



Local-Group Behavior of the Business Community and the Institutional Environment of the Region

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Abstract

The paper analyzes the problems of local-group behavior of business agents in the institutional environment of the region. As a research hypothesis, it is assumed that local groups of economic agents often form independent attitudes beyond the general trends of institutional nature, reacting to them in the mode of reflection. The study was carried out using the methods of historical, logical, structural analysis, system approach, organizational and mathematical models. The article considers the existing approaches to the concept of institutional environments of business, institutions, their functions and limitations, and establishes a fundamental difference between the external and institutional environments. Various issues related to the quality of institutions and factors of their impact on the business community of the region are discussed, in particular, the influence of these factors on the manifestations of competition and the shadow economy is noted. The main part of the study is devoted to the formation of local business communities, their interaction in the existing institutional conditions and constraints, as well as their identification in various systems of indicators. It is proposed to consider the individual groups of business agents localized on certain characteristics and criteria as “business populations”, the behavior of which is formed both at individual and group levels. At the same time, the problem of similarity of agents belonging to certain local groups is required to address by a model approach based on the use of different metrics and population classifications. The proposed approach is illustrated by a virtual example. As a result of creating an institutional graph, a second-level model for horizontal network cooperation for local groups of business agents can be developed in the future. The authors come to the reasoned opinion that local-group entrepreneurial behavior has independent categorical features, spiral character of development in the institutional environment and does not copy both the general trend of development of the whole community and the individual behavior of business agents. However, the latter has a certain influence on the formation of local groups’ behavior in the current conditions of institutional constraints.

Keywords: Regional business community, institutional environment, business agents, local groups, behavior modeling

1 Introduction

The authors, together with colleagues, have been actively involved in the implementation of various projects in the field of entrepreneurship development, as well as studying the business community and its issues in the Northern regions of Russia. These studies often covered not only socially and economically accepted topics of a regional or investment nature (1, 2, 3, 4), but also various behavioral aspects (5, 6). At the same time, obtained model and expert assessments (6), the results of observations of the business community and its behavior, its reactions to various institutional changes and prohibitions often did not fit into the “Procrustean bed” of

economic stereotypes prevailing at that time (5). This forced us to turn to the works of the founders of behavioral economics (7, 8), as well as to get acquainted with the basics of agent-based models (9, 10, 11, 12, 13, 14) and to conduct a serious revision of methodological tools used in the studies (15).

The problem discussed in this paper is that the dynamics of behavioral processes occurring in the business community is in systemic contradiction with the institutional environment, although this contradiction is often inconspicuous. In the context of territorial heterogeneity of the institutional environment in the regions of Russia there are various, including inefficient trajectories of behavior of business agents and their communities. This is particularly evident in regions with complex socio-economic and territorial conditions.

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The object of research is the regional business community. The subject of research is the behavior of business agents and their local groups in certain conditions and constraints of institutional environment of the region. The scientific value of the study lies in the reasonable conclusions obtained by the authors that local-group entrepreneurial behavior has independent categorical features, spiral character of development in the institutional environment and does not copy both the general trend of development of the whole community and the individual behavior of business agents.

The relevance of the research issue is due to the fact that local groups of economic agents form independent behavioral attitudes beyond the general trends of institutional nature, reacting to them in the mode of reflection. In this regard, the researches aimed at studying the processes of formation of local business communities, interaction in the existing institutional conditions and constraints, identification in various systems of features are relevant.

Novelty. The authors consider the individual groups of business agents localized according to certain criteria and characteristics as “business populations”, the behavior of which is formed both at individual and group levels. At the same time, the problem of similarity of agents belonging to certain local groups is required to address by a model approach based on the use of different metrics and population classifications. The article can be useful for economists, entrepreneurs and a wide range of people interested in the issues of behavioral economics, mathematical and economic modeling, and business development institutions.

As a research hypothesis, it is assumed that local groups of economic agents often form independent attitudes beyond the general trends of institutional nature, reacting to them in the mode of reflection.

2 Materials and methods

The paper collected and systematized theoretical and practical material of domestic and foreign authors on the issues described above. The study was carried out in four stages:

- 1) Institutional environment of the region;
- 2) Business community and local groups;
- 3) Model cooperative network of local groups;
- 4) Local-group behavior and institutional environment.

The methods of dialectics, logical and system analysis are used in the research on the institutional environment of the region. The review of theoretical approaches to the concept of “Institute”, functions of institutions in the socio-economic system, the concept of institutional environment for the business community of the region.

At the second stage, using the methods of logical and system analysis, the authors came to the conclusion that the business community of the region should be understood as a system of local groups and their communications under the influence of internal and external factors. An approach to the formation of local groups of entrepreneurs on the basis of the criterion of “proximity” of business agents’ profiles formed on a certain combination of parameters. The proposed approach is illustrated by a virtual example.

The third stage of the study was the search for solutions to two problems (localization of agents in groups and evaluation of relationships within groups and between groups) using methods of organizational and mathematical models. Historical and economic analysis of the development of domestic entrepreneurship allowed identifying the most important conditions for business development in Russia, drawing parallels between the historical reforms of the late XIX – early XX century and modern Russian programs of support and development of entrepreneurship. At the final stage, the analysis of foreign and domestic studies of group behavior, the methods of logical, structural and system analysis helped to formulate authors’ perspective on the local-group behavior of the business community, the institutional environment of the region; to summarize the results of all stages of the study and confirm the hypothesis.

3 Results

3.1 Institutional environment of the region

Formal and informal established norms of interaction between economic agents are common interpretation of institutions in a broad sense (16). However, the current terminology of this area of investigation is still in its formative stage and it is far from logical conclusion. Currently, there are several approaches to the definition of “Institute” in both social and economic sciences. So, G.B. Kleiner understands the institution as a system of interrelated relatively stable (in relation to fluctuations in the behavior or interests of individual subjects and their groups), as well as continuing to operate for a significant period of time formal and informal rules governing decision-making, activities and interaction of socio-economic entities and their groups (17). Generalizing different points of view, it is possible to conclude that the concept of “institution” means rules, systems of rules, norms, restrictions, habits, customs, mentality, organization, balance, framework, etc.

Institutions perform different functions in the socio-economic system. For example, the following functions of the institutional environment are distinguished in the paper (18): transactional, stimulating, restrictive and behavioral. Each of these functions emphasizes only one side of qualitative determinacy of institutional environment. All functions are in a complex relationship with each other and with system-wide responsibilities, which leads to their contradiction, unity and interdependence in some situations.

The effectiveness of functioning of business entities depends on the institutional environment, which is a system of legally fixed and informal rules that form the conditions of their activities. It should be noted that the institutional environment is perceived differently by entrepreneurs and non-entrepreneurs. In this regard, the results of the studies of I.A. Petrovskaya and V.A. Titov, who confirm the assumption of differences in the perception of institutional environment by these groups, and also assert differences in the values of individual levels, depending on entrepreneurial activity and presence of entrepreneurial intentions (19).

Thus, within the framework of this study, the institutional environment will be understood as a system of restrictive conditions generated by various institutions in relation to the business community. These restrictions may be regulatory,

administrative, territorial, socio-economic, and infrastructural.

It should also be noted that the degree of impact of institutional environment on business is inversely related to its size. Thus, in the studies of A.Yu. Kokovikhin and his colleagues (20), it is shown that the quality of the work of small-sized business institutions has a greater impact than that of medium-sized and large-scale business formats. Effective institutions contribute to economic growth by ensuring that the additional costs are significantly less than the potential benefits of business agents, and vice versa, the low efficiency of institutions leads to a decrease in business activity. N.Z. Solodilova, R.I. Malikov and K.E. Grishin note that for formal institutions efficiency is determined by the nature of their interpretation and application by economic agents in the process of interaction (21).

Currently, there is a low quality of institutional support for business in most regions of Russia, as evidenced by the current trend of behavior of economic agents, based on unilateralism at the expense of other participants in economic interaction. Various forms of unfair competition and shadow economic activity lead to certain problems of partnership and socially responsible business relations in the Russian business environment (22). Therefore, the formation of the institutional environment of the region, as well as the institutional configuration of the regional system of entrepreneurship should be the object of management and application of targeted mechanisms of influence by various state and municipal authorities.

The study (23) is of significant interest from the point of view of determining a sufficient degree of regulation of relations between institutions, in which the author proposes to determine this degree not by the number of institutions, but by the degree of development of economic, legal, social and political factors. In this case, the result of interaction of factors (institutions), that ultimately determine the economic, legal and socio-political behavior of economic entities, is the structure of the institutional graph.

3.2 Business community and local groups

Business community as a first hypothesis can be considered as a kind of association of economic entities with certain connections between them. However, when considering certain processes that occur both in the

community and in interaction with the external environment, this approach requires a certain level of detail, in which the number of estimated influencing factors increases dramatically. Therefore, to identify and analyze any foreseeable set of factors becomes quite problematic. At the same time, localizing certain groups of business agents according to certain criteria, it is possible to consider them as certain "business population" whose behavior is formed both at the individual and group levels. Thus, we will understand the business community as a system of local groups and their communications.

There is no doubt that the business community as a system category is not a homogeneous formation both on structural and process characteristics. By virtue of its openness and dynamism, the community, on the one hand, is in a state of continuous internal reformatting, on the other hand, it is highly exposed to external and institutional influences.

As shown, in the work (24), the formation of the community of entrepreneurs depends significantly on socio-psychological aspects of individuals and their social maturity. The author draws attention to the significant correlation between the level of business development and the types of motives of intra-group integration, which is schematically presented in table 1. But by paying scrupulous attention to the fact that despite the initial systematization in table 1, there are a lot of blank fields. But this does not mean that, for example, a group of entrepreneurs united with protective goals cannot have an average or high level of business development, and all socially active entrepreneurs are successful businessmen everywhere. On the other hand, there is no contradiction with the results presented in (24). Therefore, "anomalous" cases outside general logic of table 1 are of some interest. For example, business agents with a high and medium level of development, engaged in a certain economic niche, feeling a serious threat outside their local system, can unite in order to protect and confront it. Such phenomena can be observed quite often in the regions of Russia, for example, in connection with the emergence of large federal and transnational networks in the areas of trade, construction, transport, communications, housing and communal services, etc.

Table 1: The correlation of motives of intra-group integration and business development (by E.V. Shvenk).

Levels of business development	Types of motives intra-group integration			
	Protective Association	Cooperation	Image Partnership	Association of representatives of socially responsible business
High				Low level of affiliate behavior, active social position
Average or above		Teamwork preference, high attention to reputation, tolerance		
Low	Individualization, self-orientation, pragmatism, material and protective needs			

It should be noted that according to the survey conducted in May 2018 by the Analytical center of the National Agency for financial research, the lifetime of business in Russia averages 4.8 years for individual entrepreneurs and 5.8 years for legal entities. At the same time, 53% of businesses for individual entrepreneurs and 39% for legal entities are closed under the age of 3 (25).

The defensive mechanism of the business community may also arise for reasons of administrative and fiscal nature: an increase in the tax burden, carrying out unpopular administrative reforms, the introduction of certain restrictive measures and sanctions. By the way, the latter often have a pronounced institutional character. As for image partnership or socially active position, they can also be forced for a number of reasons, dictated by certain political, religious, ethnic and other motives.

It is obvious that life is much more diverse and multidimensional than formalized statistical dependencies. The formation, even if virtual, of different business communities and groups naturally leads to the question of proximity or significant differences between individual business entities in different groups and communities. At the same time, a model approach for the study of various connections, including causal nature, and dependencies, both direct and inverse, should be conceptually based on fundamental principles of system analysis, one of which is W.R. Ashby's law of requisite variety (26). To describe such multivariate schemes, the methodology of a "morphological box" proposed by F. Zwicky (27) is used. Local groups will be formed on the basis of the criterion of "proximity" of business agent profiles, both individual and group, formed on a certain set of indicators. The fragment of the morphological matrix (two-dimensional "morphological box") for the formation of such profiles is given in table 2.

Thus, if n of different characteristics are taken into account in the matrix, the profile of each business agent can be formally represented by the vector $(x_1, x_2, \dots, x_n) \in S_1 \times S_2 \dots \times S_n$, where S_i is the set of values (not only numeric, but also verbal) of the corresponding i trait. If the metric m_i

is defined on S_i , then for profiles $X = (x_1, x_2, \dots, x_n)$ and $Y = (y_1, y_2, \dots, y_n)$, the "distance" can be expressed by the corresponding functional $\rho(X, Y) = F(m_1(x_1, y_1), \dots, m_n(x_n, y_n))$. If weight coefficients w_i ($i = 1, 2, \dots, n$) are assigned to the features, then $\rho(X, Y) = \sum_{i=1}^n w_i \cdot m_i^*(x_i, y_i)$, where m_i^* is the metric value normalized by segment $[0, 1]$. It should be noted that for some specific targets the authors used p -metrics, Hamming and Mahalanobis distances (6). The latter seems in this case the most successful, since it takes into account the covariance of features. The criterion for significant differences of agents will be excess of a threshold value: $\rho(X, Y) > \varepsilon_{threshold}$.

The proposed approach is illustrated by the following example (table 3), and the threshold will be $\varepsilon_{threshold} = 0.5$. This assessment is often used as an "entry boundary" in the formation of various classes in fuzzy set theory (28). More generally, for such assessments, it is possible to use the mean value of the fuzzy number A , which is calculated by the formula:

$$\varepsilon(A) = \frac{\sum_{i=1}^N a_i \mu(a_i)}{\sum_{i=1}^N \mu(a_i)}$$

where μ is the membership function of the fuzzy set, a_i is an interval established by expert determination. In our example $\rho(X, Y) = 0.72 > 0.5$, so the profiles of agents X and Y differ significantly and in this feature system they should be assigned to different local groups. It is possible to introduce into consideration the third agent Z with the following profile: territory – "rural area", property status – "mixed", business – "public catering", financial condition – "satisfactory", age of the owner 45 years. Then:

$$\begin{aligned} m_1^*(X, Z) &= 0.8; m_1^*(Y, Z) = 0; \\ m_2^*(X, Z) &= m_2^*(Y, Z) = 0.5; \\ m_3^*(X, Z) &= 0; m_3^*(Y, Z) = 0.7; \\ m_4^*(X, Z) &= 0; m_4^*(Y, Z) = 0.4; \\ m_5^*(X, Z) &= 0; m_5^*(Y, Z) = 0.3. \end{aligned}$$

Table 2: The fragment of the morphological matrix of business agent profiles

Indicators	Characteristic Value				
Territorial	Megapolis	Medium-sized urban agglomeration	City of regional significance	Small towns, working settlements	Countryside, rural areas
Property	Fixed assets are in ownership		Mixed	Fixed assets are under lease	
Business	Industrial production	Construction	Agriculture	Services	Trade
Financial condition	Favorable	Satisfactory		Unstable	
Age of owners (beneficiaries)	Under 35 years	From 36 to 50 years		50+	

Table 3: An example of characteristics of business agent profiles

Indicators	Weight w	Profile X	Profile Y	$m^*(X, Y)$
Territorial	0.30	Urban agglomeration	Rural area	0.8
Property	0.25	Fixed assets are under lease	Fixed assets are in ownership	1.0
Business	0.20	Catering services	Agriculture	0.7
Financial condition	0.15	Satisfactory	Unstable	0.4
Age of owners (beneficiaries)	0.10	Between 30 and 40 years of age	50+	0.3

Table 4: Harrington's verbal-numerical scale

Description of gradations	The numerical value
Very high	0.80 ... 1.00
High	0.63 ... 0.80
Moderate	0.37 ... 0.63
Low	0.20 ... 0.37
Very low	0.00 ... 0.20

The distance $\rho(X, Z) = 0,365$, and $\rho(Y, Z) = 0,355$ are not significantly different, while the threshold criterion of Z close to X and to Y .

A meaningful example with agent Z means the presence of a tolerant (reflexive and symmetric, but not necessarily transitive) connection and the possibility of cooperation between local groups, which include agents X and Y . This situation often occurs, for example, in biological classification in the study of populations and can be solved by applying different similarity coefficients (Jaccard, Sorensen, Braun-Blanquet, Szymkiewicz-Simpson, Koch, etc.) (29). Thus, for two groups A and B , which include, respectively, the number of agents $|A|$ and $|B|$, the most commonly used Jaccard index is calculated by the formula:

$$K_J(A, B) = \frac{|A \cap B|}{|A| + |B| - |A \cap B|}$$

However, including the features of some studied communities, it is acceptable to use the coefficients of Szymkiewicz-Simpson K_{SS} , Braun-Blanquet K_{BB} and Ochiai K_O :

$$K_{SS} = \frac{|A \cap B|}{\min(|A|, |B|)}, K_{BB} = \frac{|A \cap B|}{\max(|A|, |B|)}, K_O = \frac{|A \cap B|}{\sqrt{|A| \cdot |B|}}$$

Such well-known psychological phenomena of group behavior as "composition effect", "leadership avoidance", "positive risk shift" by R. Stoner, "Groupthink" by I. Janis and a number of others (30, 31) require special attention and consideration. Returning to the above coefficients, it is possible to note that all of them take values from 0 to 1, and are equal to 1 if $A = B$, and are equal to 0 when $A \cap B = \emptyset$. Therefore, the degree of generality (similarity) of groups can be estimated, for example, on the Harrington's scale (32) (table 4).

If the similarity of the two local groups is high enough, then there is a reason to combine them into a new group $A \cup B$, the number of agents in which will be $|(A \cup B) \setminus (A \cap B)|$. In the case of several local groups $A_1, A_2, \dots, A_m$, L. Koch's coefficient is similarly used which also takes values from 0 to 1 and it is calculated by the formula:

$$K(A_1, A_2, \dots, A_m) = \frac{\sum_{i=1}^m |A_i| - |\bigcup_{i=1}^m A_i|}{(m-1) \cdot |\bigcup_{i=1}^m A_i|}$$

It makes sense to consider the above indicators not only in statics, but also in dynamics. At the same time, it may be necessary to expand the morphological matrix by adding

additional features. It would be quite natural to use coefficients and indices of structural differences (V. M. Ryabtseva, A. Salai, K. Gateva, etc.) to estimate the differences that appear over time in the structure of local groups.

It should be noted that the absence of any acceptable training samples, as well as information about the distribution law of corresponding random variables do not allow using the method of discriminant analysis in such cases. At the same time, numerical characteristics and scales are proposed to be selected either on the basis of available empirical information or using the methods of expert assessments (32, 33).

Further modeling procedure can be carried out by searching for pairs in the graph, the vertices of which correspond to the agents. In this case, local groups are formed around the most "distant" from each other vertices. The thus sorted agents form local groups, the "distances" between which can be considered as "distances" between the centers of groups.

The profiles are shown in table 3, clearly describe the business agents that do not have explicit prerequisites for entry into the same local group, since they differ significantly in key characteristics, first of all, territorial, property and industry, although their proximity, not included in the list of elements, is possible, based on kinship, ethnic, mental, religious, etc. However, it is conceivable that there will be economic contacts between a local farmer (profile Y) and a foodservice entrepreneur (profile X), which may later form the basis of a sustainable cooperative relationship for their businesses. Moreover, experience has shown the emergence and successful development of communication between business agents belonging to various regional local groups; it quite often turns into a system of inter-group cooperative relations. In the future, the safety and sustainability of these links will largely depend on environmental factors, institutional conditions and constraints, as well as other external and internal causes.

3.3 Modeling of cooperative network of local groups

From the point of view of organizational modeling, the problem of forming a cooperative network includes two interrelated tasks:

- localization (distribution) of agents into groups;
- evaluation of relationships within groups and between groups.

The solution of the first problem is based on the representation of a weighted directed graph G , the vertices of which correspond to the agents, and the arcs – to the relations between them, in the form of s disjoint subgraphs G_i :

$$G = \bigcup_{i=1}^s G_i, \bigcap_{i=1}^s G_i = \emptyset$$

In the case of intersecting subgraphs (the groups considered above may have common agents), a cut of the digraph G should be made considering this circumstance, which will take the form:

$$G = (\bigcup_{i \neq j} (G_i \setminus G_j)) \cup (\bigcup_{k \neq l} (G_k \cap G_l))$$

Figure 1 shows how two intersecting components G_i and G_j , produce three already disjoint components: $G_i \setminus G_j$, $G_i \cap G_j$ and $G_j \setminus G_i$ after cutting.

In the general case, the cutting of a weighted digraph with the minimum connected subgraphs with constraints on the total weight of the vertices is performed as follows (34). The minimal connectivity of a subgraph is determined from inequalities:

$$\sum_{i=1}^s \sum_{j=1}^{J_i} t_{ij}(u_{ij} + v_{ij}) \leq L_i^{ad},$$

$$D_{lad}^{min} \leq \sum_{i=1}^s \sum_{j=1}^{J_i} t_{ij} d_{ij} \leq D_{lad}^{max}$$

where $t_{ij} \in \{0, 1\}$ – Boolean variables, u_{ij} and v_{ij} , respectively, the number of incoming and outgoing external arcs of the j -vertex of the subgraph G_i , J_i is the number of vertices, L_i^{ad} – a valid number of external arcs of the subgraph G_i , D_{lad}^{min} and D_{lad}^{max} – minimum and maximum permissible total weight of the vertices of the i -subgraph; d_{ij} is the weight of j -vertex of the subgraph G_i . The structure of the cut digraph in the first approximation can be taken as a basis for the construction of a cooperative network. The relative autonomy of each component is achieved by a minimum number of external connections and influences.

When evaluating intra-group relations within G_i component, intra-group coordinates (x_{ij}, y_{ij}) are introduced for each j -vertex j , where x_{ij} is an assessment of potential of the j -agent, y_{ij} is an assessment of its contribution to some group result, $x_{ij}, y_{ij} \in [0, 1]$. These assessments can be obtained, for example, using analytic hierarchy process, which is based on a pairwise comparison of all objects (32, 33). Next, for

each G_i group, a local functional $f_i(x, y)$ is constructed, increasing monotonically for each of the variables. $F_i(x, y) = A_i \cdot x^{\alpha_i} \cdot y^{1-\alpha_i}$, $0 \leq \alpha_i \leq 1$ can be used as such a functional. The positive parameter A_i represents the upper (possibly expert) assessment of the potential of i -group. Then the general functional of the system represented by the digraph G (considering its cutting) can be represented as:

$$F = \sum_i \sum_j f_i(x_{ij}, y_{ij}) = \sum_i A_i \cdot \sum_j x_{ij}^{\alpha_i} \cdot y_{ij}^{1-\alpha_i}$$

Thus, to a certain extent, the problem of building an effective cooperative network can be considered as an optimization task with the functional F .

At the same time, it should be noted that it is not always relevant to use real coordinates in such tasks. Thus, in the work (35), devoted to the modeling of individual and group behavior of subjects of mass communication, the authors proceed from the fact that the mental space has a non-Archimedean structure and, therefore, suggest the use of p -adic coordinate systems.

When assessing intergroup relations, it is appropriate to use alternative forms of systems based on the principles of self-organization, adaptation, autonomy of individual components with “soft” links between them (36), but this discussion is beyond the scope of this work.

3.4 Local-group behavior and institutional environment

The previous historical and economic analysis of the development of Russian entrepreneurship (37) revealed the main tendencies in the formation and development of the business community of the late XIX-early XX century. The most striking transformations of that historical period were the reforms of S.Yu. Witte, P.A. Stolypin and the New Economic Policy (NEP), whose analysis suggested that the most important conditions for development of entrepreneurship in Russia were: the formation of individual property; the implementation of competent monetary and investment policy of the state; the creation of new organizational forms of management (trusts, syndicates, cooperatives).

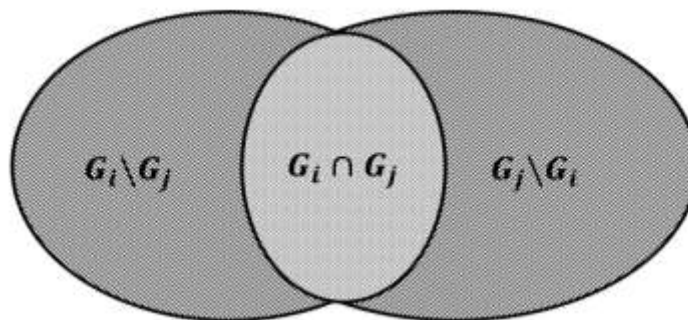


Figure 1: The digraph partition

It is noteworthy that these conditions currently remain relevant to ensure the functioning and development of small and medium-sized businesses. But, their mechanical transfer to modern realities contains certain threats. Often, the initiators and developers of Russian programs of support and development of entrepreneurship at various federal, regional, municipal levels maintain those approaches and tools that have been successfully tested in past historical periods. For example, there are obvious parallels between the already mentioned “Stolypin” decree of November 9, 1906 and the law on the “Far Eastern hectare” that appeared 110 years later. Another example is the system of financial support for small businesses through specialized banks, credit cooperatives and microfinance organizations of entrepreneurial type, which is being recreated in modern Russia, in many respects resembling its historical predecessors (37).

Considering the fact that entrepreneurship in modern Russia as a legalized activity began to revive only in the late 1980s, that is, three generations after the famous events of 1917, it is possible to state the “break” of historical trends in the mentality of people. This fact had been decisive in developing the trajectories of the business community, its individual groups and representatives.

In current researches, group behavior is understood as coordinated actions of a group of people aimed at preserving and increasing the total resources (material, economic and spiritual benefits) (38). The analysis of the works of different authors (39, 40, 41) makes it possible to conclude that the group behavior of business agents has its own distinctive features and does not repeat the individual behavior of entrepreneurs, but the latter has a certain influence on the formation of the group’s behavior. An individual business agent is instinctively predisposed to become a member of the group if he feels the reasons for group formation, for example, as noted above, in the presence of a serious external threat. The processes of group formation and opposition are examples of group behavior. The behavior of business entities or business agents is considered in the context of dynamics of relations that have developed in the business environment.

Under the trajectory of the business community’s behavior as a whole, and for its individual groups, the movement of agents in a certain space of factors and signs of different nature and originating from the external environment and formed within a certain system is understood. At the same time, influencing factors can have both general, global character, and local sources of origin. The territorial and historical features and mentality of the population occupy an important place here, which often have a pronounced regional character. These features include, first of all, the natural territorial localization of economic entities, corresponding to the nature of settlement, greatly undeveloped infrastructure and networks, as well as historical lifestyle and traditional activities.

Agreeing in general with the opinion of O.S. Sukharev (42) that “in order to understand the economic reality and trends in the development of national economies, it is necessary to know the laws of the functioning of basic institutions that structure information about the behavioral

reactions of agents that create models of expectation, models of action. Despite the fact that “institutions” force” subjects to behave uniformly and create repeated cycles of behavior in similar situations, applying punishment for deviant actions” (42), this uniformity is doubtful. The explanation for this is the fact that both the business community as a whole and its local groups and individual representatives should be considered in the active phase and not in the statics of existing institutions. Being active participants of system processes, business agents in many respects form institutional conditions in which then they also should function. Thus, it is necessary to talk here not about the cyclical nature of development, but about its spiral character. At the same time, the general behavioral trend of the business community is projected onto local groups mainly due to time-delayed reflection.

Local groups consisting of individual business agents at certain stages of development can be considered as new agents of a higher level of self-organization with common trajectories of behavior, which corresponds to such a systemic pattern as emergence. This allows defining a new hierarchical level in the structure of behavioral attitudes of the business community, which, in turn, comes into systemic conflict with existing institutional constraints. To a large extent, this is due to advanced development of individual local subsystems of the business community in relation to more inert institutions.

4 Conclusion

As a result of the study, the authors come to the following conclusions.

1. The institutional environment, being, on the one hand, a part of the external environment to the business community, is not identical to it. In addition, the institutional environment is more inert than the local business communities, which generates certain systemic contradictions.
2. None of the existing systematization of business communities does not fully reflect (and it is impossible to do) all the variety of factors involved in their formation. At the same time, the use of a local-group approach allows, at least in the first approximation, to simulate the behavior of business agents not on individual trajectories, but taking into account both their internal community and external conditions and constraints, including institutional nature.
3. The localization approach to the formation of business communities does not imply their segregation, but on the contrary, can become the basis for the emergence of effective cooperation ties.
4. From the point of view of the system-process approach, the local-group behavior of the business community is an independent category, has its own distinctive features, it does not copy both the general trend of development and the individual behavior of business agents. However, the latter has a certain influence on the formation of the behavior of local groups in the current conditions of institutional constraints.

Direction for further research is the development of the trajectory of local business communities with the further

possibility of its deployment in a horizontally-cooperated network of such local communities as new economic agents. This approach can be implemented within the framework of the concept of development of local economies as “points of growth” in the creation of a single cooperative network of groups of economic entities in the regions of Russia with complex economic and territorial conditions.

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