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## Structural Changes in Small and Medium-Sized Enterprises in Russian Regions

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### ABSTRACT

**The objective** of the research presented in the article was to develop a management concept of regional business ecosystems with an assessment of the qualitative changes of Small and Medium-Sized Enterprises (SMEs) in the Russian Federation and its regions. **The aims** include the following: clarification of functions of SME in the national economy in the context of justifying state participation in managing its development, including at the regional level; streamlining the conceptual apparatus of regional entrepreneurial ecosystems as a necessary research foundation in this area; formalizing the features of their structure; analysing fluctuations in this segment within spatial-sectoral and categorical contexts; development of theoretical provisions and methodological tools for assessing structural changes in regional SME sectors. **Research materials and methods.** The works of Russian and international scholars have become the theoretical basis for this study related to the theory of spatial economic development, entrepreneurial ecosystems, and the management of complex economic systems. During the research, the author used system analysis methods, analysis of structure and dynamics, comparative assessments construction, as well as econometric methods. The author resorted to information databases provided by Rosstat, the Federal Tax Service of the Russian Federation (FTS), and by relevant ministries and departments. **Scientific novelty.** For the first time, the concept of SME conversion was introduced into scientific circulation, methodological tools for its quantitative assessment were proposed and tested, including regions with high and low SME conversion, as well as the relationship of SME conversion with the change in gross value added created by SMEs. **Practical implementation.** The article may be of value to researchers and managers interested in developing effective measures and mechanisms to support the rapid growth of SMEs in the regions of Russia.

**Keywords:** small and medium-sized businesses; regional entrepreneurial ecosystem; dynamics; structural changes; SME conversion; growth factors

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## INTRODUCTION

In the 21st century, the Russian state has taken on the role of participant and architect of the environment for the operation and development of entrepreneurship, instead of just the function of an external controller and overseer. Today, the institutional formation of SMEs as a key sector of the economy is complete: a regulatory and legal framework, basic mechanisms, support infrastructure and services was established, and the framework for a system to monitor performance outcomes was formed.

With growing public engagement in entrepreneurship, this sector has accustomed to generate (and scale) a critical mass of business projects for the consumer market segment and has created the basis for its own structural transformation. The necessity of this transformation has become more acute with the expansion of political confrontation, foreign economic restrictions, disruptions of global supply chains, and increased difficulty to access the domestic market for ready-made technological solutions and their components. It has become obvious, that SMEs, as the most flexible business segment, can ensure a rapid installment of necessary technological solutions and products, including in various forms of cooperation with large businesses.

On the agenda is to set up a qualitative transformation of the sector, in view of the specifics of each region. This has revealed a few problems that require the improvement of theoretical principles and methodological instruments for managing SMEs in the regions, including those linked to the evaluation of structural changes and developing management approaches for the effective use of resources.

## DISCOURSE OF RESULTS

### Functional Space of SME as a Basis for Assessing their Role in the Economy

Currently, researchers worldwide are seeking sources of growth and development for SME businesses. There are extensive opportunities for exchanging ideas and best experience about this

among scholarly communities [1, 2]. Recently, multiple foreign studies have also emerged specifying the role of some territories in generating conditions for the development of entrepreneurship [3, 4], as well as the assessments of state influence on this process [2].

Domestic scholars have also made similar researches [5]. For instance, Yu.A. Krupnov determines that SMEs play the minor role in the modern Russian economy [6]. We consider it significant to contribute to the current specialist debate on this issue by means of formalising a comprehensive viewpoint of the functions of SMEs, as it is necessary to clarify it for a definite understanding of the sources of their formation (*Fig. 1*).

*Figure 1* illustrates the space for the formation of the main functions of SMEs. Its sources (beneficiaries) become an individual, society, business community, and the state. From an economic viewpoint, all of these can have a monetary value. The total contribution of SMEs to the Russian economy in value terms is higher than that of the largest industrial sectors. For instance, in 2019–2024, the share of mining and quarrying in the gross value added (GVA) of the Russian Federation was 11.8–13.3 per cent,<sup>1</sup> whereas for SMEs it was 20.7–21.7 per cent.<sup>2</sup>

Nowadays, this sector is a substantial organic part of the national economic system. The ecosystem approach may become one of the priority solution to build a management framework that ensures its effective development in the regions. According to estimates by E.L. Andreeva and P.L. Glukhikh, the potential is high for SME participation in entrepreneurial ecosystems “as a response to environmental challenges” [7].

### The Structure of Regional Entrepreneurial Ecosystems

The ecosystem approach to spatial management based on the advantages of network organisa-

<sup>1</sup> Rosstat. Gross value added by economic sectors. URL: [https://rosstat.gov.ru/storage/mediabank/VDS\\_god\\_OKVED2\\_s\\_2011–2024.xlsx](https://rosstat.gov.ru/storage/mediabank/VDS_god_OKVED2_s_2011–2024.xlsx)

<sup>2</sup> Rosstat. Gross value added generated by entities. URL: [https://rosstat.gov.ru/storage/mediabank/MSP\\_v\\_VVP\\_s\\_2017.xlsx](https://rosstat.gov.ru/storage/mediabank/MSP_v_VVP_s_2017.xlsx)

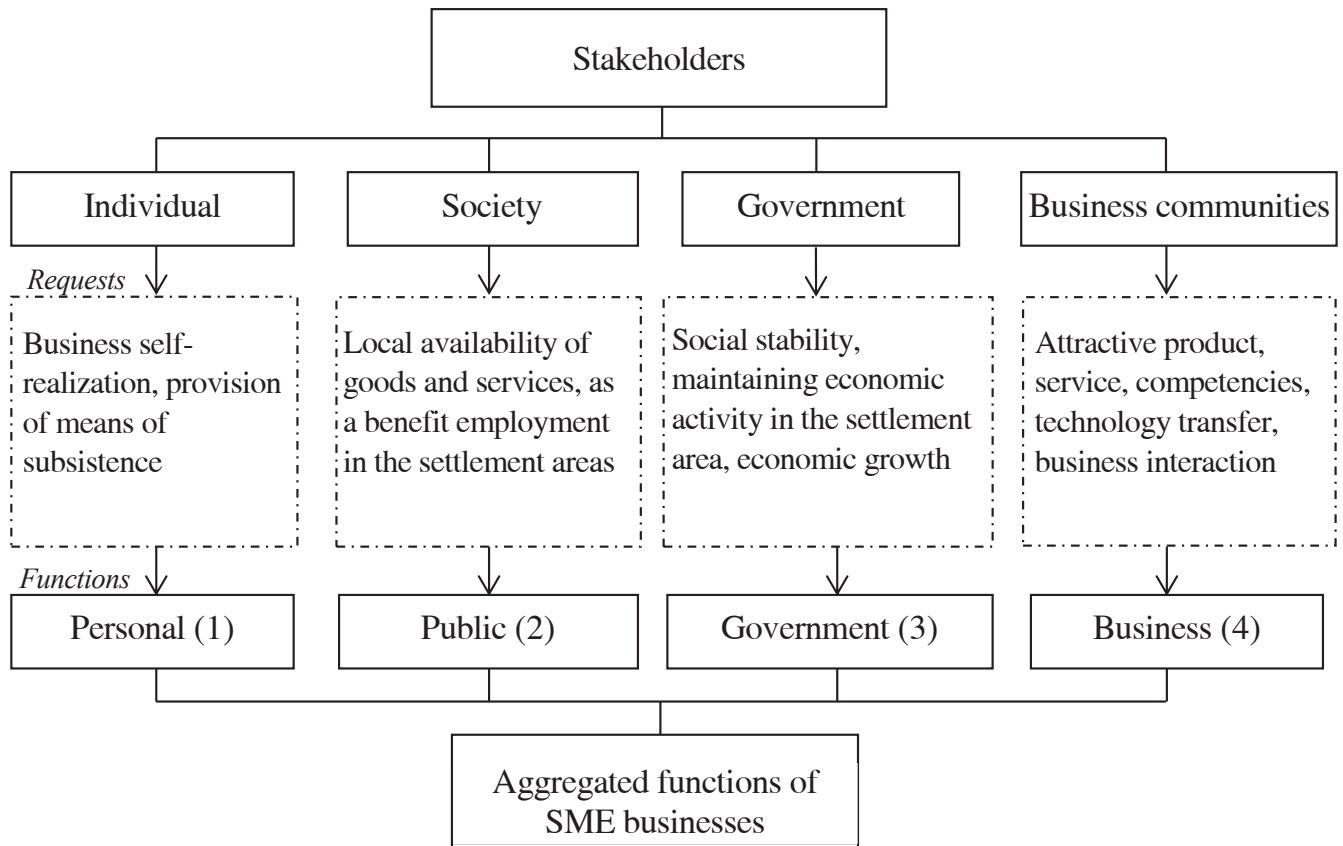


Fig. 1. The Space of the Main Functions of SMEs

Source: compiled by the author.

tional forms and the value-based foundations of value creation adds and develops cluster-based and hierarchical-administrative approaches. Its basic principles described in the works of foreign scholars J. Moore [8], D. Isenberg [9], E. Stam [10], and others, reflect the nature-like organisation of systems and the symbiosis of economic entities within a living environment, leading to mutual benefit. Among the key categories in management are interaction among entities, community, value, and benefit. All of these are fully applicable to the SME sector.

Domestic researchers explore in their works the stages of formation and evolution of the given approach. They highlight the diversity of conceptual interpretations [11–13]. There exist an opinion that the Eurasian model of building an entrepreneurial ecosystem is being implemented *de facto* in our country, which presents itself, among other things, an active role of the state in building the SME environment [14].

Scholars link entrepreneurial ecosystems with additional business opportunities [15]. Some authors assume that due to economic constraints, they can be an engine for a new industrialisation of the Russian economy [16]. The launch of the national project for SMEs predetermined the need for a closer interaction between regional authorities and its entities [17]. There also intensified the development of methodological approaches for evaluation of entrepreneurial activity in the public administration system [18], and there were appearing spatial comparisons of SME sectors in Russian regions [19].

They started to analyse the effectiveness of state support measures for regional SME entities in the light of regional ecosystem management [20, 21]. A. Ovchinnikova and S. Zimin assume that Russian regions with mature entrepreneurial ecosystems demonstrate higher economic development indicators [11]. We point out that in our view, the logical connection in this case, is



bidirectional, but the actual contour of such ecosystems is not always evident.

Indeed, the markers that indicate the presence or absence of such ecosystems in a region are insufficiently formalised. Moreover, perspectives are different from the viewpoints of the entrepreneur and state/municipal administration. Scholars A. Voronov and A. Isaeva concluded that public administration officials do not take into account all the factors that ensure the success of ecosystems [22]. Practical questions emerge that require evidence-supported answers: what, should one consider the sign of the presence of an entrepreneurial ecosystem? How can it be used in public administration?

According to R. Adner, a proper *characteristic feature* of an ecosystem is the ability to generate

a unique value proposition for participants of its community, using a specific structure of interaction [23]. To follow up this idea, C. Mason and R. Brown provide well-founded recommendations for the Organisation for Economic Co-operation and Development (OECD) countries and point out the need to account for regional (local) specifics in developing comprehensive measures and mechanisms for supporting entrepreneurship, focusing on a particular role of regional teams in this process [24].

Management in the regions, both in principle and in reality, is to promote the development of the entire regional economic system (RES), of which an organic part is the entrepreneurial ecosystem. In this regard, we put emphasis on the significance and content of the differences be-

Table 1

### Distinctive Characteristics of the Categories

| Categories                                                                    | Content and distinctive criteria                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Entrepreneurial activity (small and medium-sized entrepreneurship – SMEs)     | The set of legitimate economic forms for initiative implementation of business projects of citizens, as well as the process of creating goods within these forms                                                                                                                                                                                                                                                                                                      |
| SME entities                                                                  | Distinct participants in entrepreneurial activity                                                                                                                                                                                                                                                                                                                                                                                                                     |
| SME living environment                                                        | The set of conditions for SME operation, both predetermined and new, that impact on performance outcomes                                                                                                                                                                                                                                                                                                                                                              |
| SME sector                                                                    | The set of participants in entrepreneurial activity, along with their resources, capabilities, and outcomes, as a relatively distinct segment of the economy (local, regional, national)                                                                                                                                                                                                                                                                              |
| Entrepreneurship ecosystem (in the context of state/municipal administration) | An organisational framework ensuring the evolutionary adjustment of SME operational conditions and the optimal fulfilment of opportunities for individual participants, their groups, and the entire SME sector, as well as an interconnected set of elements and mechanisms which ensure a managed qualitative and quantitative change in the SME sector (structure and community)                                                                                   |
| Regional economic system (RES)                                                | An interconnected set of elements of economic activity (multi-structured and multi-sectoral) which uses resources within the spatial boundaries of a region: the state and corporate sectors, the SME sector, informal economic agents, as well as the regional management subsystem with its supporting infrastructure. This may also include clusters formed by regional subjects of economic relations; ecosystems, and other integration and/or cooperation forms |

Source: compiled by the author.

tween categories used in the context of state/municipal management of the SME sector (*Table 1*).

Based on the essence of the categories and their differences (in *Table 1*), one can build a conceptual foundation for the ecosystem approach in regional management.

Certain features of regional entrepreneurial ecosystems are objectively predetermined. Their identification and scrupulous analysis have allowed us to formalise the *rules of structure* with the following 10 provisions:

1. Each inhabited region has *at least viable regional entrepreneurial ecosystem* that provides its population with the necessary set of essentials in goods and services.

2. The participants in the entrepreneurial community of a regional (local) ecosystem are relatively *independent* SME entities, as well as the institutions and infrastructure linked to the sector in that region.

3. Initially, the structure of a regional entrepreneurial ecosystem is decentralised but it is *capable to get adapted* to the influence of a changing environment.

4. The successful development of a regional entrepreneurial ecosystem and the engagement of new participants in it are mainly linked to its *sustainability* (including over-time) and its ability to generate *unique value*.

5. The *basic value* of a minimum viable regional entrepreneurial ecosystem is determined by natural-climatic, resource, logistical, and other objective features of the territory where it is located, including the size of the resident population.

6. An ecosystem can *increase the value* by platform-driven solutions due to the unique (exceptional) features of the region and its individual spaces, arising from both natural and anthropogenic origin context.

7. The ecosystem is *open* both to the access of new participants from outside and to exit (departure), which can indicate its attractiveness.

8. For securing *retention* within the ecosystem, the potential benefit of a participant's presence in the current ecosystem must be higher than potential losses from moving to another ecosystem.

9. The relative independence of ecosystem participants allows state and municipal management elements (support institutions, opinion leaders) to take certain positions within its structure, enabling them to influence informally decisions.

10. Regional authorities have methods and mechanisms available for influencing changes in the *living environment* through administrative and tax policies, access to financial and non-financial support measures, services, and infrastructure; programmes promoting a distinct entrepreneurial culture and stimulating talent generation.

The given rules of structure are aimed to reduce uncertainty for applying the ecosystem approach in the practice of regional management.

The internal composition of the elements of entrepreneurial ecosystems can be structured in accordance with various criteria, including:

- business size (by income level, number of employees);
- industry affiliation (by the type of activity);
- relationship with large business (direct or indirect dependence, which, however, is not always obvious), etc.

The key criterion for regional management remains the territorial affiliation (registration) of the SME entity, which determines, on the one hand, the interest of its beneficiaries in settlement in that particular region (for various reasons), and on the other hand, the basic possibilities for implementing management performance.

### Expansion and Structural Changes in the SME Sector

In Russia, the state participation at the national-level in SME sector management has intensified with the launch of a specialised national project<sup>5</sup> primarily oriented towards achieving quantitative growth of the sector. As the activities under this project effectively began in 2019, assessing

<sup>5</sup> National Project "Small and Medium-Sized Entrepreneurship and Support for Individual Entrepreneurial Initiatives." Ministry of Economic Development of the Russian Federation. URL: [https://www.economy.gov.ru/material/directions/nacionalnyy\\_proekt\\_maloe\\_i\\_srednee\\_predprinimatelstvo\\_i\\_podderzhka\\_individualnoy\\_predprinimatelskoy\\_iniciativy/](https://www.economy.gov.ru/material/directions/nacionalnyy_proekt_maloe_i_srednee_predprinimatelstvo_i_podderzhka_individualnoy_predprinimatelskoy_iniciativy/)



the follow-up changes in 2019–2024 is of practical interest.

In general, at the end of 2024, there were over 6,450 thousand SME entities operating in the Russian Federation (+8.9 per cent compared to 2019), of which 65.4 per cent were individual entrepreneurs (IEs) and 34.6 per cent were legal entities. The total increase in numbers was due to the growth in the number of IEs: over 810 thousand units, of which 804 thousand were “micro” category entities. Concurrently, the number of SME legal entities diminished by more than 284 thousand units during the period under research. The structure of categories of institutional SME entities has slightly changed in 2019–2024. The most notable positive transformation was the growth in the share of medium-sized enterprises (legal entities): they expanded by 3.5 thousand units (*Table 2*).

The dynamics of changes in employment by SME category in 2019–2024 were diverse. The general growth in the number of personnel employed in the sector (+435.3 thousand) occurred due to the impact by IEs. By the end of 2024, when the national project on SMEs wrapped up, the following employment situation per entity took place in the Russian Federation:

- For entrepreneurs whose business corresponds to the category of small enterprise, the

average number of employees is 21.5 and for IEs corresponding to medium enterprises, it is 94.6 employees. This indicator decreased compared to 2019 by 23 per cent in small companies and 1 per cent in medium-sized ones.

- For legal entities (SME entities) a typical small enterprises have an average of 30.0 employees, while medium ones have 96.8. The decrease compared to 2019 is 2 per cent in small companies and 3 per cent in medium ones.

- In typical micro-companies, IEs employ 0.47 workers (–8 per cent from 2019), while legal entities employ an average of 2.52 workers (+1 per cent from 2019).

Notably, it is precisely the high share of micro-businesses (99.22 per cent among IEs and 90.42 per cent among SME enterprises), that hinders the growth of the average number of employees per SME entity.

Regarding the *sectoral* structural changes in the period under research, we determine a few major ones.

1. *Increase* in the share of *manufacturing industries* in the turnover structure of SME enterprises across all categories, as the growth rate is much higher for micro and small enterprises:

- for micro-enterprises, the share of manufacturing industries increased more than *1.5 times* – from 7.9 to 12.4 per cent;

Table 2

### Changes in the Categorical Structure of SMEs in Russia, %

| Year                                   | Individual entrepreneurs |       |        | Legal entities |       |        |
|----------------------------------------|--------------------------|-------|--------|----------------|-------|--------|
|                                        | Micro                    | Small | Medium | Micro          | Small | Medium |
| 2019                                   | 99.21                    | 0.78  | 0.01   | 91.45          | 7.88  | 0.67   |
| 2024                                   | 99.22                    | 0.76  | 0.01   | 90.42          | 8.68  | 0.91   |
| Structural changes 2019–2024 (+/-)     | +0.01                    | –0.02 | 0.00   | –0.03          | +0.80 | +0.24  |
| Changes in absolute terms. units (+/-) | +804 371                 | +5699 | +219   | –283 149       | –4662 | +3509  |

Source: calculated by the author based on data from the Federal Tax Service of the Russian Federation. URL: <https://rmsp.nalog.ru/loading.html>

- for small enterprises, it was even more than *1.6 times* – from 11.0% to 18.2 per cent;
- for medium-sized enterprises, it grew from 26.0 to 27.3 per cent.

2. *Increase in the share of transportation and storage in the turnover structure of*

2. SME enterprises across all categories:

- for micro-enterprises, it increased *more than 1.4 times* – from 5.3 to 7.4 per cent;
- for small enterprises it was *almost 1.5 times* from 4.0 to 5.9% per cent;
- for medium-sized enterprises *more than 1.3 times* – from 3.6 to 5.0 per cent.

3. A major *drop* in the share of *wholesale and retail trade* occurred in the turnover structure of SME enterprises across all categories amounted to 20 per cent in micro-businesses and nearly 25 per cent in small businesses.

In our viewpoint, the ongoing structural changes serve as a practical confirmation of the following:

- The capacity of rapid adaptation of the SME economy to external challenges and shocks, which, among other outcomes, intensified activity in logistics, transportation, and the transport sector, where small businesses have the flexibility to adapt to even the most unusual market demands.

- The beginning of a structural transformation of the SME economy, where priority is focused on the real sector industries, and specifically, to manufacturing.

Thus, the SME sector in Russia grew quantitatively, attracted additional personnel, and made some adjustments its sectoral structure within the period of 2019–2024 during active accomplishment of the national project. Nevertheless, the general positive changes have not yet been reflected in a noticeable growth of the share of SMEs in the gross value added (GVA) of the Russian economy as a whole. Today, this indicator in Russia is lower than in many other countries, although domestic scholars reasonably note that this is partly due to the application of different approaches to assessing such a contribution [25].

A limiting aspect for the growth of GVA in the SME sector is the high share of micro-businesses, which generate their contribution primarily through the labour with a minimum of employees and means of production. Micro-businesses often stop developing or cease to exist within the first two years of operation (according to Rosstat, in the Russian Federation in 2024, their share relative to newly created ones was 28.5 per cent.<sup>4</sup>

In the international practice of the OECD, researchers emphasise the priority of state support for entrepreneurial projects with high growth potential, which allows one to expect not just the creation but the evolution and subsequent development of the businesses [24]. In our viewpoint, such an approach applied in practice is justified also for the Russian Federation.

#### **Conversion as an Indicator of Qualitative Changes in the SME Sector**

Among the strategic priorities of the Russian Federation, enshrined, *inter alia*, in Presidential Decree No. 309 of 07.05.2024 “On the National Development Goals of the Russian Federation for the Period up to 2030 and for the Future up to 2036”,<sup>5</sup> the growth of gross domestic product is designed at rates exceeding the global average. Correspondingly, similar growth is required in the SME sector. Actually, this is possible through an increase in:

- the number of employees and the wage fund;
- the gross value added per SME enterprise and individual entrepreneur, per person employed in SMEs.

In the first case, SMEs face competition for labour resources with large businesses, occurring against a backdrop of labour shortages<sup>6</sup> in the Russian labour market. The second option implies an increase in the share of SMEs in sectors with high benefit, which is extremely hard for micro-businesses, as it is often associated with

<sup>4</sup> Rosstat. Demographic indicators of enterprises by type of economic activity and entities in the Russian Federation. URL: <https://rosstat.gov.ru/storage/mediabank/demb-2024.xlsx>

<sup>5</sup> URL: <http://www.kremlin.ru/acts/news/73986>

<sup>6</sup> URL: <https://secrets.tbank.ru/blogi-kompanij/kadry-2025/>



the need to increase the capital-to-labour ratio, requiring substantial capital expenditure. In this regard, in the medium term, it is relevant for regional entrepreneurial ecosystems to establish mechanisms for public-private interaction facilitating the accelerated transition of SMEs across categories: micro-enterprises → small enterprise → medium-sized enterprise.

The SME category is a universal characteristic embracing the most important economic indicators: the company's workforce and turnover<sup>7</sup>. Surveying the economic literature, we found no concept reflecting the qualitative changes in the structure of SME entities by category, which is probably due to the relative novelty of the phenomenon. However, such a concept is needed for convenience and simplification of scholarly presentation, including for the results of comprehensive studies. The closest in original meaning is "conversion" (from Latin *conversio* – transformation) which the dictionary of foreign words incorporated into the Russian language<sup>8</sup> interprets as transformation, conversion, change.

For the studies of structural changes in small and medium-sized entrepreneurship by category, we find it advisable to introduce into scholarly discourse the concept of "SME conversion" as the qualitative change in the structure of SME entities by category. Positive SME conversion refers to a change in structure accompanied by a fast-growing process in the number of entities belonging to the small and medium-sized business categories. Negative SME conversion is distinguished by a faster growth in the number of micro-enterprise entities within the categorical structure of SME entities.

In the course of comparative research of SME conversion across regions, we come to the

conclusion that a relative indicator is needed to indicate structural changes in the light of the scale of the SME sector in each region. Individual coefficients and integral indices of structural shifts [26] do not fully account for the scale of the sectors for precise comparison (as we established empirically), and do not reflect the qualitative direction of structural changes. Therefore, we developed an SME conversion index for spatial comparisons, which best aligns with the essence of the described phenomenon:

$$J_{SME} = \left( \left( \frac{S_1 - S_0}{S_0} \right) + \left( \frac{M_1 - M_0}{M_0} \right) - \left( \frac{SME_1 - SME_0}{n \times SME_0} \right) \right) \times P,$$

In this formula:

$J_{SME}$  – comparative SME conversion index in the relevant region;

$S_0$  and  $S_1$  – number of SME entities in the "small" category at the beginning and end of the study period;

$M_0$  and  $M_1$  – number of SME entities in the "medium" category at the beginning and end of the study period;

$SME_0$  and  $SME_1$  – total number of all SME entities at the beginning and end of the study period;

$n$  – number of categories of SME entities (in the Russian Federation  $n = 3$ );

$P$  – weight of the percentage share of changes in SMEs in the relevant region.

This index is sensitive to minimal increases in the number of entities in the "small" and "medium" categories, whose share in the overall structure of the SME sector is initially insignificant. It accounts for the weight of structural changes and reflects their qualitative direction. Index values range over a wide scale, including both positive ( $>0$ ) and negative ( $<0$ ) values. The obtained are interpreted in accordance with to the proposed scale (*Table 3*).

We evaluated the transformation of SME sectors in the regions of the Russian Federation for 2019–2024 with the SME conversion index. The calculations contain data on structural changes across the entire set of SME entities (*Fig. 2*).

<sup>7</sup> Federal Law of July 24, 2007 No. 209-FZ (amended on July 22, 2024) "On the Development of Small and Medium-Sized Entrepreneurship in the Russian Federation". URL: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_52144/08b3ecbdc9a360ad1dc314150a6328886703356/](https://www.consultant.ru/document/cons_doc_LAW_52144/08b3ecbdc9a360ad1dc314150a6328886703356/)

<sup>8</sup> Chudinov A.N., ed. Dictionary of foreign words that have become part of the Russian language. Materials for the lexical development of borrowed words in Russian literary speech. St. Petersburg: V.I. Gubinsky; 1894. [4], IV, 989 p.

Table 3

Scale of Assessment of the SME Conversion Index ( $J_{SME}$ )

| No. | IndexValueRange                                                                | Characteristicof SME Conversion |
|-----|--------------------------------------------------------------------------------|---------------------------------|
| 1   | From $0.75 \times \max J_{SME}(\text{incl.})$ up to $1.0 \times \max J_{SME}$  | Highlypositive                  |
| 2   | From $0.50 \times \max J_{SME}(\text{incl.})$ up to $0.75 \times \max J_{SME}$ | Significantlypositive           |
| 3   | From $0.20 \times \max J_{SME}(\text{incl.})$ up to $0.50 \times \max J_{SME}$ | Noticeablypositive              |
| 4   | From $0.05 \times \max J_{SME}(\text{incl.})$ up to $\times \max J_{SME}$      | Low positive                    |
| 5   | From $0.05 \times \min J_{SME}$ up to $\times \max J_{SME}$                    | Weakly expressed                |
| 6   | From $0.05 \times \min J_{SME}(\text{incl.})$ up to $0.20 \times \min J_{SME}$ | Low positive                    |
| 7   | From $0.20 \times \min J_{SME}(\text{incl.})$ up to $0.50 \times \min J_{SME}$ | Noticeable negative             |
| 8   | From $0.50 \times \min J_{SME}(\text{incl.})$ up to $0.75 \times \min J_{SME}$ | Significantly negative          |
| 9   | From $0.75 \times \min J_{SME}(\text{incl.})$ up to $1.0 \times \min J_{SME}$  | Highly negative                 |

Source: compiled by the author.

Note: min and max are the minimum and maximum values of the index, respectively, "incl." is inclusive.

Figure 2 presents the composition of regional groups related to the achieved level of SME conversion ( $J_{SME}$ ):

11. Highly positive: Krasnodar Krai, Chechen Republic.

12. Significantly positive: Republic of Crimea, Kaliningrad Oblast, Sverdlovsk Oblast, Novosibirsk Oblast.

13. Noticeably positive: Primorsky Krai, Republic of Dagestan, Sevastopol, Belgorod Oblast, Penza Oblast, Republic of Tatarstan, Ryazan Oblast, Moscow Oblast, Omsk Oblast, Kamchatka Krai, Chelyabinsk Oblast, Leningrad Oblast, Republic of Kalmykia, Nizhny Novgorod Oblast, Lipetsk Oblast, Krasnoyarsk Krai.

14. Low positive: Rostov Oblast, Vologda Oblast, Republic of Sakha (Yakutia), Tyumen Oblast (without autonomous okrugs), Amur Oblast, Yamalo-Nenets Autonomous Okrug, Samara Oblast, Ulyanovsk Oblast, Voronezh Oblast, Republic of Buryatia, Ivanovo Oblast, Khanty-Mansi Autonomous Okrug, Tula Oblast, Pskov Oblast, Magadan Oblast, Republic of Adygea.

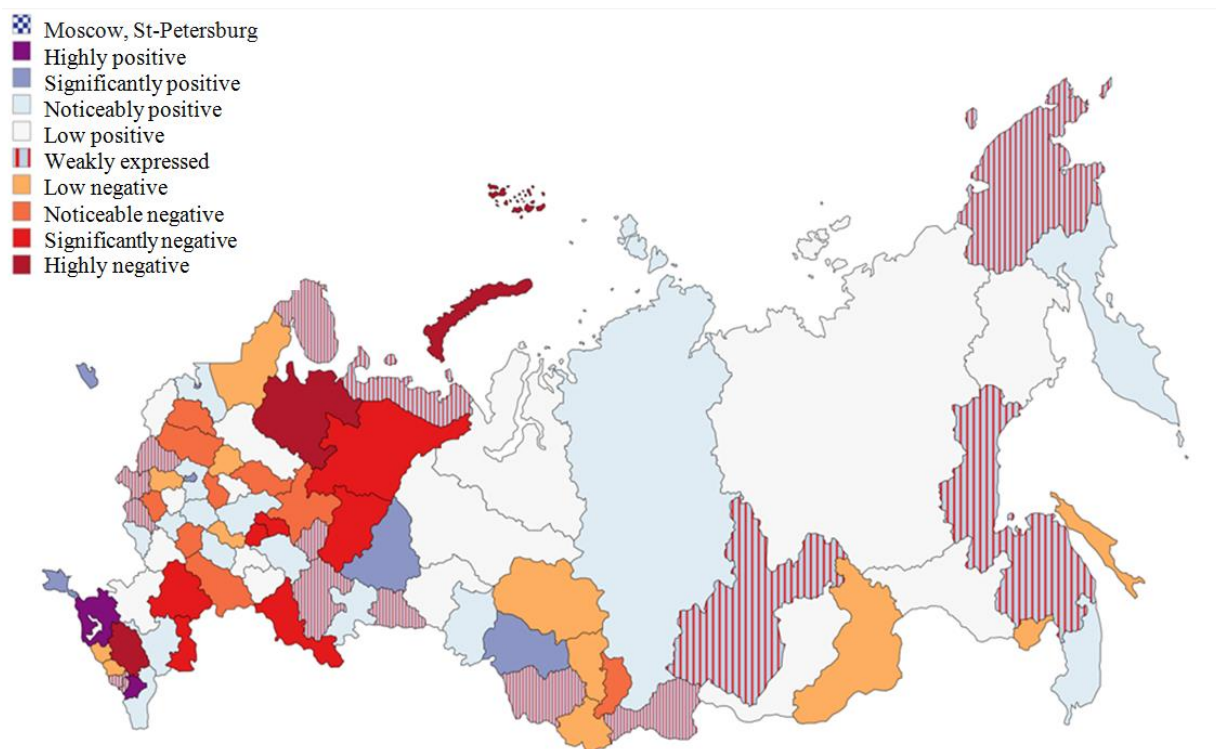
15. Weakly expressed: Kurgan Oblast, Altai Krai, Republic of Ingushetia, Republic of North Ossetia-Alania, Irkutsk Oblast, Murmansk Oblast, Republic of Bashkortostan, Khabarovsk Krai, Nenets Autonomous Okrug, Chukotka Autonomous Okrug, Bryansk Oblast, Republic of Tyva, Kursk Oblast, Udmurt Republic, Smolensk Oblast.

16. Low negative: Kaluga Oblast, Zabaykalsky Krai, Republic of Mordovia, Sakhalin Oblast, Republic of Altai, Yaroslavl Oblast, Republic of Karelia, Jewish Autonomous Oblast, Kabardino-Balkarian Republic, Karachay-Cherkess Republic, Tomsk Oblast, Kemerovo Oblast-Kuzbass.

17. Noticeably negative: Novgorod Oblast, Oryol Oblast, Tambov Oblast, Tver Oblast, Vladimir Oblast, Kirov Oblast, Saratov Oblast, Republic of Khakassia, Kostroma Oblast.

18. Significantly negative: Republic of Chuvashia, Republic of Mari El, Republic of Komi, Perm Krai, Volgograd Oblast, Astrakhan Oblast, Orenburg Oblast.

19. Highly negative: Stavropol Krai, Arkhangelsk Oblast (without autonomous okrug).



**Fig. 2. A Map of the Regions of Russia with the Level of SME Conversion**

Source: compiled by the author.

Note: Statistical information

on the Donetsk People's Republic (DPR), the Luhansk People's Republic (LPR), the Zaporizhzhia and Kherson regions for the period under study is not available in official sources.

The achieved positive levels of  $J_{SME}$  in Moscow and St. Petersburg significantly exceed the indications of values. In view of this, they are excluded from the general gradation of the assessment scale. Statistical data regarding the Donetsk People's Republic (DPR), the Luhansk People's Republic (LPR), and the Zaporizhzhia and Kherson regions for the period under review is unavailable in official sources.

Besides, according to the results of the comparative assessment of regional SME sectors using the  $J_{SME}$  index presented in Fig. 2:

- the majority (40 subjects) presented positive SME conversion in various level;
- 15 subjects are regions with no pronounced structural change or with weakly expressed nature;
- 30 subjects presented negative SME conversion.

We distinguish here some examples worth of particular attention.

Firstly, there is a positive experience of SME conversion in the largest regions of the country, including the capital's ones. Namely, Moscow ( $J_{SME} = 432,792$ , +7.6 thousand small and medium-sized SME entities). St. Petersburg ( $J_{SME} = 108,861$ , +1.2 thousand small and medium-sized SME entities). Krasnodar Krai ( $J_{SME} = 69,800$ , +652 small and medium-sized SME entities). Importantly, Krasnodar Krai has an accelerated growth in the share of small and medium-sized entities in the overall structure of the SME sectors. These regions are remote from sources of raw materials, and the achieved result is obtained due to the manufacturing industries and the service sector. As to the spatial economics in SMEs, this indicates a strengthening of regional disparities towards the *strengthening of agglomerations* with the largest populations and/or better natural-climatic conditions.

Secondly, one of the leaders in the growth and qualitative improvement of the structure

of SME entities in the Russian Federation during the period under review was the Chechen Republic ( $J_{SME} = 65,990$ , +455 small and medium-sized SME entities). It has demonstrated an increase of 3.3 times!

Furthermore, significant positive results were demonstrated in the *special regions* of our country. Kaliningrad Oblast ( $J_{SME} = 43,228$ ) demonstrated the increase in small and medium-sized SME entities for 2019–2024 amounted to +238 units, including a 68 per cent growth in the number of medium-sized companies and the Republic of Crimea ( $J_{SME} = 44,241$ , +274 entities in the ‘small’ and ‘medium’ categories, including +36% of medium-sized companies). Notable indicators were in Sevastopol, Kamchatka Krai, and Primorsky Krai. The successes achieved are partially related to the effect of a relatively low base, but overall they indicate that in these regions, the necessary conditions for positive SME conversion were established.

Thirdly, among the regions with significantly negative SME conversion we distinguish not only those with low population density (Republic of Komi,  $J_{SME} = -8,362$ ) but also industrially developed Orenburg Oblast ( $J_{SME} = -9,815$ ) and Perm Krai ( $J_{SME} = -8,440$ ). Regions with favourable natural-climatic conditions are also present in our findings: Volgograd and Astrakhan oblasts, Stavropol Krai. In each of these, the share of small and medium-sized companies decreased in the SME structure. Sometimes, this occurs against a backdrop of a plummet in the total number of SME entities across all categories (Arkhangelsk Oblast without autonomous okrug).

The findings of  $J_{SME}$  values in the spatial series show a *high correlation* with the GVA of regional SME sectors ( $r > 0.93$  per cent at  $p < 0.05$ ), and the identified relationship is substantial and statistically significant. Thus, SME conversion is a confirmed significant indicator accompanying the growth of SME GVA in the regions and the Russian Federation as a whole.

It is worth noting that positive SME conversion in 2019–2024 was partly contributed by the

stability of the “maximum revenue” criterion, which for the transition to small and medium-sized business was fixed at 120 million Rubles (in 2016, it was 800 million Rubles.<sup>9</sup> Besides, according to Rosstat data<sup>10</sup> from 2019 to 2024, the overall increase in the consumer price index in the Russian Federation exceeded 49.7 per cent. In order to eliminate the influence of inflation in an ideal calculation model, it is necessary to have operational information on the revenue value of each SME entity transitioning from one category to another. Nevertheless, even the implemented above calculation method allows ensuring comparability and making certain managerial conclusions due to the similar approach across all regions.

Among the practical instruments of the impact on the SME living environment used in regions with positive SME conversion are the following: special administrative region regimes,<sup>11</sup> free customs zones,<sup>12</sup> special economic zones,<sup>13</sup> innovation territories (centres); special tax rates under the simplified taxation system<sup>14</sup> for specific activities, etc. The leading regions resort to their own platform-driven solutions (e.g., the Moscow Innovation Cluster),<sup>15</sup> in addition with developed infrastructure for nurturing entrepreneurial talent.

An important task for regional management teams is not only to replicate and translate possible supporting instruments for SMEs in their territory. They need to create a *unique* value potential in the region attracting the entrepreneurial community and contributing to evolution of the entire entrepreneurial ecosystem.

<sup>9</sup> Russian Government Resolution No. 265 of April 4, 2016, “On the Maximum Income Levels from Entrepreneurial Activity for Each Category of Small and Medium-sized Businesses”. URL: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_196415/](https://www.consultant.ru/document/cons_doc_LAW_196415/)

<sup>10</sup> Consumer price indices for goods and services in the Russian Federation. Rosstat. URL: [https://rosstat.gov.ru/storage/mediabank/ipc\\_s\\_1992-2024.xlsx](https://rosstat.gov.ru/storage/mediabank/ipc_s_1992-2024.xlsx)

<sup>11</sup> URL: <https://invest.primorsky.ru/ru/investor/blok-gospodderzhka/svobodnyj-port-vladivostok/>

<sup>12</sup> URL: <https://invest.kaliningrad.ru/investoru/lgoty/#slide-3>

<sup>13</sup> URL: <https://titanium-valley.com/>

<sup>14</sup> URL: <https://its.1c.ru/db/taxusn#content:521:hdoc:reg56>

<sup>15</sup> URL: <https://i.moscow/>



## CONCLUSIONS

1. In terms of stimulating the economy, the SME sector is comparable to the largest industries. It performs a complex set of important functions, the beneficiaries of which are every individual, society, the business community, and the state. The development of this sector requires determining management decisions and mechanisms for the effective usage of each region's advantages, taking into account such specifics of the entrepreneurial environment and community as a relative independence of economic entities and their high reaction to changing business conditions. The ecosystem approach is best suited for this task.

2. The key criterion for regional management is the territorial attachment (registration) of the SME entity, which determines the core potential of implementing management interventions by the region related to building an entrepreneurial ecosystem. Whether an SME entity is dependent on large business or not, the tasks of the region are related to creating an operational environment that helps such businesses to establish themselves in the region, grow, and develop, creating new jobs and useful goods.

3. The expansion of SMEs in 2019–2024 in the Russian Federation and its regions occurred mainly with newly created individual entrepreneurs, usually belonging to the micro-enterprise category. Concurrently, the spatial series of SME GVA correlate with the structural changes in the sector under research. Therefore, it is critically important for to increase the share of small

and medium-sized companies in the categorical structure of SMEs to achieve the accelerated growth.

4. By 2030, the competition level for successful entrepreneurial projects among Russian regions will increase. A significant advantage for them may become a well-developed entrepreneurial ecosystem. The structure of regional entrepreneurial ecosystems should provide for a unique value potential for their participants and ensure sustainability (including over time). The concepts advanced in this article are aimed to help reducing uncertainty in their formation and development in the regions.

5. The theoretical models in this research, including the concept of SME conversion and the methodological toolkit for determining the SME conversion index ( $J_{SME}$ ), allow for the assessment of structural changes in regional SME sectors within the country and may find application in international practice. Notably, the proposed SME conversion index is not a universal indicator of SME development in the regions: it is based on the existing national system of categorical structuring of SMEs with its advantages and disadvantages. Furthermore, its values may decrease during active creation of new SME entities in the regions. However, the introduction of such an index generates an instrumental basis for assessing qualitative changes in regional SME sectors, which is important for achieving the goals of accelerated development of SME entities in the Russian Federation as established in the national project "Efficient and Competitive Economy".

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