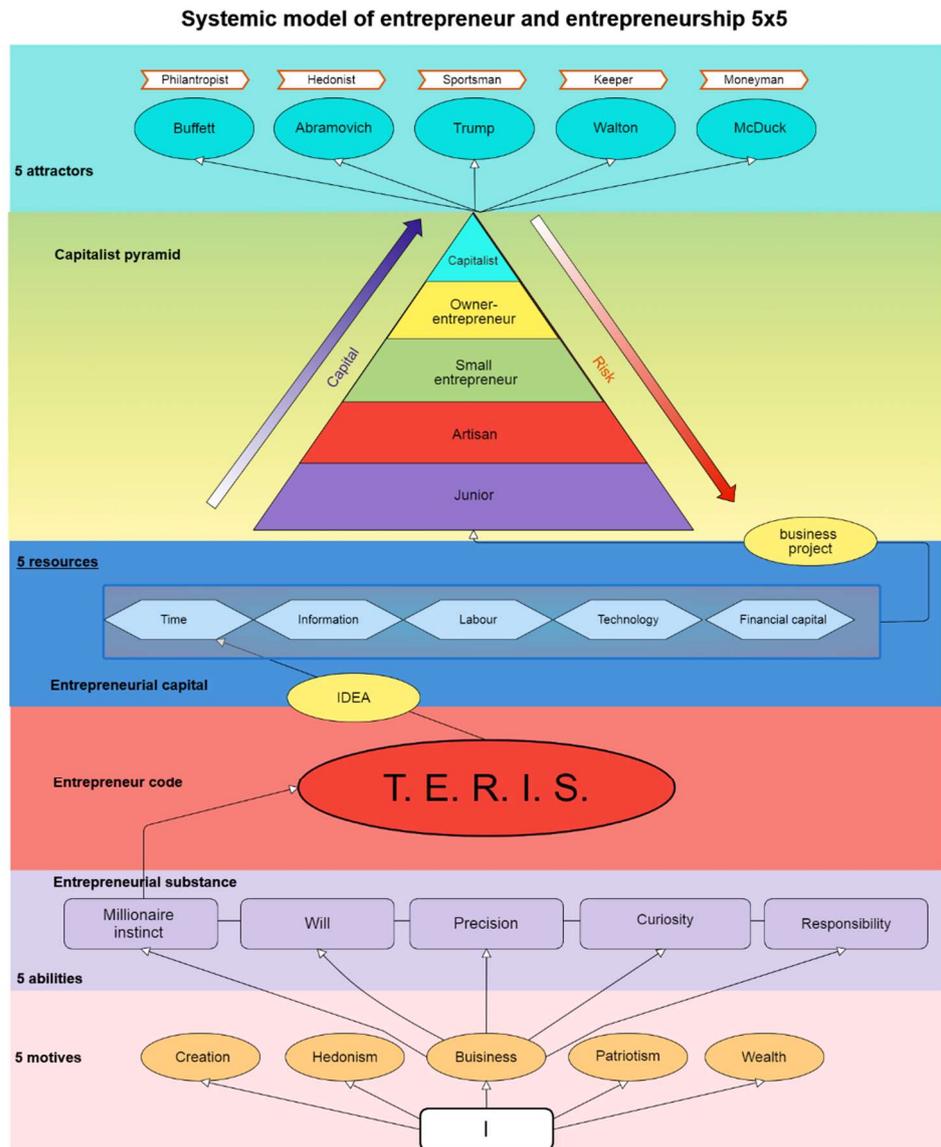
7. For the first time, the author presents a model of a successful entrepreneur called the 5x5 model. It is a description of success of a business depending on the quality of the use of entrepreneurial capital, represented by 5 basic resources (time, labor, technology, information and financial capital), as well as entrepreneurial substance in the form of 5 personal forces (willpower, accuracy, curiosity, responsibility, etc. the instinct of a millionaire). The model has been successfully verified through a written poll of successful entrepreneurs. The dissertation examines the properties of this model and shows the method of its application to analyze the degree of efficiency of entrepreneurial activity.

8. The concept of the Pyramid of Entrepreneurship has been scientifically substantiated, on the basis of which the coefficient of the favorableness of entrepreneurial activity is proposed, showing how favorable the conditions are for carrying out entrepreneurial activity in the region, industry, country. This concept is based on the ratio of the total number of juniors who have set foot on the path of an entrepreneur, to the number of entrepreneurs-artisans, small entrepreneurs-co-owners, etc.

9. Based on the life cycle model, a new interpretation of the phenomenon of social entrepreneurship is given. Social entrepreneurship is a type of entrepreneurship that an entrepreneur turns to after achieving entrepreneurial success that stimulates him to engage in socially significant projects. He becomes a social entrepreneur himself or provides support to other social projects at a stage when his entrepreneurial potential is close to zero, when his vital interest is transformed towards charity and is directed towards the sphere of social benefits. The essence of social entrepreneurship is that when allocating their personal capital for social projects, entrepreneurs follow their own values as a person, not an entrepreneur.

10. All of the above new scientific provisions, set out by the author in the dissertation, are brought together into a single systemic model of an entrepreneur.

In this model personal motives (creation, hedonism, patriotism, wealth, business idea) stimulate the individual to start entrepreneurial activity. It is initiated by the entrepreneur proceeding from the entrepreneurial substance inherent only to him, consisting of five elements (the instinct of a millionaire, will, accuracy, curiosity and responsibility). To start his business, an entrepreneur uses five basic resources (time, information, people, technology and money), applying his labor and five basic entrepreneurial abilities to them, described by the entrepreneur's TERIS code.



This synergy of five entrepreneurial resources and entrepreneurial abilities forms his entrepreneurial capital, using which he launches a business project and starts an entrepreneurial activity, going consecutively through different stages of the entrepreneur's life cycle (junior, artisan, small entrepreneur, owner-entrepreneur, capitalist). At the same time, with the growth of capital, the entrepreneur's propensity to take risks decreases. In accordance with the concept of a pyramid of entrepreneurs, only a small part of entrepreneurs reach the bifurcation point (at the capitalist stage) and choose one of the typical attractors for further activities (Buffet, Abramovich, Trump, Walton and McDuck).

The practical implication of the findings. The major conclusions and practical results of my thesis research were

- presented at research conferences on the problems of entrepreneurship: 35 International Conference of Business Information Management Association (35 IBIMA, 2020); the I International scientific-practical conference "Digital economy and e-education: European experience" (2020); the International Conference on Digital

Transformation in Logistics and Infrastructure, (ICDTLI 2019); the Innovations Management: Challenges and Opportunities for Economic Industries and Sectors international conference (2019); the Socioeconomic Development of Russian Regions: Current Condition, Trends, Prospects first research conference (Kaliningrad, 2016); Relationship Marketing and the Technology of Spatial-Systemic Economics' international research conference (Saint Petersburg, 2015); the Social Sciences, the Humanities, and Technology all-Russian research conference (Ulyanovsk, 2013); the Sociography, Politics, Culture all-Russian roundtable research conference (Ulyanovsk, 2013);

- presented and approved at the meeting of the Government of the Russian Federation discussing the Strategy for the Development of Trade in the Russian Federation in 2014–2016 and 2016–2020;

- discussed at the meetings of the governmental working group chaired by Deputy Prime Minister of the Government of the Russian Federation Arkady Dvorkovich;

- considered at meetings held by the Ministry of Industry and Trade of Russia, the Ministry of Economic Development of Russia, and the Federal Antimonopoly Service of Russia;

- discussed at various business conferences, workshops, congresses and roundtables both at the federal level (the Independent Chains Alliance of Russia, the ROST consumers society, etc.) and the regional level (Kaliningrad and the Kaliningrad region).

Publications

A. Articles in publications indexed in the SCOPUS system:

1. Ponomarev, O. B. Why do entrepreneurs forge alliances. *Revista ESPACIOS*. 2020 Vol. 41 (Issue 05).
2. Ponomarev O. B. Systemic and harmonious model of the entrepreneur // *Revista ESPACIOS*. 2020. Vol. 41 (N° 12)
3. Ponomarev, O. B., Svetunkov, S. G. Dynamic approach to the analysis of the essence of entrepreneurship. *Revista ESPACIOS*. 2018, vol. 39 (50).
4. Ponomarev O. B. Predprinimatelskiy kapital regiona: poniatiya, formy proyavleniya, prostranstvennaya lokalizatsiya [Entrepreneurial capital of a region: concept, manifestation forms, spatial localization]. *Baltiyskiy region [The Baltic region]* // *Baltic Region*. 2019. Vol. 11, No. 4. P. 152-166.
5. Ponomarev, O. B., Svetunkov, S. G. The impact of digital economy on the entrepreneurial capital. International Conference on Digital Transformation in Logistics and Infrastructure, (ICDTLI 2019). Available at: <https://www.atlantispress.com/proceedings/icdtli-19/125918546>. <https://doi.org/10.2991/icdtli-19.2019.75>

B. Articles in publications included in the "List of peer-reviewed scientific publications in which the main results of dissertations should be published ..." VAK of the Ministry of Education and Science of the Russian Federation:

1. Ponomarev, O. B. K voprosu ob usloviyakh effektivnosti predprinimatelskoy deyatel'nosti [On the conditions of effectiveness of entrepreneurship]. *Rossiyskoe predprinimatel'stvo [Russian entrepreneurship]*. 2019. Vol. 20. 4. doi: 10.18334/rp.20.4.40521
2. Ponomarev, O. B. TERIS–kod predprinimatelya i instrument vyyavleniya ego problem [The TERIS entrepreneurship code and a tool to identify its problems]. *Rossiyskoe predprinimatel'stvo [Russian entrepreneurship]*. 2018. Vol. 19. 1.
3. Ponomarev, O. B. Dinamicheskiy podkhod kak sistematiziruyushchiy instrument teorii predprinimatel'stva. *Konkurentosposobnost v globalnom mire: ekonomika, nauka, tekhnologii [Competitiveness in a global world: economy, science, technology]*. 2017, 1 (p.2). Pp. 118-122.
4. Ponomarev, O. B. O perspektivakh razvitiya teorii sotsialnogo predprinimatel'stva [On the prospects of social entrepreneurship theory]. *Rossiyskoe predprinimatel'stvo [Russian entrepreneurship]*, 2017, tom 18, 4.
5. Ponomarev, O. B. K voprosu ob upravlenii predprinimatelskoy deyatel'nostyu [On business management]. *Baltiyskiy region [The Baltic region]*, 2017, 2, pp. 82-91
6. Ponomarev, O. B. Model uspehnogo predprinimatelya [A model of successful entrepreneurship]. *Konkurentosposobnost v globalnom mire: ekonomika, nauka, tekhnologii [Competitiveness in a global world: economy, science, technology]*. 2016, 7, P. 2. Pp. 42–47.
7. Ponomarev, O. B. Transformatsiya predprinimatelskogo povedeniya v dinamike zhiznennogo tsikla predprinimatelya [Transformation of business behaviour and the life cycle of a businessperson]. *Konkurentosposobnost v globalnom mire: ekonomika, nauka, tekhnologii [Competitiveness in a global world: economy, science, technology]*. 2016, 5. Pp. 161–165.
8. Ponomarev, O. B., Svetunkov, S. G. K voprosu o bazovykh definitsiyakh teorii predprinimatel'stva [On the basic definitions of the theory of entrepreneurship]. *Sovremennaya konkurentsia [Contemporary competition]*, 2016, vol. 10, 1 (55). Pp. 70-79.
9. Ponomarev, O. B. Psikhotypy predprinimateley i kompleksnoe predstavlenie o predprinimatelskoy deyatel'nosti [Personality types of entrepreneurs and a comprehensive idea of entrepreneurship]. *Rossiyskoe predprinimatel'stvo [Russian entrepreneurship]*, 2016, tom 17, 9. Pp. 1105–1118.
10. Ponomarev, O. B. Sotsialnoe predprinimatel'stvo i model zhiznennogo tsikla predprinimatelya [Social entrepreneurship and the model of the lifecycle of the entrepreneur]. *Nauchno-tekhnicheskie vedomosti Sankt-Peterburgskogo politekhnicheskogo universiteta. Ekonomicheskie nauki [The science and technology bulletin of Saint Petersburg Polytechnic University. Economic sciences]*. 2016, 6. Pp. 112–122.
11. Ponomarev, O. B. Transformatsiya predprinimatelskogo povedeniya v dinamike zhiznennogo tsikla predprinimatelya [The transformation of business behaviour in the lifecycle of the entrepreneur]. *Konkurentosposobnost v globalnom mire: ekonomika, nauka, tekhnologii [Competitiveness in a global world: economy, science, technology]*. 2016, 5. Pp. 161–165.
12. Ponomarev, O. B. Sotsialnaya rol predprinimatelya v ekonomike [The social role of the entrepreneur in the economy]. *Nauchnoe obozrenie. Seriya 1 Ekonomika i pravo [Scientific review. Series 1. Economics and law]*, 2015, 6. Pp. 299–312.

13. Ponomarev, O. B. Nekotorye utochneniya aksiomaticeskogo yadra teorii predprinimatelstva [Some details of the axiomatic core of the theory of entrepreneurship]. *Nauchnoe obozrenie. Seriya 1 Ekonomika i pravo* [Scientific review. Series 1. Economics and law], 2015, 15. Pp. 450–458.
14. Ponomarev, O. B. Istoricheskie osobennosti rossiyskogo predprinimatelstva / *Rossiyskoe predprinimatelstvo* [Russian entrepreneurship], 2015, Tom 16, 17. Pp. 2707–2726.
15. Ponomarev, O. B. Teoriya predprinimatelstva v sovremennoy ekonomicheskoy nauke [Theory of entrepreneurship in contemporary economic science]. *Nauchnoe obozrenie. Seriya 1 Ekonomika i pravo* [Scientific review. Series 1. Economics and law], 2014, 10, part 1. Pp. 233–238.
16. Ponomarev, O. B. Zhiznennyy tsikl predprinimatelskoy deyatel'nosti [The lifecycle of entrepreneurship]. *Sovremennaya ekonomika: problemy i resheniya* [Contemporary economics: problems and solutions], 2013, 9. Pp. 140-155.

B. Monographs and coursebooks:

1. Ponomarev, O. B. *Sistemnaya teoriya predprinimatelstva: monografiya* [A systemic theory of entrepreneurship: a monograph]. Kaliningrad: Immanuel Kant Baltic Federal University Press, 2014.
2. Ponomarev, O. B. *Ekonomika Rossii i predprinimatelskaya deyatel'nost: monografiya* [The economy of Russia and entrepreneurship: a monograph]. Kaliningrad: Immanuel Kant Baltic Federal University Press, 2013.
3. Ponomarev, O. B., Svetunkov, S. G. *Ekonomika i predprinimatelstvo* [Economics and entrepreneurship]. Saint Petersburg: Levsha, 2015.

V. Other publications:

1. Svetunkov S.G., Ponomarev O.B. Features of entrepreneurship in the digital economy // Digital economy and e-education: European experience: collection of scientific papers of the I international scientific and practical conference March 10-14, 2020 / ed. L.I. Ushvitsky, I.V. Penkova. Stavropol: SEKVOYA, 2020.S. 340 – 344
2. Ponomarev, O. B., Svetunkov, S. G. Predprinimatelstvo, konkurentsia i innovatsii: sistemnaya model [Entrepreneurship, competitiveness, and innovations: a systemic model]. *Upravlenie innovatsiyami: vyzovy i vozmozhnosti dlya otrasley i sektorov ekonomiki. Materialy Mezhdunarodnoy konferentsii* [Innovations management: challenges and opportunities for industries and sectors of the economy. Proceedings of the international conference]. Kaliningrad, Immanuel Kant Baltic Federal University, 2019. Pp. 193–208.
3. Ponomarev, O. B., Svetunkov, S. G. Prognozirovaniye urovnya sotsialno-ekonomicheskogo razvitiya regionov metodami kompleksnoznachnoy ekonomiki [Forecasting the level of socio-economic development of regions, using the methods of complex-valued economics]. *Sotsialno-ekonomicheskoe razvitiye regionov Rossii: realii sovremennosti, tendentsii, perspektivy: materialy I Mezhdunarodnoy nauchno-prakticheskoy konferentsii* [The socioeconomic

- development of Russian regions: current state, trends, prospects: proceedings of the first international research conference*]. Kaliningrad, 2016. Pp. 110-114.
4. Ponomarev, O. B., Svetunkov, S. G. Marketing vzaimodeystviya i tekhnologii prostranstvenno-sistemnoy ekonomiki [Relationship marketing and the technology of spatial-systemic economics]. *Materialy Mezhdunarodnoy nauchno-prakticheskoy konferentsii 10-12 sentyabrya 2015 g., Sankt-Peterburg* [Proceedings of the international research conference. September 10-12, 2015. Saint Petersburg]. Saint Petersburg.: Saint Petersburg State University of Economics Press, 2015. Pp. 131–137.
 5. Ponomarev, O. B., Svetunkov, S. G. Nekotorye definitsii teorii predprinimatelstva [Some definitions of the theory of entrepreneurship]. *Marketing Menedzhment v tsifrovoy ekonomike: Zhurnal = Marketing management in the digital economy: MMDE Journal*. Saint Petersburg., 2015.-1. PpS. 33–44 (<http://www.marketing-digital.ru/>)
 6. Ponomarev, O. B. Osnovnye uchastniki ekonomiki predprinimatelstva [Major participants in the entrepreneurship economy]. *Ekonomicheskaya kibernetika: sistemnyy analiz v ekonomike i upravlenii: Sbornik nauchnykh trudov* [Economic cybernetics: systemic analysis in economics and management. A collection of papers]. 28. Saint Petersburg., Saint Petersburg State University of Economics Press, 2014. Pp. 13–18.
 7. Ponomarev, O. B. Psikhotypy predprinimateley [The personality types of entrepreneurs]. *Ekonomicheskaya kibernetika: sistemnyy analiz v ekonomike i upravlenii: Sbornik nauchnykh trudov* [Economic cybernetics: systemic analysis in economics and management. A collection of papers]. 28. Saint Petersburg: Saint Petersburg State University of Economics Press, 2014. Pp. 18–20.
 8. Ponomarev, O. B. Model predprinimatelya [A model of entrepreneurship]. *Sotsialno-gumanitarnye nauki i aviatsiya: sbornik materialov konferentsii, posvyashchennoy 20-letiyu kafedry gumanitarnykh i sotsialnykh distsiplin* [Social sciences, the humanities, and aviation: proceedings of the conference dedicated to the 20th anniversary of the Department of the Humanities and Social Disciplines]. Ulyanovsk: Ulyanovsk Institute of Civil Aviation Press (I), 2013. Pp. 132–142.
 9. Ponomarev, O. B. O meste riteyla v sovremennoy ekonomike [On the place of retail in today's economy]. *Ekonomicheskaya kibernetika: sistemnyy analiz v ekonomike i upravlenii: Sbornik nauchnykh trudov* [Economic cybernetics: systemic analysis in economics and management. A collection of papers]. 26. Saint Petersburg: Saint Petersburg State University of Economics and Finance Press, 2013. Pp. 63–78.
 10. Ponomarev, O. B. K voprosu o suti predprinimatelya i predprinimatelskoy deyatel'nosti [On the essence of the entrepreneur and entrepreneurship]. *Ekonomicheskaya kibernetika: sistemnyy analiz v ekonomike i upravlenii: Sbornik nauchnykh trudov* [Economic cybernetics: systemic analysis in economics and management. A collection of papers]. 27. Saint Petersburg: Saint Petersburg State University of Economics and Finance Press, 2013. Pp. 21- 29.
 11. Ponomarev, O. B. Oblast vzaimnykh pokupok i multiplikator Keynsa [The region of mutual purchases and the Keynesian multiplier]. *Korolevskie vorota*, 2014, pp. 60–61.
 12. Ponomarev, O. B. Triada 'proizvodstvo–raspredelenie - potreblenie' v ekonomike Adama Smita [The production-distribution-consumption triad in Adam Smith's

- economics. *Ekonomicheskaya kibernetika: sistemnyy analiz v ekonomike i upravlenii: Sbornik nauchnykh trudov* [Economic cybernetics: systemic analysis in economics and management. A collection of papers]. 25. Saint Petersburg: Saint Petersburg State University of Economics and Finance Press, 2012. Pp. 34–38.
13. Ponomarev, O. B., Svetunkov, S. G. Torgovye seti v regionalnoy ekonomike. Nachalo veka v provintsii [Retail chains in a regional economy. The beginning of the century in the provinces]. *Sotsiografiya, politika, kultura: Sbornik materialov Vserossiyskoy nauchnoy konferentsii v formate kruglykh stolov. May-oktyabr 2012 g., Ulyanovsk* [Sociography, politics, culture: proceedings of the all-Russian roundtable research conference]. Ulyanovsk: Ulyanovsk State University Press, 2012. Pp. 192-199.
 14. Ponomarev, O. B. Adam Smit o torgovle [Adam Smith on trade]. *Povolzhskiy pedagogicheskiy poisk* [Volga pedagogical search], 2012, 2. Pp. 138–142.
 15. Ponomarev O.B. Pyti razvitiya vertikalnoi integratsii v agro-promyshlennom komplekse Kaliningradskogo regiona [Ways of development of vertical integration in the agro-industrial complex of the Kaliningrad region] // Forecasting and development strategies of the Special Economic Zone of Russia: Interuniversity. Sat scientific tr / Kaliningrad: Kaliningrad University 2000.
 16. Ponomarev O.B. Retrospektivnyi analiz: ot agro-kylturnoi kooperatsii k agro-integralnoi integratsii [Retrospective analysis: from agricultural cooperation to agro-industrial integration] // Bulletin of the Baltic Science Center. 1999. - No. 2 (13).
 17. Ponomarev O. La Région de Kaliningrad // Carrefours France-Russie. 1994. No12

In total, 45 works were published on the topic of the dissertation research, including 5 articles indexed in SCOPUS, 16 articles published in journals recommended by the Higher Attestation Commission of the Ministry of Education and Science of the Russian Federation. The total volume of publications is more than 79.5 pp

The dissertation consists of an introduction, six chapters, including 24 sections, a conclusion and a list of references (376 sources).

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