Evaluation of Small Business Support's Effectiveness

Natalia Ewaldovna Sokolinskaya[1] & Lyudmila Mikhaylovna Kupriyanova[1]

[1] Financial University under the Government of Russian Federation, Moscow, Russia

Correspondence: Natalia Ewaldovna Sokolinskaya, Financial University under the Government of Russian Federation, Leningradsky Prospect, 49, Moscow, 125993, Russia. E-mail: profsokn@rambler.ru

Abstract

This article is devoted to the peculiarities of the formation and support of small business in Russia. On the one hand, this sector is at a stage of development when it is in dire need of government support; on the other hand, the intensification of production and investment activities of small business largely affects the implementation of structural changes in the economy. That is why there is an urgent need to assess the effectiveness of small business support. The article clarifies the concept of small business in Russia; criteria for identifying the enterprise category of small business entities are developed; the place of the state and forms of banks' and insurance companies' in the financial programs to support small businesses are highlighted; performance indicators of supporting small business entities are identified. Also we present the method of the integrated performance calculation which could be of use in assessing the impact of small businesses on the economy of the region.

Keywords: small business, criteria, program support, banks, insurance companies, foundations, integral indices

1. Introduction

In recent years, many books and articles on small business development in Russia has been written. However, they are at most present theoretical and practical provisions on the types of small business, organization form, the competitiveness of products, specifics of marketing strategies and plans presented to the regional aspects of development of small business, lighted foreign experience in small business, as well as the problems and prospects of development of small entrepreneurship in Russia.

However, the support of small business has received little attention and did not address the question of assessing the effectiveness of the measures to support small businesses by government agencies and banks. In this regard, we set ourselves the task of identifying performance indicators to support small businesses, as well as the development of methods of calculation of the integrated performance and assess the impact of small businesses on the economy of the region.

1.1 Developed Criteria for Identifying the Enterprise Category of the Small Enterprise

The number of employees, annual turnover in terms of value, the value of assets should be highlighted among *quantitative* criteria for classifying enterprises in the category of small businesses.

The term small business denotes the totality of small and medium-sized enterprises that are not directly included into any monopoly union and perform a subordinate role with respect to monopolies in the economy.

A personal risk management, specifics of the structure of assets, reflected in the prevalence of current assets over fixed assets, specifics of the structure of liabilities, characterized mainly by loan capital - could be called among the main *qualitative* characteristics inherent in small businesses. Additional qualitative characteristics are *purpose of activities* and *availability of analysis* of small enterprises (Table 1).

In same time the growth of micro and small enterprises was observed in the Moscow region, St. Petersburg, CFD and in Russia as a whole, and there were higher rates of growth in Russia as a whole. During the same period a drop of 4.4% was recorded in Moscow. This may be accounted for the negative impact of financial crisis, on the one hand, and for the transition of small enterprises to the simplified tax system, on the other hand. Besides, the period under consideration gave an increased number of individual entrepreneurs and, thus, the transformation of micro and small enterprises to other legal form of organization - individual entrepreneurs - is quite possible.

(Acharya, 2009; Demirguc-Kunt & Detragiache, 1998; Hauswald & Marquez, 2006; Holmstrom & Tirole, 1997; Lemieux, 2014)

Table 1. Criteria for business entities to be qualified as a small enterprise

Criteria	Criterion level, depending on class of small business	
	Small	Micro
Quantitative		
Number of employees	Up to 100 people	Up to 15 people
Annual turnover	Up to 20 million rubles	Up to 20 million rubles
Asset value	Up to 21 million rubles	Up to 21 million rubles
Qualitative	Main criteria	
Personal risk management	High	High
Structure of assets	Predominant current assets	Predominant current assets
Structure of liabilities	Predominant borrowed capital	Predominant owner's capital
	Additional criteria	
Company goal	Profit	Lifestyle
Availability of analysis	Difficult	Difficult

These facts, on the one hand, describe the enterprises as sufficiently flexible and resilient to changes in the external economic environment, but, on the other hand, determine their key dependence on changes in the internal, private factors that impact only the activity of each individual company. (Basel Committee on Banking Supervision, 2010).

1.2 The Place of the State and Banks' and Insurance Companies' Participation in the Financial Programs to Support Small Business

Currently, the state support of small businesses has a broad regulatory framework.

The Federal Law N 88-FZ of June 14, 1995 "On State Support to Small Business in the Russian Federation" is the main document. In accordance with this Act, the relevant decisions were taken by the Government. The fundamental ones of them are devoted to federal programs to small business support. Besides, there are also regulations on small business support and programs for such support at regional and local levels. The law defines the division of powers between the Russian Federation and subjects of the Russian Federation in the field of state support of small enterprises that enables regions of the Russian Federation to independently develop and implement policies concerning small business. The law on support for small business in Moscow proved to be the most effective. Law of the city of Moscow "On the Basis of Small Business" was adopted in 1995. One of the effects of the law is that up to 30% of all small enterprises are currently concentrated in the capital of Russia. The first step made by the state towards small enterprises in taxation was Federal Law N 222-FZ of December 29, 1995 "On a Simplified System of Taxation, Accounting and Reporting," which came into force in January 1996.

The main agents of radical technological innovations are the small scientific, technological and innovative companies that base their activities on government support. Therefore, special attention must be given to the support of innovative small businesses. (Sinn, 2001)

The funds for the promotion of investment, innovation and investment forums whose primary purpose is not only to help businesses find the sources for funding to implement their innovative projects, but orient them in a variety of opportunities for funding effective tools to ensure mutual understanding of investors and entrepreneurs of small businesses. (Colquitt, 2007)

The funds for the promotion of investment, innovation and investment forums hold thematic sessions and round tables with participation of representatives of government bodies and major public corporations interested in developing the innovation sector, of financial institutions' managers that invest money in the latest developments. All that increases the effectiveness of these measures and the implementation of the projects. (Sokolinskaya, 2014)

Debate on topical issues, such as "Initiative of the State Support and Financing of Small Innovative Companies, Regional Funds for Investment in Small Enterprises in Scientific-and-Technological Areas, State Programs for Financing of Innovative Activity, The Financial Crisis and Innovative Business: threat or opportunities" and

others, increase the interest of the participants of the Forum. With a focus on investment in IT sector, biotechnology, nanotechnology, alternative energy, real *support for small innovative companies includes*:

- Advisory assistance to applicants of innovative projects on the formation of innovative projects, processing requests for financial assistance, the choice of topical areas and regions to realize their intellectual property, increase the competitiveness of products, determining the conditions, possibilities and ways to attract investors;

- Liaising with a Fund to promote investment in small enterprises in scientific and technical area of the region and its Management Company;

- Scientific and methodological support for the development and support of small businesses in innovation;

- Provision of information support for innovative projects to enhance the effectiveness of implementation and rapid introduction of the innovation of small businesses;

- Organization of comprehensive and specialized expertise of innovative projects coming from small businesses;

- Demonstration of the achievements of innovative activity of small businesses entities participating in the venture competitions, interaction with various media;

- Research, development and testing of new methods of innovation;

- Development of proposals for effective implementation of interim and final results of innovative activities of small businesses, including the needs and priorities of the region;

- Organization of the events to share experiences, expand business ties and opportunities for small business innovation;

- Development of proposals for the government on the development of innovative activities in accordance with the priorities of a particular region;

- Promotion of interaction of small businesses and technological parks in the region;

- Establishment of business links between small and large businesses.

Receiving the budget on non-refundable basis is the only way to finance the development stage of the project for most innovative companies. Public funds can be provided in the form of subsidies or in the form of subventions (grants). Mandatory participation in the project together with the funds, their own and other sources is one of the conditions to attract budget, the mechanism of the equity in funding is also taken into account.

An active subsidy program for innovative projects is submitted to the Department for Support and Development of Small Entrepreneurship in Moscow:

1. **Subsidies for the implementation of the innovative project.** The subsidy is provided for compensation of 25% to 50% of capital expenditures for the implementation of innovative projects, including, among other things, the purchase of equipment, as well as the fees for outside organizations and the purchase of raw materials and components. The subsidy begins from 2, 5 million rubles.

2. **Subsidies to cover the costs of patent-license work, branding and intellectual property protection.** Grants are available to offset up to 50% of the cost of patent-license work, branding and intellectual property protection, including: the establishment of patentable results of scientific and technological activities, conducting patent searches, the maintenance of security documents, making changes in them, examination of texts of license agreements, contracts, etc., independent scientific, technical and economic audit of the innovative project and others.

The subsidy amounts to 500 thousand rubles to finance the costs of patenting, registration and protection of intellectual property rights in Russia and up to 1 million rubles - abroad.

3. **Subsidies to cover costs of small innovative companies for participation in special events to promote products (exhibition, fair, conference).** The subsidy is available to offset up to 50% of the cost of drawing up legal documents for participation in special events, renting of exhibition space and exhibition equipment, preparation and decoration of showpieces, stands, posters, registration fees and services of the exhibition committee, insurance, exhibition goods, transportation costs and etc. The subsidy amounts to 250 thousand rubles.

Programs of the Foundation for Assistance to Small Innovative Enterprises in science and technology (Moscow) are of interest. Each year the Foundation is allocated 1.5 percent of the federal budget for science, research and development funding for small innovative companies. Currently the most interesting programs of the Fund are Start, Pusk (University Partnership with the Companies) and Temp (Technology - Small Enterprises).

The program *Start* is aimed at funding innovative projects at an early stage of development. It is assumed that the development of small innovative companies will take up to 3 years within its framework. The Fund provides up to 750 thousand rubles for the first stage of the project (R & D). Full project budget for the Fund is up to 4.5 million rubles, only the first year of operation is directly funded by the Fund. Second year funding of the project is carried out by the Fund in two ways: co-financing projects with extra-investor (option "I") together with co-financing of its business innovation (option "SD"- self-development).

Under program *Pusk* ("University Partnership with the Companies") there is funding of innovative projects carried out by enterprises. The innovative projects are based on universities' developments and are carried out with staff support of Russia's universities. The purpose of this program is to improve technologies and competitiveness of small innovative companies through the introduction of scientific and technological developments of the institutes of Russia and the special training of engineers for a specific technology or design. In 2007, a total limit of budget financing of the program *Pusk* was 104.0 million rubles.

The program *Temp* is aimed at small enterprises, which consider the acquisition of licenses for new technologies and technical solutions in Russian universities, academic and industrial institutions as the basic tools to accelerate its development. Under this program, the Fund supports research and development conducted by small business that must be done to develop the license. Only those who are already established companies with solid (at least 30 million rubles per year) volume of sales, purchasing a license for a serious increase in these volumes are invited to participate in the program.

The solution to problems with the loan is offered by the Fund of Small Enterprise Credit Assistance of Moscow, created in 2006. The fund provides **guarantees and warranties to banks for small businesses**. Fund guarantees can amount to 50% of the loan amount, 30% must be provided by the borrower, and 20% of the risk is taken by the bank. In this case the fund provides guarantee for a fee. The small business fee is 1.75% of the amount of guarantees. Moreover, 90% of these costs are compensated for businessmen from the city budget.

Department for Small Business Support and Development in Moscow, solves the problem of reducing the high cost of credit, and through an appropriate program **compensates for the cost of employer credit**. Under this program, bank rate may be offset from the city budget by 2 / 3, that is, if the loan rate is 12%, it actually may be 4%.

Sources of investment funds for small innovative companies can be divided into three types: business angels, venture funds and private equity funds.

Business angels - are individuals who invest in high-risk projects in order to get some benefit. In Russia this movement is in the process of becoming, there are a number of social organizations that bring together business angels. For example, the "National Union Business Angels of Russia" united people who invest their money in projects that are under development. The size of investments is determined from 1 to 10 million rubles. Investor supports the project as a partner of a small business.

Venture capital funds accumulate means of several investors. It allows to diversify risks. Under the program of public-private partnership, regional funds are created, and they accumulate funds from the federal and municipal budgets and private investors. The total amount of funds currently stands at 6.7 billion rubles.

For example, in 2006 the Moscow Venture Fund was formed. The Fund assets totaled 800 million rubles. The management company "Allianz ROSNO Asset Management" and 400 million rubles, means of a private investor – JFC Sistema. The OJSC Russian Venture Company (RVC), established by the Russian Government, invests in innovative projects, through private venture capital funds, giving each of them 49% of their investment resources.

Private equity funds (private equity) - organizations that are interested in larger deals and projects than venture capital funds (100 million). Private equity funds investment in companies at the stages of early growth and expansion. These include large investment funds dominated by Western capital. They are - a fund managed by Delta Private Equity Partners, Baring Vostok Capital Partners, Eagle Venture Partners, Quadriga Capital, Russia Partners Management etc. The volume of some exceeds $ 100 million. Moreover, the influence of the closed share investment funds (FTRA) and of the structures created by large domestic holdings is quite noticeable.

Increasing the number of **market participants' lending** to small businesses is another step towards the development of market institutions that promote small business development. In 2009 - 2010 new participants - credit cooperatives and microfinance institutions emerged in the credit market.

According to the All-Russian Public Organization of Small and Medium Enterprises' "Opora - Credit", 17 Russian banks are the most active with small and medium-sized enterprises. However, their shares in loans to

small and medium-sized businesses are not equal. The largest market players are Sberbank of Russia - more than 56% of the loans, Banca Intesa - 25.5%, Uralsib and Nomos-Bank 4.6%. The share of these four banks exceeds 86% of total loans granted by the market leaders to small and medium-sized businesses (Table 2).

Table 2. Banks - participants of market lending to small and medium-sized enterprises

Name of Bank	Net assets, thousand rubles	Volume of loans to small and medium-sized enterprises, thousand rubles	Share of loans to small and medium-sized businesses in structure of assets	Share in total loans granted by 17 banks
Sberbank of Russia	7 105 100 000	481 897 775	6.8%	56.4%
Uralsib	461 205 410	217 346 252	47.1%	4.6%
Bank Inteza	60 772 174	39 279 993	64.6%	25.5%
Bank Vozrozhdenie	155 700 000	39 000 000	25.0%	0.8%
Rosbank	440 887 961	29 007 881	6.6%	3.4%
Promsvyazbank	471 200 000	22 533 997	4.8%	2.6%
Nomos-Bank	253 400 000	8 500 000	3.4%	4.6%
Trast	89 101 175	6 845 170	7.7%	0.1%
SDM-Bank	16 150 768	3 005 285	18.6%	0.2%
Rus-Bank	87 191 951	1 658 994	1.9%	0.1%
SolidBank	5 486 453	1 380 702	25.2%	0.1%
Forus Bank	1 721 000	1 249 606	72.6%	0.1%
Gazstroybank	1283 810	500 000	38.9%	0.1%
Genebank	3980 351	488 222	12.3%	0.4%
RosDorBank	7418 966	464 933	6.3%	0.1%
Metcombank	1760 000	444 850	25.3%	0.2%
Unicredit Bank	4 823 000	147 000	3.0%	1.0%
	9 167 183 019	**853 750 660**	**9.3%**	**100.0%**

Sources: authors' calculations on "Opora".

The share of other market participants lending to small and medium-sized businesses in the structure of the total loans granted to small and medium-sized businesses by industry leaders ranges from 3.4 to 0.1%. In addition, these tables allow us to select lenders with significant components or specialized in serving small and medium-sized businesses. These organizations include Forus Bank, whose share of loans small and medium-sized enterprises is about 73% of net assets, Banca Intesa - about 65% of net assets, Uralsib - more than 47% of net assets Gazstroybank - 39%, Bank Renaissance, SolidBank, Metcombank - more than 25% of net assets.(Sokolinskaya & Kupriyanova, 2011).

Being a major player in the market of lending to small and medium-sized businesses Sberbank of Russia, nevertheless, lends to small and medium-sized businesses less than 7% of net assets. However, the bank has to give more attention to working with small businesses, since corporate clients and individual entrepreneurs make up more than 80% of the bank clients. (Burakov, 2014) In 2008 – 2009's due to the crisis, the number of creditworthy borrowers among the clients in this segment decreased substantially. Given the instability and drop of consumer demand small business preferred to reduce the level of debt and repay earlier loans. In 2009 the share of small enterprises did not exceed 11% in the structure of corporate loan portfolio, and was more than 3 times less than the share of medium and 4.5 times less than that of large companies served by Sberbank of Russia, which is insufficient and does not fully corresponds to the public purposes of the development of the country's small businesses. (Burakov, 2013)

Sberbank provides loans to business owners with annual revenues of up to 4.5 million rubles, individual entrepreneurs and small enterprises with annual revenues of up to 25 million rubles. The Bank does not require collateral, verification of credit purposes and does not charge commissions on the loan. Officially, the declared time to consider a loan is up to 3 business days. The minimum loan amount for business owners with annual revenues of up to 4.5 million rubles is 30 thousand rubles. For individual entrepreneurs and small enterprises with annual revenues of up to 25 million rubles it is 80 thousand rubles. Maximum loan amount cannot exceed 1 million rubles. Lending period is - from 6 to 24 months. The loan rate of 19 % is among the lowest for small enterprises in Russia.

For a positive decision on granting a loan guarantee of an individual or a legal entity is required, depending on the type of ownership of business: individual entrepreneurs must provide the guarantee of an individual, to a limited liability company - a guarantee of a limited liability company owned by the borrower. (Hull, 2012; Joseph, 2013)

Another market leader in lending to small and medium-sized businesses is Banca Intesa which offers loans for working capital and investment purposes. The loan amount ranges from 150 thousand to 120 million rubles for a term of up to 7 years. Officially declared term of the loan is from 3 days. Vehicles, real estate, equipment, personal property, surety, goods in circulation are pledged as collateral for loans made. The interest rate on loans is floating. Customer rates can be fixed on loans of up to 60 months to resolve. The Bank charges a one-time fee for a loan in the amount of 1-5% of the loan amount. Commission for early repayment of the loan is 1 % of the amount paid in advance. If the loan amount is more than 1 million 500 thousand rubles and provided that the early repayment is made after 36 months, from the date of the loan, no commission fee is charged. If a security agreement or a contract of insurance is signed in connection with a loan the insurer's rates are charged. Commission for early termination of the pledge at the request of the mortgagor or substitute collateral is from 02 to 2% of the appraised value of the collateral declared by the parties in the pledge agreement, the minimum of $ 100. Repayment of the loan may be made annuity differentiated payments or separate schedule of payments, taking into account the seasonality of client's business may be made.

Terms of loans to small businesses granted by Sberbank of Russia and Bank Intesa, which consider this line of banking activities as a priority, are quite comfortable and compare favorably to the terms of lending to small businesses and other credit organizations. For example, the bank VTB-24 provides loans to individual entrepreneurs and small business owners in the amount of 100 thousand to 2 million rubles. Credit period ranges from 6 months to 5 years. For granting a credit VTB-24 recommends the program of life insurance and disability, which guarantees the repayment of debts owed to the bank in case of illness, injury, or death of the borrower. The official time of the credit application and a decision on the loan is 5 days. The bank charges a fee for loans amounting to 2% of the amount, but not less than three thousand rubles. Price of credit on the average is 24-27% per annum. Price of credit for small enterprises ranges from 17 to 27% per annum. And the level of return on assets which is the boundary of the loan amount for small enterprises does not exceed 1% on the average. This means that loans will be absolutely inaccessible to the vast majority of small businesses without financial infrastructure.

In 2009 the Foundation for Assistance to Small Business Lending in Moscow gave bail on the 1183 loan agreements totaling $ 4 billion rubles. This allowed to draw loans for small businesses worth about 8 billion rubles.

Foundation for Assistance to Small Business Lending of St. Petersburg provides surety to companies registered and operating on the territory of the city subject to a credit agreement for a period exceeding 3 months. The bank requires providing security for a loan of not less than 30% of the commitments to innovative enterprises, scientific, technical, and industrial and service enterprises, microfinance institutions and other infrastructure organizations, and 50% for other small businesses. The volume of guarantees also depends on the activities of small businesses and lending purposes. Innovative, scientific, technical, manufacturing plants, service industries can expect up to 50 % of liabilities. Traders will be guaranteed up to 40% of its liabilities, and only when obtaining a loan for working capital.

Banks that are most actively participating in the program of support lending to small enterprises of St. Petersburg are North-Western, Bank of Sberbank of Russia, Baltinvestbank, VTB 24, Promsvyazbank, Bank Saint-Petersburg. They provide loans to small businesses for a term of up to 5, and in some cases up to 7 and 10 years. The interest rate on them as a result of diversification of risk is substantially lower than the national average, ranging from 9.5 to 17.5% per annum. The maximum loan amount is from 60 to 100 million rubles.

The lending fund guarantee allows small enterprises to get a bank loan in case of insufficiently liquid collateral. Some state programs to support lending to small and medium-sized businesses are realized with the participation of the Russian Bank for Development, which provides refinancing loans granted to regional banks, small and medium enterprises. In 2010 the Russian Development Bank provided loans for interbank lending to small and medium enterprises worth about 50 billion rubles under the program to support lending to small and medium-sized businesses. Further on, it is supposed to increase support for small and medium-sized businesses up to 100 billion rubles. Firstly, loans from the Russian Development Bank will allow regional banks to lend to small and medium-sized enterprises for longer periods. The average credit period of the program is 64 months. Secondly, the relatively low rate of refinancing of the Russian Bank for Development (10% per annum) allows

regional banks to provide loans to small and medium-sized enterprises at lower percent than the national average.

Vnesheconombank and German banking group Kreditanstalt fur Wiederaufbau (KfW Vankengruppe) became participants in another state program to support small businesses. Under this program KfW provides long-term loans to Russian banks for lending to small and medium enterprises, and VEB stands guarantor for these loans. The estimated volume of lending under the program amounts to 200 million Euros. Banks lend in Euros.

Meanwhile in lending process of small entities banks face a number of problems. E.g., low profitability as we can see according to Figure 1.
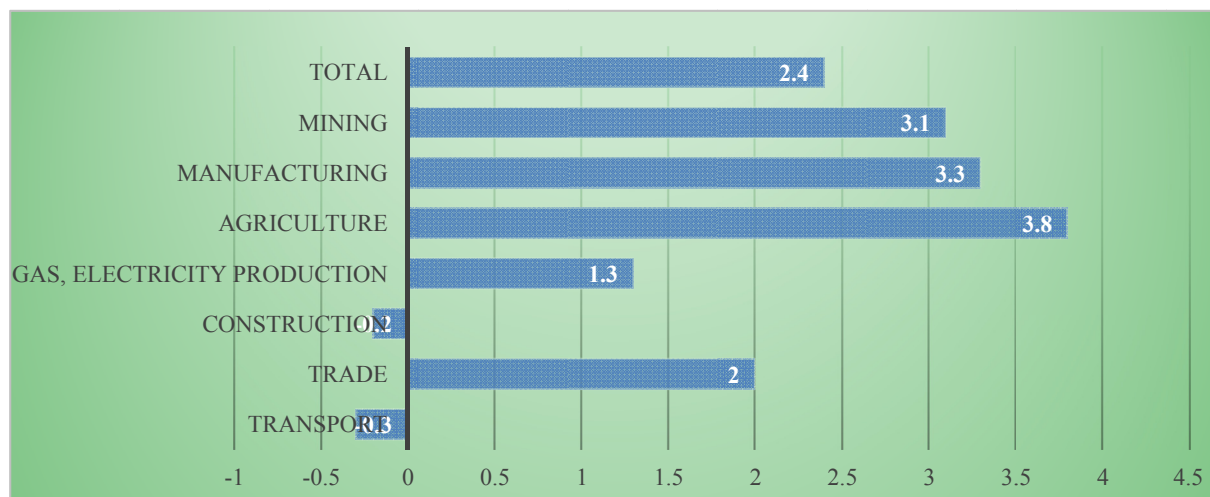

Figure 1. Profitability of SME in 2014, by sector, Russia, in %
Source: author's calculations on data by AK&MAKMRATING.RU

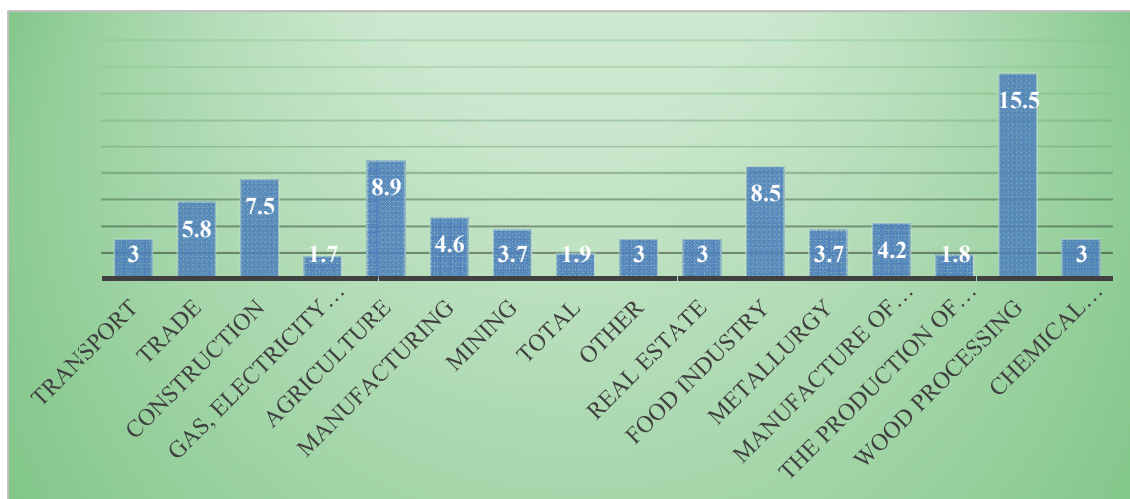High NPL ratio is also a serious problem for effective lending relations. (Figure 2)

Figure 2. Share of non-performing loans by sector of economy on 01.10.2014, Russia, in %
Source: author's calculations on data by AK&MAKMRATING.RU

2. Performance Indicators to Support Small Business

The system of indicators, which tracks the impact of regional policies (investment, innovation, structural, stimulating co-operation of large and small businesses) on small businesses development.

The comprehensive analysis of small business development, based on standard indicators allows the evaluation of the condition and level of development of small business in the region. To provide an objective assessment of small business as a subsystem of the regional economy, it must be supplemented by specific indicators reflecting the efficiency of investment, credit, structural and innovation policies, as well as policies to encourage the

cooperation of large and small businesses, methodology of assessing the contribution of small business to the economic growth of the region. (The Moscow City Government Decree N724-PP, 2009)

Indicators of effectiveness of policies to encourage cooperation of large and small businesses are presented in Table 3.

Table 3. Effectiveness' indicators of cooperation between small and large businesses

Policies to stimulate cooperation between large and small businesses	Indicators of effectiveness of policies to encourage cooperation of large and small businesses
1 Inventory of unused industrial areas, facilities. 2 Development and adoption of regulatory instruments that will identify productive facilities working under capacity and transfer them to reserve with corresponding exemption from property tax. 3 Development of methodology for competitive distribution of facilities with provision of certain forms of support (additional credits, loan guarantees for working capital, leasing possibilities, personnel training, consulting). 4 Restructuring of bankrupt enterprises with release of independent small businesses. 5. Separation of auxiliary facilities in structure of large company. 6 Creation of bank franchise departments involved in promoting idea of franchising among its customers. 7 Information support of co-operation of small and large businesses through institutions for IE, business associations support. 8 Stimulation of exhibition and fair activity of economic entities ("fair contracting") to identify potential partners. 9 Working out of project for development of high-tech venture (risk business) in region, taking into account capabilities, commitment and experience of foreign countries. 10 Search for potential investors, negotiations, negotiation of contracts with stable management- advisory support by lawyers.	1 Number of large business companies working. 2 In cooperation with small one. 3 Share of small businesses that have cooperative relations with big business in total number of enterprises of small business. 4 Rate of development of franchising or other forms of cooperation ties of cooperation of enterprises of large and small businesses. 5 Index of cooperation rate of enterprises of large and small businesses.

The indicators for assessment of the impact of investment policy on the effective development of small business are presented in Table 4.

Table 4. Indicators of effectiveness of investment policy in small business in region

Conditions for efficient small business development in region (investment policy)	Indicators reflecting investment policy	Investment policy in small business	Performance Indicators of investment policy in region of small business
1 Customs, tax, legal protection of competitive domestic enterprises; 2 Government regulation (including "freezing") prices for products of natural monopolies; 3 Creation of legislative and legal framework of guarantees to private investors, both domestic and foreign; 4 Formation of legal system to attract foreign exchange resources of population; 5 Formation of modern legal and information infrastructure of securities market.	1 Investment in fixed assets: - volume; - growth rate; - average in Russia in percents. 2 Investment in fixed assets with foreign: - volume; - growth rate - average in Russia in percents. 3 Budgetary investment (federal and federated entities): - volume; - growth rate; - average in Russia in percents. 4 Number of companies in nation's largest stock exchanges 5 Daily turnover of market shares.	1 Investment on basis of state protectionism promising areas of science and technology; 2 Provide financial guarantees to foreign investors; 3 Direct financial support to small enterprise through special funds and system of government programs; 4 Formation of guarantee, venture capital, leasing and other funds; 5 Creation of system of guarantees at level of FEFD.	1 Share of investments made in small business; 2 Share of investment in fixed assets of small business; 3 Index of investment increasing rate in small business; 4 Investment in small business per worker; 5 Index of changes in accessibility to credit resources of small enterprises; 6 Index of changes in balance of volume and number of loans granted to small business; 7 Index of changes in proportion of profitable small enterprises in total number of small enterprises.

Indicators of effectiveness of structural policy in small business area are given in Table 5.

Table 5. Indicators of effectiveness of structural policy in the region of small business in the region

Conditions for effective development of small business in region (structural policy)	Indicators reflecting e structural policy	Structural policy in small business	Performance indicators of structural policies in the region of small business
1 Enforcement of Agreement between Russia and the region one separation of powers on reform to pursue structural policies in military-industrial complex of region; 2 Development of lobbying mechanisms for placement state orders for defense-oriented enterprises in the region; 3 Creation of "Regional microzones joint venture (regional micro SEZs)", at some enterprises of defense industry as one of the most effective means of attracting foreign capital.	1 Industrial output 2 Share of manufacturing industries; 3 Output of manufacturing industries; 4 Output of manufacturing industries per head of population; 5 The same in percents of the figure for the Russian Federation.	1 Exploitation of the competitive advantages of e territory by breaking up existing businesses, creating new areas of industrial activity, in which small businesses are engaged; 2 Encouragement of industries engaged production, processing of agricultural products, the production of foodstuffs and manufactured goods; 3 Establishment of ongoing monitoring of structural policy priorities in small business; 4 Conduction of large-scale redistribution of manpower, material and financial resources.	1 The coefficient of structural change; 2 The share of priority sector output in total output of small businesses; 3 The growth rate of output of priority sector in small business; 4 Index of the rate of changes in structural policy.

Thus, the indicators for evaluating the efficiency of investment, innovation, structural policies, and policies to encourage the cooperation of large and small businesses can be used in the technique for a comprehensive assessment of the effectiveness of small business development, as a subsystem of the regional economy.

3. The Method of Calculation of Integral Indicators and Assessment of the Impact of Small Businesses in the Region's Economy

The next step towards improving the adequacy and completeness of the performance evaluation of efforts of regional authorities for the effective development of small business is the construction of the integral index, reflecting its status, efficient operation. (Bernanke & Gertler, 1989; Bernanke et al., 1996; Van Deventer et al., 2013).

Table 6. Integral indicators of effective small business development at regional level

Functions	Integral indicators
Economic function	Integral index of business activity $$I_1 = \sqrt[5]{I_{11} * I_{12} * 1/I_{13} * I_{14} * I_{15}} \quad I_1 = \sqrt[5]{I_{11} * I_{12} * 1/I_{13} * I_{14} * I_{15}}$$ The integral index of budgetary efficiency $$I_2 = \sqrt[4]{I_{21} * I_{22} * I_{23} * I_{24}} \quad I_2 = \sqrt[4]{I_{21} * I_{22} * I_{23} * I_{24}}$$
Political function	Integral index of investment policy $$I_3 = \sqrt[5]{I_{31} * I_{32} * I_{33} * I_{53} * I_{53}} \quad I_3 = \sqrt[5]{I_{31} * I_{32} * I_{33} * I_{53} * I_{53}}$$ The integral index of innovation policy $$I_4 = \sqrt[3]{I_{41} * I_{42} * I_{43}} \quad I_4 = \sqrt[3]{I_{41} * I_{42} * I_{43}}$$ Individual index of structural alternation $$I_5 = I_{51} \quad I_5 = I_{51}$$ The integral index of cooperation of large and small businesses $$I_6 = \sqrt[3]{I_{61} * I_{62} * I_{63}} \quad I_6 = \sqrt[3]{I_{61} * I_{62} * I_{63}}$$
Social function	Integral index of social efficiency $$I_7 = \sqrt[3]{I_{71} * I_{72} * I_{73}} \quad I_7 = \sqrt[3]{I_{71} * I_{72} * I_{73}}$$

A comprehensive assessment tool of the effectiveness of the development of small business in the region is based on the multiplicative integral indices that reflect the economic, social and political functions (Table 6).

In accordance with the methodical approach adopted in the present work, integral indices reflecting the efficient development of small business are calculated as the geometric mean of the indices of changes in individual indicators of its condition. (Baesens & van Gestel, 2009)

Next an integral consolidated index of small business development is formed on a similar principle:

$$I_{SB} = \sqrt[7]{I_1 * I_2 * I_3 * I_4 * I_5 * I_6 * I_7} \; , \tag{1}$$

where I_1 - integral index of business activity;

$\quad I_2$ - integral index of fiscal efficiency;

$\quad I_3$ - integral index of investment policy;

$\quad I_4$ - integral index of innovation policy;

$\quad I_5$ - individual index of structural change;

$\quad I_6$ - integral index of cooperation of large and small businesses;

$\quad I_7$ - integral index of social efficiency.

In our view, the use of the geometric mean for calculation of integral indicators has several advantages:

- advantage of the geometric mean is the ability to use it in cases where it is difficult to give preference to weights, which in the integral index should include specific indicators of small business development;

- method allows to reduce to a common denominator figures that are measured in different units;

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- method takes into account the dynamics of individual indicators.

This method involves the calculation of the following integral indices:

1. The integral index of business activity

$$I_1 = \sqrt[5]{I_{11} * I_{12} * 1 / I_{13} * I_{14} * I_{15}} \; , \tag{2}$$

where I_{11} - index of change in the number of small enterprises per 100 thousand population;

$\quad I_{12}$ - Index of change in turnover volume of small enterprises per one employed in small business;

$\quad I_{13}$ - index of change of elimination factor of small enterprises;

$\quad I_{14}$ - index of change of creation factor of small enterprises;

$\quad I_{15}$ - index of change in the balance of creation and liquidation of small enterprises.

2. The integral index of budgetary efficiency

$$I_2 = \sqrt[4]{I_{21} * I_{22} * I_{23} * I_{24}} \; , \tag{3}$$

where I_{21} - index of change of consolidated budget expenditures of Russia for realization of government support for small enterprises;

$\quad I_{22}$ − index of percentage change in the share of small enterprises, that received support through the activities at the regional level;

$\quad I_{23}$ - index of change in income tax for single simplified taxation;

$\quad I_{24}$ - index of change in income for single tax on imputed income;

3. The integral index of investment policy

$$I_3 = \sqrt[5]{I_{31} * I_{32} * I_{33} * I_{34} * I_{35}} \; , \tag{4}$$

where I_{31} - index of change in investment in fixed assets of small enterprises;

I_{32} - index of change in the share of investment in R & D of small enterprises in the total investment;

I_{33} - index of change in availability of credit resources to small enterprises;

I_{34} − index of the rate of increase of investment in small enterprises;

I_{35} - index of change in the proportion of profitable small enterprises in the total number of small enterprises,

4. The integral index of innovation policy

$$I_4 = \sqrt[3]{I_{41} * I_{42} * I_{43}} \,,$$

(5)

where I_{41} - index of change in cost-effectiveness ratio of business incubators;

I_{42} - index of change in cost-effectiveness ratio of the infrastructure to support science and technology;

I_{43} - index of change in cost-effectiveness ratio of venture funds;

5. Individual index of structural alternation

$$I_5 = I_{51} \,,$$

(6)

where I_{51} - index of the factor of structural alternations.

6. The integral index of cooperation of large and small businesses

$$I_6 = \sqrt[3]{I_{61} * I_{62} * I_{63}} \,,$$

(7)

where I_{61} – index of change in the share of small enterprises working on the franchising agreement in the total number of small enterprises;

I_{62} - index of change in the share of small enterprises working on sub-contract in the total number of small enterprises

I_{63} – index of change in the share of small enterprises working on lease agreement with a major company in the total number of small enterprises.

7. The integral index of social efficiency

$$I_7 = \sqrt[3]{I_{71} * I_{72} * I_{73}} \,,$$

(8)

where I_{71} –index of change in the share of small enterprises employees in the total number of employees;

I_{72} – index of changes in the average number of employees at one small enterprise;

I_{73} – index of change in the social appeal of small enterprises;

Our research also shows low profitability ratio of SME. According to data provided in Figure 3, growth rates of interest on loan surpass those of profitability.
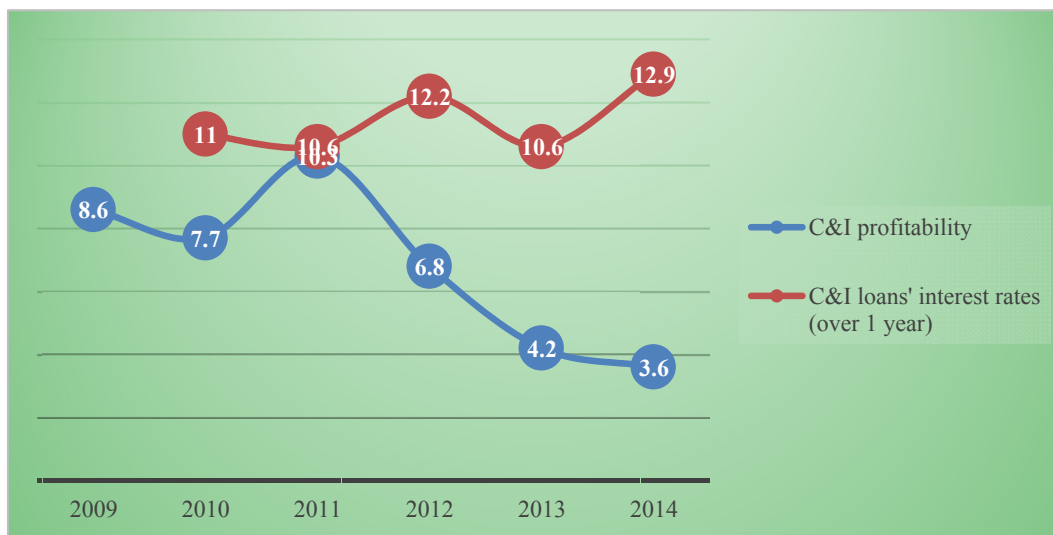

Figure 3. Profitability and SME loans' interest growth rates, Russia, in %
Source: author's calculations on data by AK&MAKMRATING.RU

That's why it's necessary to calculate integral ratios of SME's effectiveness, developed in this study.

The characteristic feature of the performance evaluation of the effectiveness of small business in the region is the focus on the accumulation of effects that enable to combine social and economic interests of the population of the territory with business activity. Dynamics of parameters allows evaluating the systemic changes in the

effectiveness of small business development in the region, both from the perspective of business entities, and from a position of regional support for small business by authorities. (Bouteille & Coogan-Pushner, 2013; Lemieux, 2014).

Large amounts of initial information on the influence of external and internal environment factors of small enterprises are used in a comprehensive assessment of effectiveness of small business development in the implementation of the proposed methodology.

A set of trend and factor models such as regression was used as a tool for assessing the contribution of small businesses into the regional economy.

For effective regulation of the development of small business in the interests of the regional economy as a whole, the administration of the region should monitor the development of small business and its contribution to the regional economy, obtaining information to make decisions on the regulation of small business development at the regional level.

4. Conclusions

Formation of the system of state insurance and other forms of small business support is a significant factor in the economic development of the country. Its role may be particularly noticeable for small business development for the country in the period of recovery from the economic crisis, with the modernization of small businesses, investment in fixed assets, reduce unemployment and create a special competitive environment. Under these conditions, becomes extremely important assessment of the effectiveness of measures to support small businesses, identification and tracking of performance indicators to support, such as indicators for assessing the effectiveness of policies to stimulate the cooperation of large and small businesses, the indicators for assessing the efficiency of investment policy in the regional small business indicators for assessing the effectiveness of structural policy in the sphere of small business in the region. Indicators for assessing the efficiency of investment, innovation, structural policies, and policies for stimulating the cooperation of large and small businesses allow you to use them in the methodology of integrated assessment for effective small business development, as a subsystem of the regional economy. A complex method of evaluating the effective development of small businesses in the region is based on multiplicative integral indices, which reflect the economic, social and political functions. The method of calculation of the integrated performance and assess the impact of small businesses on the economy of the region can testify to improve the adequacy and completeness of the performance evaluation of the efforts of regional authorities for the effective development of small business.

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