

REGIONAL ENTREPRENEURIAL SYSTEM: DEVELOPMENT PARAMETERS AND POTENTIAL OF RECONFIGURATION

The article deals with the development of entrepreneurship in the Russian regions. Firstly, the state of both Russian entrepreneurship, in general, and small and medium-sized business, in particular, is not satisfactory. Secondly, the measures implemented by the state in the field of entrepreneurship development are not sufficiently effective. To the authors' opinion, these two facts are due, among other things, to a lack of a holistic understanding of what constitutes an institution of entrepreneurship in a spatial context. The authors propose to consider the development of regional entrepreneurship using the system approach with the scope to the regional business system. Within the proposed authors' approach, resources, economic agents and institutions are considered as the main elements of this system. The authors substantiate that there are institutional configurations, and not simple institutions, which determine the parameters of interaction between the elements of the regional enterprise system. These elements can contribute to the enterprise processes in the territory or block them. We assume that even a region with an essential resource of business potential is not able to realize it completely until it develops an effective institutional configuration of the regional business system. In order to investigate certain parameters of the institutional configuration of the regional business system, we propose a methodology for assessing the institutional loyalty of business entities and testing this technique on the example of eighty-four constituent entities of the Russian Federation. We have concluded that, in a large part of the Russian regions, a successful implementation of the strategy for the development of small and medium-sized businesses will require the transformation of the regional enterprise system on the basis of reengineering. It involves a radical redesigning the entire system, ensuring the entrepreneurial processes in a territory. The authors prove that the basis for reengineering should be the institutional reconfiguration of the regional business system. The results of the research can be used to identify systemic problems that impede the development of entrepreneurship in the Russian regions and to develop more effective measures to address these problems.

Keywords: region, entrepreneurship, regional business system, entrepreneurial processes, resources, economic agents, institutions, institutional configurations, institutional loyalty, architecture of the regional enterprise system, reengineering of the regional enterprise system, reconfiguration.

Introduction

The development of private entrepreneurship is currently one of the most important strategic tasks for the development of the Russian economy. Modern problems that our country is faced with actualize the need for rapid development of the Russian economy on the basis of an innovative development model. It seems that in the emerging conditions only an innovative model of economic development of our country will be able to most efficiently meet the ever growing needs of society. It is quite obvious that an effective solution of this problem without involvement of a sufficiently large number of private entrepreneurship can reach a deadlock and not lead to the achievement of the required results. It seems that without laying the groundwork for the further growth of private business initiative and improving the quality of entrepreneurship, the government will not be able to solve the tasks of innovative economic development, which will undoubtedly affect the place of Russia in the global economic space. Particular attention in this regard should be paid to the development of small and medium-sized businesses, which under certain conditions can become a key driver for the development of certain branches of the economy of the future.

At the same time, at present the level of development of small and medium-sized businesses, its sectoral structure are clearly unsatisfactory in Russia. Despite some positive dynamics in the development of small and medium-sized businesses, which has been taking shape recently, the overall picture of the state of this sector of the Russian economy looks rather problematic. Thus, according to the preliminary results of a continuous survey of small and medium-sized businesses, the contribution of small and medium-sized businesses to GDP in 2015 was 19.9 %. The number of employees in this sector of the economy is 20.5 million, that is, small and medium businesses account for slightly more than 28 % of all job places in the economy. These indicators are not satisfactory, they are significantly

behind the indicators of countries that have leading positions in the world economy or are striving for world economic leadership. In addition, the structure of domestic small and medium-sized businesses is unsatisfactory, in which the percent of industrial entrepreneurship and innovative ventures is rather low.

At the same time, the government continues to set quite ambitious plans for the development of entrepreneurship and private business initiative. They are especially enormous in the development of small and medium-sized businesses (SMEs). It is known that the Strategy for the Development of Small and Medium-sized Entrepreneurship in the Russian Federation for the period until 2030, which sets out the main target indicators for the development of this sector of the economy was approved in 2016. The strategic goal of this program document is a rather ambitious goal—increasing the percent of small and medium-sized enterprises in the country's gross domestic product by 2 times (from 20 % to 40 %) by 2030.

In our opinion, the achievement of this goal, which in fact involves the transition of the small and medium-sized business sector to a new qualitative level of its future activity, will require a certain theoretical rethinking of economic policy and the development of a new concept of managing the development of entrepreneurship, and above all at the regional and municipal levels.

In this regard, it should be noted that, in general, the theoretical foundations of entrepreneurship (the theory of entrepreneurship) as an integral part of economic science (primarily the neoclassical direction) have not yet been finally formed and, for a number of reasons, are in the process of formation. In the scientific research (primarily foreign) slight attention was given to the role of the entrepreneur almost until the 1980s. Exceptions are the studies of J. Schumpeter, F. Knight, I. Kirtsner and some other researchers [1–5]. According to the well-known expression of W. Baumol, the foundations of the theory of entrepreneurship were laid down in the works of economists-classics, "but in the era of neoclassicism, the entrepreneur was expelled from the scientific literature" [6, p. 31]. I. Kirtsner agrees with him, stating that "the true role of the entrepreneur in the market system is not presented in the proper perspective or with proper recognition of him as the driving force of the entire market process" [7, p. 17]. However, recently, research in the field of entrepreneurship (primarily of a sociological nature), as A. Chepurenko notes, has turned into a rapidly developing discipline. In addition to the above, the focus of entrepreneurial research is not only the personality type and the human and social capital of the entrepreneur, but also the role of social networks, as well as institutions, including development institutions, in the formation of entrepreneurial strategies and practices [8].

At the same time, the situation with scientific research in the field of entrepreneurship remains ambiguous in Russia. Despite a number of quite interesting works ([9–11], etc.), in general, there is still quite a huge number of poorly-researched directions for the development of entrepreneurship, which require increased attention of researchers in the Russian scientific environment. Among the insufficiently studied topics, according to experts, are also studies of interregional differences in entrepreneurial activity, types of entrepreneurship, composition and structure of entrepreneurial cohorts [8]. There are also obviously poor theoretical and practical studies on researching the role and place of the entrepreneur, entrepreneurial processes in the system of regional economic relations, motivations for the behavior of business entities in specific space-time parameters from our point of view.

It seems that the inefficiency of measures implemented by state structures in the field of entrepreneurship development at the regional level can be explained (among other things) by the lack of a holistic understanding of what constitutes an institution of entrepreneurship in a spatial context and on what principles it is developed. All this does not allow to come to an understanding of how, in general, and on what principles, entrepreneurship develops in the region, and prevents adequate forecasting of scenarios for the development of regional entrepreneurship, even in the short term prospects. In this regard, there are serious problems in the management of business development processes at the regional level. All this does not allow to effectively and with high return involve private business into the implementation of the innovative model of social and economic development of the regions of the Russian Federation.

The current state of affairs indicates the need for a certain methodological reset of research on the development of entrepreneurship (including small and medium-sized ones) in the Russian regions, their transfer to the rails of a new methodology based on institutional analysis and the system approach. As Academician A. I. Tatarkin correctly noted, the systematic approach in recent years has

become a universal requirement for the study of any problem that needs a scientific solution [12]. In this regard, it seems advisable to consider the development of regional entrepreneurship through the prism of a systematic approach, in the contour of which the subject of research is the regional system of entrepreneurship (RSE).

Experimental

Currently, the system analysis is based on the approach proposed by Karl Ludwig von Bertalanffy, according to which the system is most often represented as a certain set of elements that are interrelated to each other and form some integrity. This understanding, as a rule, prevails in modern studies of both economic and socio-economic systems, in which the authors of definitions focus their attention on such properties of social and economic systems as integrity, internal organization, focus and manageability. V.V. Glushchenko and I.I. Glushchenko define the economic system as a set of elements that are combined structurally and functionally in a way that allows to provide a set of conditions for achieving a set of goals with limited resources and time [13]. V. Kudrov defines the social and economic system as "a set of existing production relations, forms of ownership and public institutions in the format of the already existing infrastructure in the form of production, financial, social and other institutions" [14, p. 25]. According to G.B. Kleiner, the socio-economic system is a time-localized (and / or space-localized) relatively stable part of the country (sometimes – world) socio-economic continuum, with external integrity and internal diversity [15].

When analyzing the concept of "regional socio-economic system" as its basis, researchers also consider the interaction of various elements of the system (a set of resources, business units or economic subsystems), but taking into account the spatial (territorial) context. Thus, according to A.I. Gavrilov, the socio-economic system of the region includes a set of resources and business units that are interconnected and interacting in the sphere of production, distribution of exchange and consumption, forming a single integrated socio-economic structure within a certain territory [16]. V.V. Smirnov, believes that the regional socio-economic system should be viewed as a system in which participating elements with their structures, functions, connections with the external environment form an emergent organization on the basis of synergies and that consists of functionally complementary subsystems: resource, production, market, investment, social, institutional, cultural and organizational [17]. In the monograph under the general editorship of Academician A.I. Tatarkin "Self-developing socio-economic systems: theory, methodology, forecasts," regional socio-economic systems are defined as systems operating on an integral territory that serves as a place of permanent residence and people's livelihood, includes interconnected socio-economic subsystems and is characterized by mutually conditioned processes that take place on the basis of established and converted processes on the territory of institutions [18].

In this regard, the approach of G.B. Kleiner that offers to consider a meso-level subsystems as four relatively independent subsystems: the region (in a broader sense – the regional regulation authorities), the regional society (regional authority, the structured population of the region), the regional economy, regional business is very interesting [15]. From the point of view of this approach, the subsystems designated form – stable complexes of four types of systems of different types – object, environment, process and design, interacting in a circular scheme: "object – environment – process – project – object" [15]. Based on this approach, the regional system of entrepreneurship can be represented as a tetrad consisting of all four types of systems – the object system (the set of business structures operating in the region), the environment (business environment), the process (the set of entrepreneurial processes) and the project system (set of entrepreneurial projects). All four subsystems interact with each other in a circular scheme, which in brief form can be described in the following way: entrepreneurs in the business environment on the basis of entrepreneurial processes implement a set of entrepreneurial projects. Consequently, in a well-functioning and well-balanced tetrad of regional entrepreneurship, these subsystems must ensure effective business development. From our point of view, the study of trends in the development of entrepreneurship in the region on the basis of this approach seems to be quite promising, since in this projection it becomes possible to look at the regional system of entrepreneurship from different angles, which allows to take into account the dynamic processes taking place in the regional socio-economic system.

At the same time, most researchers, recognizing the leading role of entrepreneurship in the socio-economic development of the region, do not separately single out the entrepreneurial subsystem, and

thus, from their point of view, it (the subsystem of entrepreneurship) is built into the structure of other subsystems, integrating into all the elements of the system, which in one or another way affects the development of entrepreneurship.

However, in our opinion, in order to clearly represent and analyze a holistic picture of the formation and development of the entrepreneurial movement in the region, it is necessary to identify and allocate the elements of the socio-economic system that are involved in generating and supporting the processes of management on an initiative, risky basis with a view to obtain entrepreneurial income.

In this regard, the primary task is the need to clarify the definition of "regional system of entrepreneurship". The analysis of the scientific studies made it possible to come to the conclusion that the domestic scientists paid less attention to the complex study of the regional system of entrepreneurship as subsystems of the regional social and economic system. As a consequence, not so many definitions of the concept of "regional business system" are presented in the domestic scientific literature. In particular, it is possible to note the interpretation of this category proposed by P.N. Mashegov and T.S. Soboleva, who understand the regional system of entrepreneurship as a territorially limited set of physical and non-material objects, institutions, conditions, relations and processes, aimed at the stable implementation of the targets of the functioning of its participants through interaction between themselves and with elements of the environment [19].

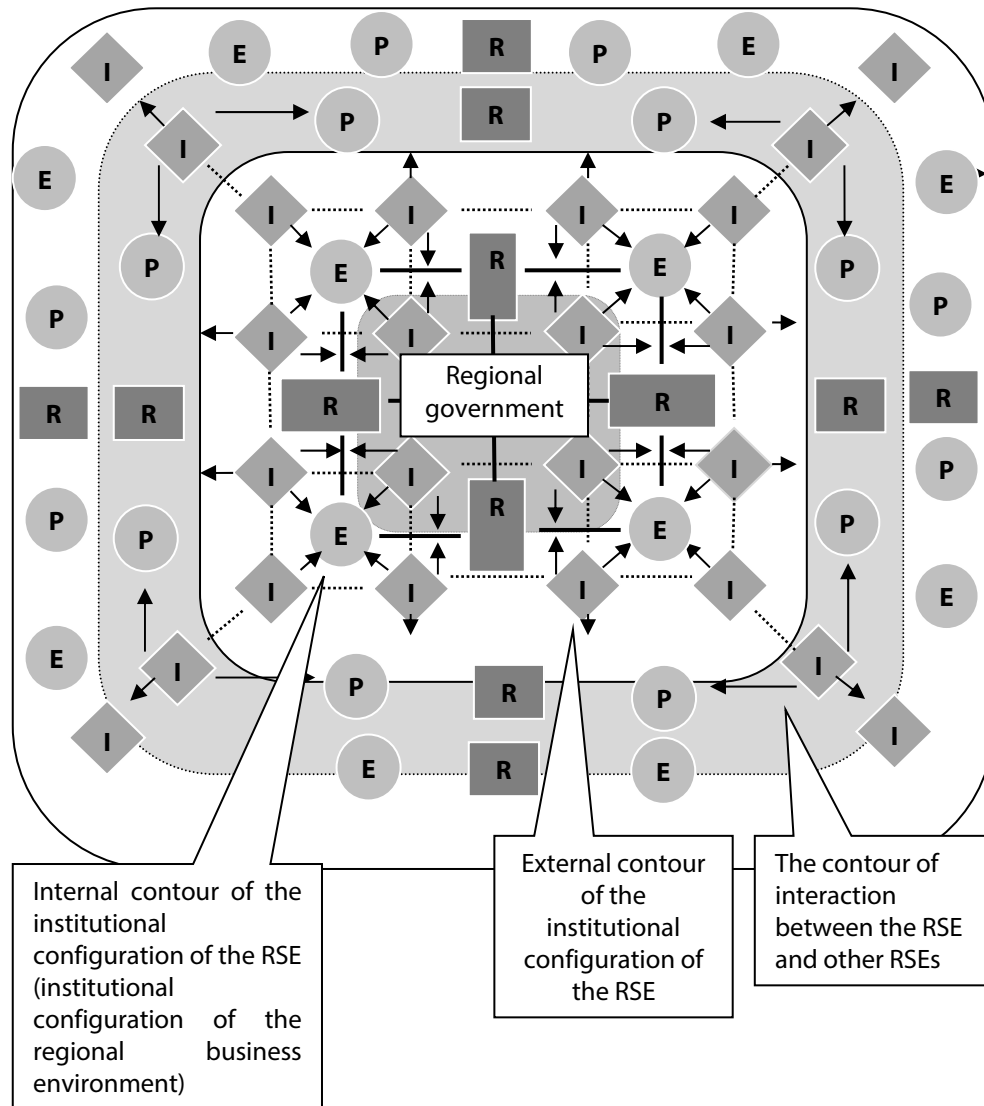
From our point of view, the main elements of the regional business system are resources or resource subsystems (natural, financial, infrastructural, labor, etc.), economic agents (individuals, households, enterprises, etc.) and institutions (formal and informal). Key elements of the regional business system are economic agents, since they are able to generate and intensify entrepreneurial processes on the basis of available resources under certain conditions. At the same time, we understand the entrepreneurial process as a stable, purposeful set of actions (works) carried out on an initiative and risk basis, which are performed independently or with the involvement of other economic agents, which, by a certain technology, transform the inputs (resources) into outputs (products, services) with the purpose of obtaining entrepreneurial income. An economic agent who manages and bears full responsibility for the results and effectiveness of the entrepreneurial process is the owner of the entrepreneurial process.

In our opinion, the regional system of entrepreneurship is a set of interconnected and interacting resource subsystems and economic agents localized in space, forming an integral structure that generates entrepreneurial processes and influences them on the basis of formal and informal institutions that have developed and are being transformed on a certain territory. It means that objectively, the RSE has different properties and potential, which are determined, firstly, by the resourcing of the business system on an initiative risk basis for obtaining entrepreneurial income, and secondly, by the structure and nature of resources distribution between economic agents (the ownership structure resources), thirdly, by the access credentials to resources necessary to launch entrepreneurial processes, and fourth, by the ability of economic agents to organize the entrepreneurial process, and to be its owners, in the fifth, by the characteristics of institutional support of entrepreneurship. Hence, it is quite obvious that the parameters of interaction between the elements of the regional business system that promote or block the generation and development of entrepreneurial processes on the territory are determined by institutions, in other words, the institutional environment [20, 21] of the region. In addition, the specific parameters of the institutional environment of the region affecting business processes are determined merely not by a set of institutions, but by its (institutions) interaction with each other – that is, the institutional configuration.

It should be noted that the concept of institutional configurations has been applied for several years to study the regional business environment for the development of entrepreneurship. In our opinion, the configuration approach allows to obtain a reliable and comprehensive description of the regional business system properties in view of the fact that the motivation of the structural and functional certainty of the system, along with the type and features of the structure of subsystems and elements, takes into account the ways in which the activities of the system are coordinated and the integration of all its elements and subsystems involved in the generation and development of entrepreneurial processes is supported. Through this, it is possible to identify the unique influence of each of the elements and subsystems on the structure and efficiency of the whole system functioning. Such influence does not necessarily lead to immediate and noticeable results, but, nevertheless, it has a significant impact on the development of entrepreneurial processes in the regional business system over time. For the first time, the configuration approach [22] to the study of the regional business environment institutions

was substantiated in a number of our research [23–25], in which it was proposed to define the concept of the institutional configuration of the regional business environment — as a set of interrelated and interacting basic and additional regional formal and informal institutions, ordered and structured in a certain hierarchical combination, in aggregate defining rules, as well as economic restrictions on the behavior of economic agents in the framework of a regional (spatial) enterprise system [24]. Thus, we justified that the parameters (limitations) of the economic activity of a specific business entity are determined not by a simple set of institutions of the business environment, but by their interaction, that can weaken one institution influence and impact another, that leads to the formation of a plural institutional space. Under that logic, each business entity has its own individual-specific institutional configuration of the business environment, parameters of which are determined by the resource (material and non-material) potential of the particular entrepreneur.

Correspondingly, the institutional configuration of the regional business environment determines the parameters for the economic management of a specific business entity, it is a kind of internal institutional contour of the regional business system. At the same time, there are economic agents in the region that, for various reasons, do not participate in economic relations as entrepreneurs, but potentially can be included in entrepreneurial activities. The same can be said about the resources of the system, which can be used for entrepreneurial activities (for example, retail deposits of the population). The reluctance of economic agents to participate in economic activities as an entrepreneur can be a consequence of the fact that the combinations of institutions of entrepreneurial activity developed in the region make, for example, employment, more profitable rather than self-employment or the use



E — Economic agents — active entrepreneurs; P — Economic agents — possible entrepreneurs; R — Business resources; I — Institutions.

Fig. Institutional configuration of the regional business system

of resources, not for the purpose of implementing entrepreneurial projects, but in a different way. The level of underground and informal economy development in the region also depends on the specific character of the institutional configuration.

From our point of view, the institutional component of the regional business system is a two-loop institutional structure. The structure of the internal contour is formed by combined and interacting in a particular configuration institutions that constitute the direct institutional environment of business entities (institutions of the business environment of the region, such as institutions of state regulation and business support, institutions protecting the rights of entrepreneurs, investors, consumers, etc.). The external contour of the institutional structure of the regional enterprise system is organized by institutions that form an indirect institutional environment for entrepreneurship (regional political, social, and economic institutions that indirectly affect the structure of economic relations of economic entities, for example, the institutions of social responsibility of business and business ethics). It is necessary to emphasize that the external contour of the institutional structure forms a continuum of the RSE, in which economic agents that are not business entities at the current time, but potentially capable to become entrepreneurs under favorable institutional conditions, operate.

Together, the configuration combinations of the institutions of both contours form the institutional configuration of the regional enterprise system (Fig.). In addition, the institutional configuration of the RSE interacts with the institutional configurations of other regional business systems and, through such interaction, either draws economic agents and resources from other regional business systems into its orbit (brings to the territory of the region), or "pushes" them out, giving way to stronger regional business systems. Also, within the framework of such interaction, the most effective institutions can be exchanged (technologies for best practices application).

Thus, in our opinion, the institutional configuration of a regional business system is a set of relatively localized in the space, interconnected and interacting basic and additional regional formal and informal institutions, ordered and structured in a specific hierarchical combination, together defining rules, as well as limits on the interaction of resources and economic agents in the generation and development of entrepreneurial processes.

Model

In our opinion, the region, even with a significant resource potential of entrepreneurship, will not be able to fully realize it if it fails to build an efficient institutional configuration of the regional business system.

The most important characteristic of the quality of the institutional configuration of a regional business system can become the indicator of institutional loyalty of economic agents, that is, their willingness to formally carry out economic activities in the parameters of the current institutional environment. Of course, it is possible to carry out activities in different ways (with varying economic efficiency and even partially in the "shadow format"), but the very fact of tax registration, as well as accounting in the PFR (Pension Fund of Russia) and other off-budget funds in a different regions of the Russian Federation, are the evidence of a certain satisfaction of the economic agent with the parameters of the institutional configuration established in the regional business system.

We propose to use the indicator, which is called the index of institutional loyalty of small and medium-sized businesses as one of the indicators of the institutional configuration of the regional business system in the conditions of limited availability of official statistical information on the development of entrepreneurship in the regions. The following relative indicators are used for its calculation: the number of small and medium-sized businesses in the region included in the Single Register of Small and Medium-Sized Enterprises, per 1,000 inhabitants of the region (I_1), the percent of the employed population in small and medium-sized enterprises in the total share of the economically active population of the region (I_2) and the percent of small and medium-sized enterprises that have the attribute "newly created" in the total number of small and medium business entities in the region included in the Single Register of Small and Medium-Sized Enterprises (I_3). A distinctive feature of the proposed methodology for calculating the index of institutional loyalty is the application of the indicator of the share of small and medium-sized enterprises that have the attribute "newly created" in the total number of small and medium-sized businesses in the region (I_3), since it mainly reflects the desire of economic entities to enter more into the business and their willingness to adapt to the institutional conditions created in the business environment of the region.

The sub-indexes for each indicator are calculated by dividing the relative indicator of the region by the maximum value of this indicator in a sample that includes 85 regions of the Russian Federation. The integral index is calculated by the formula of the geometric mean:

$$I_I = \sqrt[3]{I_1 \cdot I_2 \cdot I_3}$$

The results of calculating the index of institutional loyalty of small and medium-sized businesses in all regions of the Russian Federation for 2016 are listed below (Table 1).

Table 1

**Index of institutional loyalty of small and medium-sized businesses
in the regions of the Russian Federation in 2016**

Region	Index				Rank
	I_1	I_2	I_3	I_I	
<i>Central Federal District</i>					
The Belgorod Region	0,615527	0,548673	0,418981	0,521	36
The Bryansk region	0,518176	0,530973	0,358796	0,462	59
The Vladimir Region	0,59427	0,678466	0,324074	0,507	40
The Voronezh region	0,563771	0,654867	0,460648	0,554	21
The Ivanovo Region	0,63817	0,766962	0,425926	0,592	10
The Kaluga region	0,616605	0,663717	0,391204	0,542	29
The Kostroma Region	0,598429	0,837758	0,368056	0,569	19
The Kursk Region	0,497843	0,530973	0,342593	0,449	65
The Lipetsk region	0,523722	0,516224	0,453704	0,496	47
The Moscow Region	0,616913	0,60767	0,430556	0,544	28
The Orel region	0,531885	0,634218	0,354167	0,492	49
The Ryazan region	0,572089	0,775811	0,384259	0,554	21
The Smolensk region	0,607979	0,678466	0,400463	0,548	25
The Tambov region	0,466266	0,495575	0,37037	0,44	68
The Tver Region	0,556531	0,684366	0,372685	0,521	36
The Tula region	0,560382	0,551622	0,421296	0,506	42
The Yaroslavl region	0,668053	0,737463	0,486111	0,621	6
Moscow city	0,93931	0,870206	0,539352	0,761	2
<i>North-West Federal District</i>					
Republic of Karelia	0,644948	0,651917	0,354167	0,53	33
Republic of Komi	0,561768	0,643068	0,3125	0,483	52
The Arkhangelsk region	0,523413	0,631268	0,321759	0,473	57
The Vologda region	0,684381	0,719764	0,493056	0,623	5
The Kaliningrad Region	0,90342	0,882006	0,335648	0,644	4
The Leningrad Region	0,449476	0,460177	0,405093	0,437	69
The Murmansk region	0,556069	0,463127	0,351852	0,449	65
The Novgorod region	0,54313	0,589971	0,384259	0,497	46
The Pskov Region	0,525262	0,640118	0,384259	0,505	43
St. Petersburg	1	1	0,516204	0,802	1
<i>Southern Federal District</i>					
Republic of Adygea	0,560228	0,530973	0,365741	0,477	55
Republic of Kalmykia	0,523722	0,321534	0,421296	0,413	75
Republic of Crimea	0,6622	0,486726	0,465278	0,531	32
The Krasnodar Territory	0,757548	0,640118	0,388889	0,573	15
The Astrakhan region	0,500462	0,513274	0,340278	0,443	67
The Volgograd Region	0,497689	0,516224	0,377315	0,459	61
The Rostov Region	0,627234	0,60472	0,358796	0,514	39

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Region	Index				Rank
	I_1	I_2	I_3	I_I	
Sevastopol	0,832409	0,625369	0,435185	0,609	7
<i>North-Caucasian Federal District</i>					
Republic of Dagestan	0,169439	0,079646	0,75	0,216	82
Republic of Ingushetia	0,101356	0,067847	1	0,19	83
Kabardino-Balkar Republic	0,361214	0,235988	0,534722	0,357	77
Karachay-Cherkess Republic	0,368608	0,238938	0,458333	0,343	79
Republic of North Ossetia-Alania	0,335644	0,250737	0,446759	0,335	81
The Chechen Republic	0,163278	0,056047	0,62963	0,179	84
Stavropol Territory	0,552064	0,510324	0,335648	0,455	63
<i>Privolzhsky Federal District</i>					
Republic of Bashkortostan	0,469963	0,542773	0,446759	0,484	51
Republic of Mari El	0,490758	0,628319	0,384259	0,491	50
Republic of Mordovia	0,40727	0,525074	0,358796	0,424	72
Republic of Tatarstan	0,618145	0,666667	0,467593	0,577	11
Udmurt Republic	0,580253	0,699115	0,423611	0,555	20
Chuvash Republic	0,57024	0,60472	0,402778	0,517	38
Perm Territory	0,637092	0,764012	0,384259	0,571	17
The Kirov region	0,63817	0,766962	0,335648	0,547	27
The Nizhny Novgorod region	0,629852	0,719764	0,418981	0,574	13
The Orenburg Region	0,462107	0,522124	0,409722	0,462	59
The Penza region	0,537277	0,587021	0,351852	0,48	54
The Samara Region	0,597197	0,675516	0,465278	0,572	16
The Saratov Region	0,457794	0,589971	0,351852	0,456	62
The Ulyanovsk Region	0,528189	0,59587	0,381944	0,493	48
<i>Ural Federal District</i>					
The Kurgan Region	0,41297	0,545723	0,333333	0,421	74
The Sverdlovsk Region	0,713339	0,769912	0,393519	0,6	8
The Tyumen Region	0,658965	0,80236	0,407407	0,599	9
The Khanty-Mansijsk Autonomous District	0,579482	0,554572	0,386574	0,498	44
The Yamalo-Nenets Autonomous district	0,546981	0,439528	0,393519	0,455	63
The Chelyabinsk Region	0,625539	0,657817	0,407407	0,551	24
<i>Siberian Federal District</i>					
Republic of Altai	0,634319	0,740413	0,402778	0,574	13
Republic of Buryatia	0,439464	0,448378	0,425926	0,437	69
Republic of Tuva	0,32825	0,244838	0,509259	0,344	78
Republic of Khakassia	0,530499	0,575221	0,333333	0,466	58
Altai Territory	0,509088	0,631268	0,386574	0,498	44
The Trans-Baikal Territory	0,380006	0,471976	0,347222	0,396	76
Krasnoyarsk Territory	0,577172	0,619469	0,414352	0,529	35
The Irkutsk region	0,558226	0,619469	0,377315	0,507	40
The Kemerovo Region	0,413894	0,530973	0,375	0,435	71
The Novosibirsk Region	0,786044	0,834808	0,493056	0,686	3
The Omsk Region	0,538509	0,584071	0,474537	0,53	33
The Tomsk Region	0,626001	0,716814	0,368056	0,548	25
<i>Far Eastern Federal District</i>					
Republic of Sakha (Yakutia)	0,641251	0,415929	0,421296	0,482	53
Kamchatka Territory	0,766482	0,59882	0,331019	0,533	31

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Region	Index				Rank
	I_1	I_2	I_3	I_I	
Primorsky Territory	0,710721	0,675516	0,386574	0,57	18
Khabarovsk Territory	0,616913	0,654867	0,386574	0,538	30
The Amur Region	0,520795	0,578171	0,361111	0,477	55
The Magadan Region	0,777264	0,675516	0,324074	0,554	21
The Sakhalin region	0,729205	0,764012	0,342593	0,575	12
The Jewish Autonomous Region	0,40496	0,525074	0,354167	0,422	73
The Chukotka Autonomous District	0,424214	0,300885	0,300926	0,337	80

Source: official site of the Federal Tax Service (<https://www.nalog.ru>); official website of the Federal State Statistics Service (<http://www.gks.ru/>); authors' calculations.

The obtained institutional loyalty indexes of SME subjects in the regions of the Russian Federation were ranged by their ranks and compared with the data of the regions of the Russian Federation in the framework of the National Investment Climate Rank in Regions of the Russian Federation – 2016. (Table 2).

Table 2

Indicators of the Russian Federation regions included in the top 20 of National rank of the investment climate in the Russian Federation regions – 2016 by the institutional loyalty index of SMEs – 2016

Russian Federation region	Russian Federation region place in National rank of the investment climate in the Russian Federation	Russian Federation region place in the rank by the institutional loyalty index of SMEs – 2016
The Republic of Tatarstan	1	11
The Belgorod Region	2	36
The Kaluga region	3	29
The Tula region	4	42
The Tyumen Region	5	9
Chuvash Republic	6	38
The Krasnodar Territory	7	15
The Vladimir Region	8	40
The Khanty-Mansijsk Autonomous District	9	44
Moscow	10	2
The Ulyanovsk Region	11	48
The Tomsk Region	12	25
The Orel region	13	49
The Chechen Republic	14	84
The Kirov region	15	27
The Lipetsk region	16	47
The Republic of Mordovia	17	72
The Yamalo-Nenets Autonomous district	18	63
The Tambov region	19	68
The Republic of Bashkortostan	20	51

Source: National Investment Climate Rank in Regions of the Russian Federation (<http://www.investinregions.ru/rating>).

The choice of National Investment Climate Rank in Regions of the Russian Federation as a comparison is due to the fact that within the framework of this project 45 indicators are estimated and grouped into 17 factors in 4 directions, largely reflecting the quality of institutional conditions for opening and running a business: regulatory environment, business, infrastructure and resources institutions, support of small business. It is noteworthy that only four regions of the Russian Federation

(the Republic of Tatarstan, the Tyumen Region, the Krasnodar Territory and Moscow) from the the top 20 list of National Investment Climate Rank in Regions of the Russian Federation in 2016 could get into the top twenty of the leaders by the institutional loyalty index of SMEs – 2016. Of course, it is difficult to draw any conclusions based on this comparison, it may even be incorrect, and careful interpretation of the results is necessary here. However, it is perfectly permissible to make some assumptions. For example, this discrepancy may, in particular, indicate that in some regions, when implementing the activities of the "road maps" to create favorable business conditions, the leadership of the Russian Federation regions is more concerned with attracting large investors to the territory and the relevant conditions are created (sometimes only formally) only for them, while insufficient attention is given to the development of small and medium-sized businesses.

In addition, the result can indicate a strong competition between the regions for the positions in the National Investment Climate Rank, where the regional authorities actively work to show the indicators and score the desired result for certain positions to occupy the necessary place in the ranking, and it often turns out to be only formal improvements in the investment climate. Real improvements of business conditions at the same time, even if they take place, occur not to the extent that would be expected for a qualitative breakthrough in the dynamics of business development.

Despite the ambiguity and apparent simplicity of the proposed approach, the index of institutional loyalty of small and medium-sized businesses, calculated by the proposed methodology, can be fully considered as an indicator that partially characterizes the quality of the institutional configuration of the RSE, can be used for more accurate assessment of the institutional parameters of entrepreneurial activities in the regions. As the available statistical base is expanded to improve the adequacy of the assessment, the number of subindexes can be significantly increased, as well by including indicators that characterize the informal component of entrepreneurial processes taking place in the region.

In our opinion, the proposed approach based on the application of indicators of institutional loyalty is the most important indicator of the institutional environment of entrepreneurship, free from the drawbacks of subjective assessments of customary sociological surveys, often used in assessing the quality of institutions for doing business, which provides an opportunity for more correct conduction of interregional analysis of the effectiveness of institutional configurations of regional business systems.

This analysis allows us to conclude that each region has its own unique architecture of the regional business system, by which we mean the structural organization in a certain space of the system of economic management on an initiative, risk basis for obtaining entrepreneurial income, embodied in the specifics of its elements and the features of their interrelations with each other and with the environment, defining the key properties of the system, manifested in its ability to influence the generation and development of entrepreneurship processes.

The specificity and uniqueness of the architecture of the RSE is a consequence of both the differentiation of the territories in terms of resource provision and the structure of resource owners, as well as the specifics of the institutional configuration that determines the rules for the interaction of economic agents among themselves (for example, between the government and the entrepreneur) and their desire to generate and own entrepreneurial processes.

In this regard, it should be noted that, despite the dynamic nature of the regional business system, its architecture takes a clearly defined and stable form of structure that is adequate to a particular spatio-temporal context for a certain period of time, which in its turn determines the level of intensity and quality of entrepreneurial processes on a particular territory. This so-called equilibrium state of the regional enterprise system, which, although it may not provide the proper level and intensity of business development, still largely suits the main regional stakeholders that will resist any attempts to transform the system, while allowing non-fundamental, partial changes of its individual elements and interrelations between them (for example, the growth of the number of infrastructure facilities supporting small and medium-sized businesses, an increase of its financial support, etc.).

Meanwhile, the present level of small and medium-sized businesses development in most regions indicates that the current state of the regional business system, its architecture does not fully meet modern challenges, and at the current time are not able to generate a sufficient level of intensity of entrepreneurial processes. All this may challenge the possibility of a quantitative and qualitative breakthrough in the development of small and medium-sized business in the Russian regions, which is necessary to achieve the indicators outlined in Strategy-2030.

Results and discussions

From our point of view, in order to successfully achieve the strategic goals of small and medium-sized businesses development in a large part of the Russian regions, a regional business system will need to be transformed. Moreover, it should not be about simply reformatting the regional system of entrepreneurship, but about its reengineering, that is, a fundamental rethinking of the ideology of managing the development of entrepreneurship and a radical redesign of the whole system that ensures the flow of entrepreneurial processes on a certain territory. This is a very difficult management task, since reengineering will require the regional enterprise system to be taken out of a stable state (that will meet serious stakeholders resistance) and return it to this state, but only at a new quality level of functioning. It is quite obvious that it is possible to launch the procedures for reengineering the regional business system with the support of the main political and business stakeholders [26]. This is due to the fact that the system will effectively change only if groups (at least part of groups) of influence that have a decisive influence on the formation and maintenance of the rules of the game in the region will be interested in these changes [24].

From our point of view, the basis for reengineering the regional business system is the institutional reconfiguration of the RSE, which consists in recombining the ways and nature of the interaction of institutions that support the generation and development of entrepreneurial processes in a spatial context. This is due to the fact that it is the institutional configuration that determines the stability of the structure of the regional business system. Institutes act as a kind of braces of the regional system of entrepreneurship, which in fact keep the existing configuration of the structure and ensure its stability. In this regard, we assert that it is possible to realistically change the properties of the regional enterprise system only on the basis of institutional reconfiguration, which will be expressed in the growth of the quantity, quality and intensity of entrepreneurial processes occurring in a certain territorial space. At the same time, institutional reconfiguration of the regional business system can have a serious chance for success if it is coordinated with resource, technological and institutional constraints and is based on built-in mechanisms that stimulate planned institutions changes and prevent the formation of dysfunctions and institutional traps [27].

Zone of a positive institutional attractor formation in the regional business environment – that is, a set of structured and coordinated rules of economic behavior, as well as ways of its interpreting and applying, which complementary impact will induce the bulk of economic agents, functioning in a certain territory, to choose a productive format of business activities, providing profitability, while at the same time the public utility, should be a result of the institutional reconfiguration of the regional business system. At the same time, the formed area of the institutional attractor should have a serious energy potential, allowing to draw into its orbit the largest possible number of economic agents operating both within the region and beyond it [25].

At present, the mechanism of the complex institutional reconfiguration of the regional business system in the regions of the Russian Federation has been formally launched. It is a question of "road maps" procedures for improving the investment climate in the constituent regions of the Russian Federation in the framework of the National Entrepreneurship Initiative. However, practice shows that the activities implemented in the regions are often fragmented and do not have a systematic and complex nature, and institutional changes are formal and do not have a serious impact on improving the business environment in the region. The formation of special economic zones (SEZs) in the regions of the Russian Federation is nothing more than an attempt of a limited institutional reconfiguration of the regional business system with the formation of zones of positive institutional attractors. However, the practice has shown that institutional reconfiguration of this type often has formal nature and does not achieve its goal. So 36 SEZs were established in the Russian Federation in the territories of 31 regions from 2005 to 2016. At the same time, from 2010 to 2016, the activities of 10 SEZs were terminated prematurely. As on January 1, 2017, there are 26 special economic zones in the territories of 23 regions. At the same time, according to experts' estimates, the activity of only four SEZs established in the territories of the Republic of Tatarstan ("Alabuga"), Lipetsk, Samara Regions and St. Petersburg 4 can be considered as relatively efficient¹. In addition, Priority Social and Economic Development Area (PSEDA) project in regions and also monocities has been launched. However, it is too early to judge the

¹ 4 Otchet o rezultatakh ekspertno=analiticheskogo meropriyatiya "Analiz effektivnosti funktsionirovaniya osobykh ekonomicheskikh zon v 2016 godu" [Report on the results of the expert-analytical event "Analysis of the effectiveness of the special economic zones in 2016"]. Retrieved from: (date of access: May 27, 2017). (In Russ).

efficiency of this tool of institutional reconfiguration of the regional business system, this project is still at the initial stage, although, according to experts, it has good prospects.

In general, the task of institutional reconfiguration of a regional business system with the possibility of a positive attractor zone formation seems to us to be very complex and ambiguous. It should be noted that the ability and readiness of regional authorities to unite regional elites for the purpose of supporting institutional reforms is the key aspect for the successful institutional reconfiguration of the regional business system. This is due to the fact that the institutional environment for the business functioning will be effectively changed only if groups of influence will be interested in such transformations (at least in part), as these groups have a decisive influence on the formation and maintenance of the rules of the game in business practice.

In the course of the study the methodology for studying the regional business system from the standpoint of configuration analysis, based on a systematic approach, was substantiated. Within the framework of the presented research paradigm, a number of tasks of complex analysis of the RSE were formulated and solved, a new understanding of the structure of the management system on an initiative, risk basis with the aim of obtaining entrepreneurial income in a spatial context was developed as a result.

It is determined that the key factor of the regional business system success is its institutional configuration. The methodology for analyzing the institutional loyalty of small and medium-sized businesses, which, according to authors, is the most important indicator of the quality of the institutional conditions for doing business, was substantiated, in order to assess the individual parameters of the institutional configuration of the regional business system. The obtained calculations of integral indicators of institutional loyalty, conducted on the example of 85 regions and its comparison with the data of the National Investment Climate Rank in Regions of the Russian Federation in 2016 made it possible to focus attention on the discrepancy between the real and fixed in analytical ratings institutional conditions for doing business in Russian regions, which may indicate the insufficient effectiveness of measures taken by the individual regional government in the field of development of the business.

In this regard, further scientific theoretical and methodological elaboration of the procedures for both institutional reconfiguration and the comprehensive stage-by-stage reengineering of the regional business system is required, that will allow to avoid serious mistakes and inefficient decisions in the practical implementation of such large-scale and complex projects.

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