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On The Assessment Peculiarities of the Authorities' Activity in the Field of Small and Medium Entrepreneurship Development in the Territory of the Russian Federation: Evidence from the Republic of Tatarstan

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Abstract
State support of small and medium entrepreneurship is relevant in modern reality, because this type of business is the most vulnerable, and at the same time capable of the most dynamic development. Most research and publications available in the scientific literature focus on the factors that hinder the development of small and medium entrepreneurship, namely the high tax burden, the problem with the recruitment of qualified personnel, administrative barriers, corruption, etc. Existing measures of state support are built in accordance with the principles specified in the legislation of one or another country, and are aimed at eliminating the above mentioned problems. This study has been conducted in the framework of the project grant program № 18-410-160005 of the Russian Foundation for Basic Research, entitled "Development and testing of modern approaches to assess the effectiveness of regional measures of state support for small and medium entrepreneurship". The main purpose of the article is to study the existing measures aimed at supporting small and medium entrepreneurship, and assessing their effectiveness at the regional level, as well as developing a methodology to assess the integrated efficiency indicator of small and medium entrepreneurship in the region, and proposing a specific system of indicators. To determine the integrated efficiency indicator of small and medium entrepreneurship in the region, we propose a specific system of indicators. In general, the system of indicators represents a set of comprehensive and individual parameters characterizing the level of small and medium entrepreneurship development. It is essential that the development parameters of small and medium entrepreneurship, which form the system of indicators, should include measurable (objective) and immeasurable (subjective) data. Basically, instrumental, calculation, and statistical methods are used to determine the measurable indicators, while sociological and expert methods are employed for qualitative descriptions of immeasurable indicators of small and medium entrepreneurship development. This approach has been tested on the statistical data of small and medium entrepreneurship development in the Republic of Tatarstan.
Keywords: Small and medium entrepreneurship (SME); Government support measures; SME development infrastructure; Assessment of the effectiveness of regional measures of state support; The integrated efficiency indicator of SME development; The system of indicators.

1. Introduction
In developed countries, small and medium enterprises (SMEs) are full-fledged significant participants in the economy which are not treated on a leftover principle, and are a development driver for the state's main economy sectors. At the moment, the issue of the small and medium entrepreneurship (SME) development is one of the main tasks for the executive bodies at all levels of the Russian government. Thus, the government of the Russian Federation approved a profile Strategy until 2030 and its implementation plan which specified its main performers (Nikiforova and Prygunova, 2017).

Consider the international practice of SME economic management.

Although Russia is ahead of developed countries such as Belgium, Italy, and Israel, the majority of economically advanced countries of the world are still ahead of Russia in the ranking of ease of doing business. The top three countries are New Zealand, Singapore, and Denmark (Nikiforova and Prygunova, 2017).

Table 1 shows the analysis of measures to support SMEs in both the Russian Federation and developed countries, such as for example the USA and the EU. When comparing, it should be noted that the small and medium business regulation system in Russia originated just 15-20 years ago that is much later than in the US or EU countries, where the regulation of the SME system started more than 65 years ago. For example, the formation of the state support system of SMEs in the United States began in the 1920's with the adoption of the law on the protection of small retail businesses against the expansion of large retail chains.

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Table-1. Comparative analysis of the SMEs status in the Russian Federation and developed countries

Indicator	Russian Federation	USA	EU
Rating position in the international ranking of Doing Business for 2017	40	8 (a decrease in rating position by 1 point compared to last year's position)	Most EU countries are the leaders of the rating, ratings of just three countries, namely Luxembourg (61), Greece (60), and Malta (80) are below Russia
The proportion of SME in GDP	21 % (in 2014)	46 %	More than 50 %
State strategies for SME support	Development strategy for the SME until 2030	Small Business Act (PL 85-536)	The SME development strategy of the European Union until 2020
Inflation rate, 2015	12.91 %	0.73 %	0.23 %
The proportion of jobs in SMEs	Less than 25 %	More than 50 %	68 %
The integrity of the historical development of entrepreneurial traditions	Period from 1917 to 1991 was characterized by state anti-entrepreneurial policy. Currently, the foundations of civilized business are being formed again	The country is characterized by historical integrity and continuity of traditions, the high status of the entrepreneur, and the concept of personal success depending on wealth	A long history of the development steeped in tradition. Along with increasing profits, maintaining a balance between the economic and social spheres of society is considered by business to be an important task

The literacy rate of the population is undoubtedly an important factor in intercountry cooperation, sharing experience, as well as internal development of the country. According to the UN study, the Education Index[1] of countries, which is the composite index of United Nations Development Program (UNDP), measured by combining average adult years of schooling with expected years of schooling for children, for Russia is 0.816 (that corresponds to the 34th position in the list of 188 countries). For comparison, in the USA this index is 0.9 (8th position), in the UK – 0.896 (10th position), in Germany – 0.914 (5th position), and in Canada – 0.890 (12th position). Ranking of the UN countries in terms of Education Index (2018).

In our opinion, quite interesting is the experience of Canada (Danilina, 2015), where measures to support small and medium innovative entrepreneurship have been developed at both the state and regional levels. These consisted in providing state support in hiring graduates who acquired specialty in natural science, engineering, technology, humanities, and business. Education index in Canada is 0.89, which is by 0.074 higher than that in Russia. The advantage of the program is that graduates have the opportunity to get the first experience in the acquired specialty (internship lasts from 6 to 12 months). According to this program, SMEs receive state support for the payment of 50% of the wages of the hired graduate (Shulaeva, 2014).

The state bodies are one of the key elements of the infrastructure to support small and medium business. At that, the Ministry of Economic Development is the main federal coordinating body of state support in the field of small business.

The following main directions of business support can be distinguished:
- Financial support (assistance in obtaining loans, grants, etc.);
- Technical and information support (consulting services, mentoring support, providing angel investors, etc.);
- Innovative support (business incubators, special economic zones, agricultural parks, etc.)

Currently, special attention is paid to the factors that hinder the SME development (Orekhin, 2017). In addition to the financial aspect of the issue, which is the main one in terms of the state support of SMEs, there are key problems that hinder the development of entrepreneurship in the subjects of the Russian Federation, including the Republic of Tatarstan (Zhabin *et al.*, 2017). According to the research of the entrepreneurship development issues, conducted by "Support of Russia", "Business Russia", and the Committee of the Republic of Tatarstan on Socio-Economic Monitoring, as well as outcomes based on the data of surveys and questionnaires of the business community, the main factors hindering entrepreneurship include the following:
- personnel deficiency;
- high tax burden for small and medium business;
- low availability of financial resources;
- low availability of land and real estate;
- low availability of energy infrastructure;

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[1]Before 2010, the Education Index was measured by the adult literacy rate (with two-thirds weighting) and the combined primary, secondary, and tertiary gross enrollment ratio (with one-third weighting). The adult literacy rate gives an indication of the ability to read and write, while the gross enrollment ratio gives an indication of the level of education from kindergarten to postgraduate education. Since 2010, the Education Index has been measured by combining average adult years of schooling with expected years of schooling for children, each receiving 50% weighting.

- administrative barriers;
- corruption;

problems related to the purchase of new equipment.

2. Methods

A number of projects are being implemented in Russia using methods of foreign research organizations. Among them, there are three main ones - "Doing Business" (The World Bank), "Business Environment and Enterprise Survey" (The European Bank for Reconstruction and Development together with the World Bank), and "Global Entrepreneurship Monitor" (implemented by national competence centers based on their own funds or funds independently raised according to the conventional methodology). Thus, in our opinion, the experience of supporting the assessment of SMEs abroad should be used in Russia, because it gives positive dynamics of SME development.

At the same time, the issues of business community functioning in the social sphere are quite relevant in Russia. For example, most small US firms are a family business. It is believed that family firms are the most successful survivors during the crisis developments in the economy. By the example of developed countries, Russia should adopt experience in supporting family business, women's entrepreneurship, as well as business promotion among young people, starting with schools and universities.

Thus, there are different attitudes in Russia and developed countries regarding the status and prospects of SME development. Certainly, when developing mechanisms for SME development and support, it is important to take into account existing international best practices, and successfully apply them taking into account national specifics. However, in practice, this is quite difficult, since each country has its own peculiarities in terms of political and legal environment, as well as historical and cultural traditions, which can act both as barriers and as advantages in the implementation of contemporary practices depending on the ability to take them into account when implementing business projects.

In the Russian Federation, support for SME is provided by public authorities and bodies of local government in accordance with the Federal Law of July 24, 2007 № 209-FZ "On the development of small and medium entrepreneurship in the Russian Federation" (Article14) (On the development of small and medium entrepreneurship in the Russian Federation, 2007). Among other measures, state support includes the provision of subsidies to small and medium business from the federal and regional budgets within the framework of regional programs for the development of SME by the constituent entities of the Russian Federation (Resolution of the Cabinet of Ministers of the Republic of Tatarstan of October 31, 2013).

The government resolution № 1605 of December 30, 2014 approved the following performance indicators reflecting the efficiency of subsidy use (the indicators are mandatory for the implementation of programs aimed at supporting SME):

Assessment of the implementation efficiency of the j-th measure of state support of SME, implemented through grant funding by the i-th subject of the Russian Federation as of the reporting date ($Оц_{ijk}$), is determined by the formulas (1) and (2):

$$if \ \frac{S_{act \ ijk}}{S_{plan \ ijk}} \leq 1, \ then \ \ Оц_{ijk} = \frac{S_{act \ ijk}}{S_{plan \ ijk}}, \tag{1}$$

$$if \ \frac{S_{act \ ijk}}{S_{plan \ ijk}} > 1, \ \ then \ Оц_{ijk} = 1, \tag{2}$$

where $S_{act \ ijk}$ is the actual value of the k-th performance indicator of the implementation of the j-th measure of state support of SME implemented through grant funding by the i-th entity of the Russian Federation as of the reporting date;

$S_{plan \ ijk}$ is the actual value of the k-th performance indicator of the implementation of the j-th measure of state support of SME implemented through the subsidy established by the agreement.

For the purpose of subsidies' distribution for 2016, the assessment of efficiency of implementation of the state support measures of SME at the expense of the subsidies given by the constituent entity of the Russian Federation, was carried out as of October 1, 2015, based on actual achievements of the following performance indicators of provided subsidies established by the agreements signed in 2014:

1) the proportion of the average number of staff (without external part-time workers) employed in microenterprises, SMEs, as well as employees hired by individual entrepreneurs, in the total number of employed population;

2) the number of SME agents that have received state support;

3) the number of SME agents (including individual entrepreneurs) per one thousand people of the population of the constituent entity of the Russian Federation;

4) the number of newly created jobs (including newly registered individual entrepreneurs).

Within the framework of the project "Development and testing of modern approaches to assessing the effectiveness of regional measures of state support for small and medium entrepreneurship", we propose to use an integrated efficiency indicator of SME along with using various factors.

To determine the integrated efficiency indicator of SME in the region, we propose a specific system of indicators. In general, the system of indicators represents a set of comprehensive and individual parameters characterizing the SME development level.

It is essential that the development parameters of SME included in the system of indicators should include measurable (objective) and immeasurable (subjective) data.

The values of measurable indicators are determined using mainly instrumental, calculation, and statistical methods, while sociological and expert methods are used for qualitative descriptions of immeasurable indicators of SME development.

In order to solve the problem on determining the quantifiable indicative indicators of SME development, four groups of factors that have the strongest impact on level of advancement, were identified based on a comprehensive multidimensional study.

1. Demographic indicators of SME.
2. Social efficiency of SME.
3. Performance level of SME.
4. Investment efficiency of small entrepreneurship performance.

This group of indicators is reflected in the integrated efficiency indicator of SME based on the analysis of macroeconomic statistics.

To quantify the integral level of SME development in the region for each group of factors, indicative indicators shown in Table 2 were identified in consequence of the conducted study. The choice of criteria for the construction of an integral indicator (index) of the SME development in the region should be carried out based on an accessible statistical base. The system of indicators does not contain expert indicators or indicators based on the results of surveys of economic entities.

Table-2. System of indicators to determine SME development level

№	Indicators	Indicators of socio-economic attractiveness of the region
	Demographic indicators of SME	1. Number of registered SME agents in the region, units. 2. The proportion of SME agents in the total number of enterprises in the region, %
	Social efficiency of SME	3. The number of employees of SME. 4. The proportion of people employed at SME in total employment in the region, %. 5. The average wages of the employees at SMEs, rubles. 6. The ratio of wages at SMEs to the level of wages in the Republic of Tatarstan. 7. The average number of people employed at the same SMEs.
3	Functioning efficiency of SME	8. The average turnover of SME per SME agent, million rubles. 9. The proportion of turnover of SME in the total turnover of entrepreneurship in the region, %. 10. Labor productivity in SME (per one employed), million rubles. 11. Tax revenues from SME in the Republic of Tatarstan (excluding unified social tax), thousand rubles.
	Investment efficiency of small entrepreneurship	12. Total investment of SME in fixed capital, mln rubles. 13. Average amount of investments in fixed assets per one small and medium enterprise, mln rubles. 14. Proportion of investments in fixed capital of SME in the fixed assets of enterprises in the region, %.

Some of the above indicative indicators are both quantitative as well as quantitative and qualitative in nature, characterizing some aspects of SME development in the region.

The proposed method allows obtaining nonverbal, descriptive and comparative characteristics of the development level of SME: "in terms of certain indicators SME is developing better, while in terms of other parameters it develops much worse". This method makes it possible to obtain a well-defined, quantifiable, objective characteristic covering the entire set of indicators under consideration that is embodied in a single integrated indicator, namely the development index of SME in the region.

The method involves the derivation of regional scores with respect to each of the indicators characterizing various development aspects of the SME. It is assumed that the vast majority of the selected indicators have an unambiguous, positive or negative interpretation, that is, a higher numerical value of the indicator indicates a qualitative increment (for better or for worse) of the characteristics of a certain aspect of the SME development in the region. Indicators that in this sense do not have an unambiguous interpretation, though are necessary for calculations or are illustrative in nature (for example, the organizational and legal form of a small and medium enterprise), are assigned zero scores, or they are not considered at all. Indicators that have a negative value are given negative scores; indicators that have neutral values can be assigned to zero.

The scale of ranges of real values for each of indicators for all analyzed years is constructed to obtain score estimates. The ranges are determined based on the minimum and maximum values of the particular indicator. Next, the ranges are divided into 10 equal intervals, where each interval corresponds to a certain number of scores equal to

the number of the interval (from the 1st to the 10th). The amount of scores for all indicators of the particular region, derived in accordance with the 10-point calibration scale, is exactly *the index of SME development in the region*. In order to better assess certain aspects of the situation in the region, indices can be compiled for individual groups or sets of indicators. Depending on the nature of the study, certain indicators that are most important in a given particular case can be supplemented by weighting factors.

Thus, the development index of SME in the region will be characterized by the sum of the scores of the selected indicators presented in the formula (3):

$$= I_R = \sum_{i=1}^{N} P_i \ (1) \tag{3}$$

where i is the indicator; N is the number of indicators in the set; P_i is the score corresponding to the value of the i-th indicator.

It is also possible to calculate the index of a group of indicators characterizing the development of SME in the region with respect to some aspect, for example, by the level of investment activity of SME. Then the set of indicators will include only given aspect of the problem.

3. Results

Evaluation of the SME effectiveness in the Republic of Tatarstan was carried out for the period of 2009-2013 using the above indicators. The results of the evaluation are presented in Table 3.

According to the methodology presented in the previous section, the calculation of the development index of SME in the Republic of Tatarstan was carried out based on the official macroeconomic statistics.

Table-3. Score-rating assessment of SME of the Republic of Tatarstan in the context of key factors (components) that determine the development efficiency

| Years	Demographic indicators of SME (Score$_{max}$=20)	Social efficiency of small business (Score $_{max}$=50)	Performance efficiency of small entrepreneurship (Score$_{max}$=30)	Investment efficiency of small entrepreneurship (Score$_{max}$=30)
2009	2	11	12	30
2011	14	44	25	3
2012	17	42	26	3
2013	12	32	30	5

The presented calculated data demonstrate the multidirectional nature of development trends of the key components of the integrated efficiency indicator of SME in the region.

For the period from 2009 to 2013, an increase in all factors that determine the qualitative and quantitative growth of the development index of SME of the Republic of Tatarstan was noted, except for the factor characterizing the investment activity of SME in the region. In many ways, a significant decrease in investment efficiency over the five-year period was due to anti-crisis measures implemented in the Republic of Tatarstan in 2009, i.e. during the acute phase of the crisis that broke out in 2008. Thus, we can talk about the effect of a high base that was formed in 2009 as a result of "excessive stimulation" of business in the implementation of investment projects.

In general, the Republic of Tatarstan, as already noted, is characterized by the growth of demographic indicators of SME, as well as increase of their social and economic efficiency.

Thus, on the basis of incremental steps, we designed the development index of SME in the region for the period of 2009-2013, the dynamics of which in time are presented in Fig. 1. At that, the maximum number of scores equals to 140.

Figure-1. Rating of the development index of SME in the Republic of Tatarstan for the period of 2009-2013
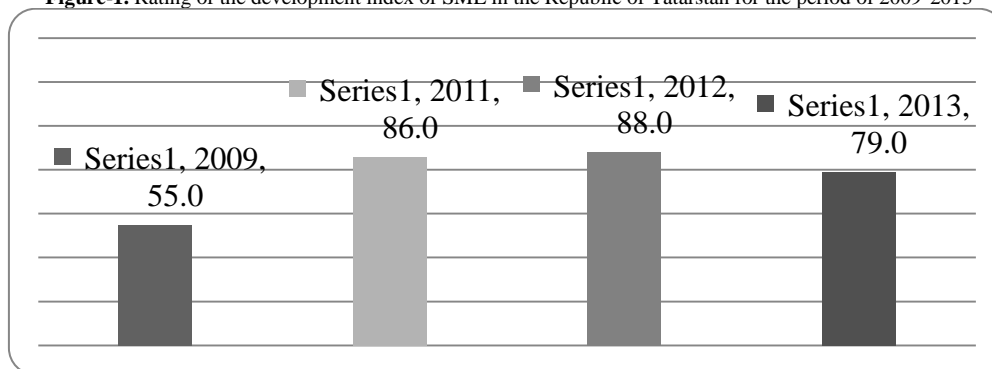
4. Discussion

Conducting analysis of the factors determining the nature and dynamics of the index of SME in the region (I_{sme}) throughout the whole analyzed period of time (2009-2013) is quite interesting both in terms of scientific and

practical aspects. For example, the identification of the causes and factors that determine the decline or, conversely, the growth of the index studied in this work forms the backbone to develop specific measures of state influence on the relevant processes and subjects of management.

Moreover, the study of these reasons allows understanding the logic of the SME development in the region, which forms the basic grounds for the scenario modeling of SME depending on the determining key factors.

Based on the analysis of official statistical information, revealing the five-year dynamics of SME development indicators in the Republic of Tatarstan, the main conclusions and recommendations were formulated aimed at improving the efficiency of tools and mechanisms of state regulation of SME.

5. Conclusion

Based on the above presented study, the following focus areas for improving the economic development of SMEs in the region were identified.

Focus area 1: Strengthening measures aimed at stimulating investment activity of SME.

Focus area 2: Stabilizing demographic processes in the development of SME.

Focus area 3: Stimulating demographic processes in SME.

Focus area 4: Providing legalization of employment in SME.

Focus area 5: Activating SME development in the production sector corresponding to the fifth and sixth technological waves.

Focus area 6: Stimulating integration processes of SME in the field of international, national, and republic-wide division of labor (stimulating cooperation processes).

Acknowledgments

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