

Artículo de investigación

Regional specifics of innovative development of socio-economic systems in the Russian Federation

Características regionales específicas del desarrollo innovador de sistemas socioeconómicos en la Federación Rusa

Especificidades regionais do desenvolvimento inovador de sistemas socioeconômicos na Federação Russa

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Abstract

The Russian economy has a tendency to slow down and reduce real investment, which hinders the possibility of innovative development. This is largely a consequence of the situation in the credit sector, especially in terms of the practical inaccessibility of Bank lending to small and medium-sized businesses. The objectives of the work are to justify an effective mechanism for increasing the availability of credit resources for small and medium-sized businesses, directly focused on innovation. Overcoming the contradiction between the banks aspiration to commercial profit and ignoring the objective needs of national expanded reproduction, and expanding the availability of Bank lending for the participants of the innovation process at the present stage of Russian development are associated with the effective interaction of the SME Corporation and the banking system in the process of production cooperation. The results of the study can be used to develop new organizational, economic and management mechanisms and tools for financing innovation.

Resumen

La economía rusa tiene una tendencia a desacelerar y reducir la inversión real, lo que dificulta la posibilidad de un desarrollo innovador. Esto es en gran parte consecuencia de la situación en el sector crediticio, especialmente en términos de la inaccesibilidad práctica de los préstamos del Banco a las pequeñas y medianas empresas. Los objetivos del trabajo son justificar un mecanismo eficaz para aumentar la disponibilidad de recursos crediticios para las pequeñas y medianas empresas, centradas directamente en la innovación. Superar la contradicción entre la aspiración de los bancos al beneficio comercial e ignorar las necesidades objetivas de la reproducción ampliada nacional, y ampliar la disponibilidad de préstamos del Banco para los participantes del proceso de innovación en la etapa actual del desarrollo ruso están asociados con la interacción efectiva de la Corporación de PYME y el sistema bancario en el proceso de cooperación productiva. Los resultados del estudio pueden utilizarse para desarrollar nuevos

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Keywords: Banking, innovation financing, small and medium-sized enterprises, vertical cooperation.

mecanismos y herramientas de organización, económicos y de gestión para financiar la innovación.

Palabras claves: Banca, financiamiento a la innovación, pequeñas y medianas empresas, cooperación vertical.

Resumo

A economia russa tem a tendência de desacelerar e reduzir o investimento real, o que dificulta a possibilidade de desenvolvimento inovador. Isto é em grande parte uma consequência da situação no sector de crédito, especialmente em termos da inacessibilidade prática dos empréstimos do Banco às pequenas e médias empresas. Os objetivos do trabalho são justificar um mecanismo efetivo para aumentar a disponibilidade de recursos de crédito para pequenas e médias empresas, com foco direto na inovação. Superar a contradição entre o desejo dos bancos para benefício comercial e ignorar as necessidades objectivas da reprodução nacional expandida, e expandir a disponibilidade de empréstimos bancários para os participantes no processo de inovação no atual estágio de desenvolvimento da Rússia estão associados com a interação da SME Corporation e do sistema bancário no processo de cooperação produtiva. Os resultados do estudo podem ser usados para desenvolver novos mecanismos e ferramentas organizacionais, econômicas e de gestão para financiar a inovação.

Palavras-chave: Bancos, financiamento para inovação, pequenas e médias empresas, cooperação vertical.

Introduction

In recent years, the Russian economy has demonstrated the downward trend in investment, which results not only in a reduced expanded reproduction in the national economy, but also in serious problems in innovative development. This is largely due to the practical inaccessibility of commercial loans to small and medium-sized businesses, which, in turn, is one of the key factors limiting the investment activity in the real sector of Russian economy and directly impeding the development of innovative businesses. For example, bank lending to fixed

investment does not exceed 7-9 percent. In comparison: in developed economies, the share of bank lending in the structure of sources of financing investment in fixed assets is 40% in the USA, 45% in the EU countries, and 65% in Japan (Aganbegyan and Ershov, 2013).

At the same time, the innovative characteristics of Russian reproduction are steadily worsening. First of all, this refers to the structure of investment, where the share of capital construction is growing, as it was in relatively distant 1980s (Figure 1).

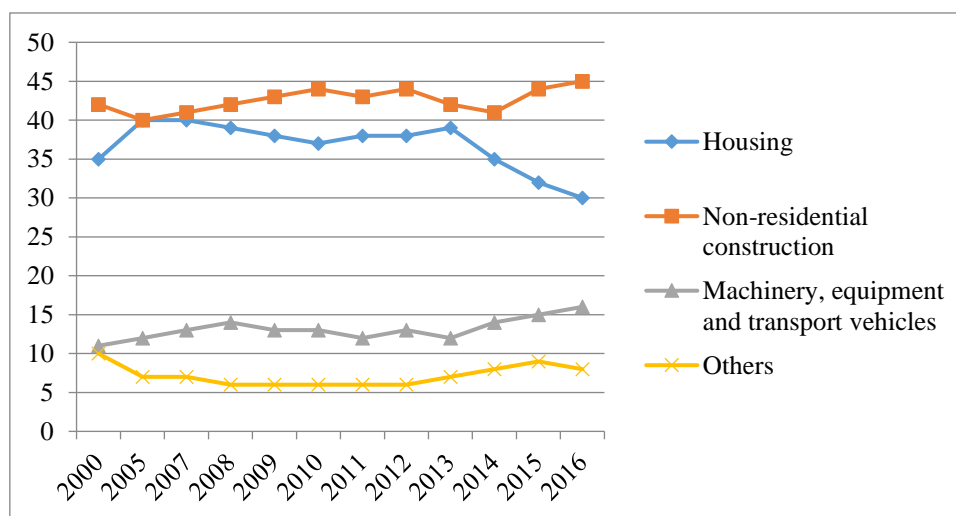


Figure 1. Main elements of the structure of fixed investment in the Russian Federation, in then-current prices, in percent (according to the Federal State Statistics Service. - http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/enterprise/investment/nonfinancial/#)

The importance of these issues has significantly increased in the context of strategic tasks set in the President's Address to the Federal Assembly of 01.03.2018 and the Decree "On the Objectives and Strategic Priorities in the development of the Russian Federation for the period until 2024" dated 07.09.2018, directly oriented to a breakthrough in the national economy.

The need to overcome the technological handicap of Russian economy had to be underlined in particular. This calls for an active renewal of the employment structure and a simultaneous creation of a modern economic and public infrastructure. Therefore, the main source of structural changes should be a serious increase in investment, the share of which should exceed a quarter of the gross domestic product (GDP) in the near future.

Methods

By means of the analysis the main reasons for the unavailability of Bank loans for the real sector of the economy are identified. It is shown how the activity of implementation of Russian programs providing financial support for the activities of small and medium-sized businesses has started to decrease in recent years. On the basis of the system approach, the growing contradiction of banking activity in modern conditions, associated with the minimization of banks' participation in the real economy with the overall financialization of modern economic development, is noted.

Results

One of the major sources of growth for the national economy must become the active development of small businesses. In this regard, it is planned to bring the contribution of small businesses to GDP to forty percent, with the number of employed increased to 25 million people. The related instrument is clearly indicated: improving financial access by reducing the interest rate of bank loans.

Accordingly, we have every reason to assert that in practice the Russian banks have simply withdrawn from the most important task - the investment in the economic growth of the country (Stark, 2011; Bedelbayeva, 2016).

The main factor limiting the investment activity of enterprises in the Russian economy is the deficit of borrowed funds. This mostly relates to the activities of small and medium-sized businesses (SMEs). For 2/3 of representatives of this segment, bank loans are inaccessible funding source not only for capital maintenance, but also for working capital financing. In early 2017, only every tenth representative of SMEs intended to get a bank loan, and no more than one out of 30 considered to get it in the next six months. The main reasons for the inaccessibility of bank loans for the real sector of the economy (including industrial production in general (Galazova, 2013)) were their high real cost and poor banks' interest to provide loans to businesses. In this situation the private businesses chose conservative business strategies, characterized by almost complete refusal to invest in the expansion and modernization of production, especially in terms of investing in innovative solutions.

In many countries with a high level of economic development, the state ensures the implementation of integrated measures aimed at supporting investment and innovation activities of small and medium-sized businesses. For example, the United States government has a number of institutional systems created for this purpose: state regulation of SMEs activities; state and government orders for SMEs; state guarantees for SME loans; private investment for SME development projects; soft loan programs for SMEs. The main tasks of these measures are the following: increasing the availability of borrowed funds for small and medium-sized businesses; stimulating their activities by placing government orders; financial, material and other assistance (including advisory services) to small and medium-sized enterprises.

The government of Japan has also undertaken a combined group of actions to support the development of small and medium-sized businesses. In particular, the SME enjoy a number of prerogative, the antimonopoly regulation of prices and various programs for financial, material and advisory support to SME have been implemented. In order to increase the availability of credit resources, the Small and Medium Business Insurance Corporation have

been established, and credit guarantee associations have been formed. The key institutions aimed at SME support are the following: Japan Finance Corporation for small business, which provides long-term loans to Micro and Small Businesses; The National Finance Corporation of Japan, the largest creditor of SMEs; Soko-Chukin Bank, focused on financing small and medium-sized enterprises. Many OECD countries including Finland, Great Britain, Canada, Republic of Korea have developed their mechanisms and instruments of financial support for the development of small and medium-sized businesses (Zabolotskaya, 2015). The OECD experts have analyzed the state financial support measures for innovative small-to-medium-sized enterprises, which allowed to identify the most effective forms of such support [6]: grants, subsidies and an innovative program for SME (Germany), R & D fund (Israel), innovative research program in small business and public procurement of innovative products and services (USA), guarantees and risk allocation mechanisms, small business financing program (Canada), mezzanine financing and guarantees for mezzanine investment (Austria), PROGRESS program (Czech Republic), business angels investments and the Serafim fund (UK), innovative vouchers and innovative voucher programs in Austria, Chile, the Netherlands, China, Denmark, etc.

In Russia, certain measures have also been undertaken in order to provide financing for small and medium-sized businesses. In particular, the restrictions on non-residents SME capital ownership have been reduced; programs promoting the public procurement of goods and services from small and medium-sized enterprises have been implemented; assistance has been provided to facilitate the access of small and medium-sized businesses to foreign markets (a special electronic platform for SMEs focused on foreign consumers). Among others, a special attention was paid to provide financial support to entrepreneurial initiatives and the inflow of investments into the small and medium-sized business sector, with investments not only private (domestic and foreign) but also state investments.

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investments into the small and medium-sized business sector, with not only private (domestic and foreign), but also public investment.

Nevertheless, the effectiveness of state financial support programs has started to decline in recent years. This has been due to an increase in the state budget deficit and cutting budget expenditure. Thus, in general, 17 billion rubles were allocated from the state budget to support the SME sector in 2015. In 2016, the amount of planned expenditure in this area was 20 billion rubles, but the SMEs received only about a half of this amount - 12 billion rubles. In 2017, the SMEs experienced an even greater decrease of state support - to 7.5 billion rubles.

Only the activities of a specially established institution - "Federal Corporation for the Development of Small and Medium-sized Entrepreneurship" (also known as SME Corporation) - allowed to improve the situation. The key tasks of the SME Corporation are to provide information, marketing, financial and legal support to the activities of small and medium-sized businesses. The main functions of SME Corporation are the following:

- development of infrastructure supporting the SME activities;
- mobilization of financial resources of residents and non-residents to fund activities of SME;
- bringing small businesses to Government procurement system;
- organizing an information exchange between SME, executive authorities and local governments;
- preparing proposals on improvement of SME support measures.

To achieve the main objectives, the SME Corporation ensures the issue of guarantees and warranties, financing from credit institutions, development of leasing operations and refinancing facilities for SME debt obligations. The SME Corporation performs as a guarantor within the framework of agreements concluded with banks, increasing the availability of bank loans to SME in conditions of collateral shortage. The general characteristics of the Corporation's activities are presented in Exhibit 1.

Table 1 – Types of guarantees and warranties provided by the SME Corporation in 2016 and their volume *

Type of guarantee	Number	Volume, thousand rubles
Program 6,5	1554	50492045
Direct guarantees for investors	905	3587711
Direct guarantee for securing loans to the non-trade businesses for working capital replenishment	434	2715852
Co-guarantees	96	2697293
Direct guarantee for disbursed loans	2	516000
Contract performance bond	24	350887
Direct guarantee for real estate developers	1	250000
Syndicated guarantee	1	216000
Direct guarantee securing the loans given for contract performance	20	106165
Direct guarantee for restructured / refinanced loans	3	69450
Direct guarantee for securing loans given to enterprises registered in the Republic of Crimea and / or in the city of federal significance Sevastopol	1	2345
Total:	3041	61003749

* the table was compiled based on data: Annual report of the joint-stock company "Federal corporation for the development of small and medium-sized businesses" based on the results for 2016. – M.: JSC «Corporation MSP», 2017. – P.33.

Table 2 provides information on the temporary structure of guarantees and warranties provided by the SME Corporation in 2016.

Table 2 - Number and volume of guarantees and warranties provided by the SME Corporation in 2016: maturity structure*

Guarantee/warranty period	Number of guarantees	Guarantee volume, mln. rubles.
Up to 1 year	552	12692
from 1 to 3 years	1093	20960
from 3 to 5 лет	1272	23276
More than 5 years	124	4075
Total:	3041	61004

* the table was compiled based on data: Annual report of the joint-stock company "Federal corporation for the development of small and medium-sized businesses" based on the results for 2016. – M.: JSC «Corporation MSP», 2017. – P.34.

In general, the SME Corporation provided guarantees to 26 partner banks in 2016 (Table 3).

Table 3 – Number and volume of guarantees and warranties provided by the SME Corporation in 2016 to partner banks *

Partner financial institution	Number of guarantees	Volume of guarantees, thousand rubles
VTB bank	821	30093712
PAO Sberbank	1665	18488950
JSC «Rosselkhozbank»	200	5985091
PAO «Promsvyazbank»	113	2555687
VTB 24 (PAO)	52	1077133
PAO «AK BARS» Bank	10	536074
PAO Bank «FC Otkritiye»	63	503396
PAO Rosbank	16	293818
JSC «Reiffeisenbank»	22	284089
Bank «Vozrozhdenie» (PAO)	8	272050
PAO «BM-Bank»	13	132 810
PAO «NBD-Bank»	4	111 000
JSC «Alfa-Bank»	4	105000
PAO Bank Zenit	1	100000
PAO TKB Bank	24	95347
PAO RNKB Bank	8	86753
PAO «Bank Uralsib»	4	70850
PAO «Bank «Saint Petersburg»	2	68000
OOO «SIBSOCBANK»	1	50000
JSC «Bank Inteza»	4	39740
JSC «Bank Orenburg»	1	6750
PAO AKB «URAL FD»	1	4000

* the table was compiled based on data: Annual report of the joint-stock company "Federal corporation for the development of small and medium-sized businesses" based on the results for 2016. – M.: JSC «Corporation MSP», 2017. – P.34-35.

The largest share in the structure of the SME Corporation guarantees (Figure 2) fell on the small and medium-sized businesses representing, for the most part, the real sector of economy.

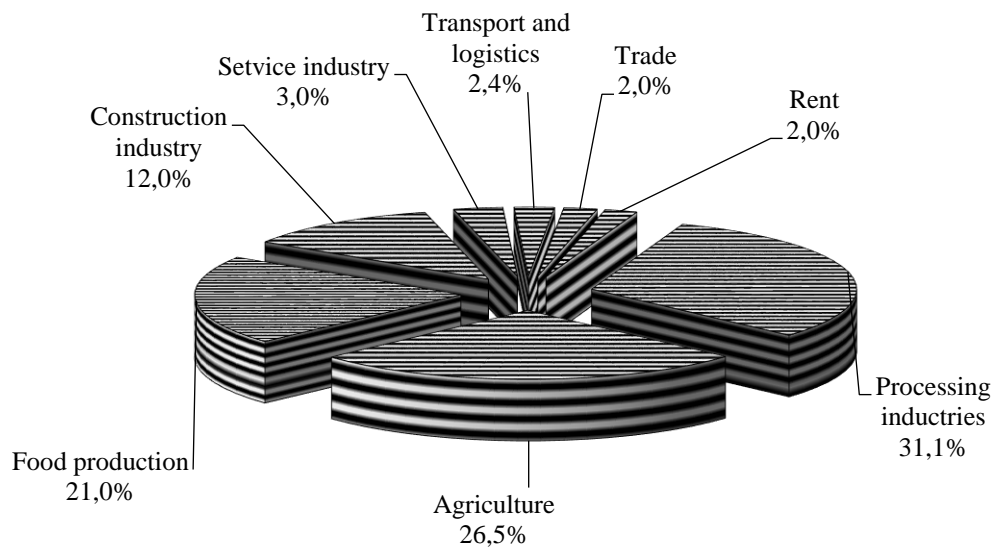


Figure 2. The structure of the SME Corporation guarantees given in 2016 by sectors of national economy (the diagram is made up based on: Annual report of the joint-stock company "Federal corporation for the development of small and medium-sized businesses" based on the results for 2016. – M.: JSC «Corporation MSP», 2017. – P.35)

In general, the volume of aggregate financial support provided by the SME Corporation to small and medium-sized enterprises has reached 172.5 billion rubles in 2016. According to preliminary data, the total financial support should reach 200 billion rubles in 2017. The same amount of financial support is planned for 2018 as well. In 2018, the key areas of the SME Corporation support for small and medium-sized enterprises will be the following: issuing guarantees to SME; funding of lending institutions that provide financial support to SME; direct loans to SME; leasing support of SME; other forms of financial support for SME (including development of factoring operations, development of refinancing debts operations, organization of integrated financing with other development institutions).

Jointly with the Ministry of Economic Development and the Central Bank of the Russian Federation, the SME Corporation has developed the Program for stimulating lending to small and medium-sized businesses - Program 6.5. The purpose of this program is to "create a mechanism for supporting small and medium-sized businesses by providing credit funds on preferential terms for the creation and / or acquisition of fixed assets, launching new projects, and for replenishing working capital." The loan recipients may include small and

medium-sized businesses operating in one or some priority sectors of the economy; leasing companies that provide services to SME; organizations managing the SME supporting infrastructure; microfinance organizations providing micro-credits for SME. The list of priority sectors of the economy includes: agriculture; manufacturing industries; production and distribution of electricity, gas and water; construction; transport and communications; tourist activity; public health protection; waste collection, processing and disposal; warehousing and storage; sectors promoting the development of science, technology and engineering.

Under the terms of this program, the owners of small businesses in priority sectors of the economy are given loans with a fixed interest rate, partially subsidized by the Central Bank. The minimum loan size is 3 million rubles, and the maximum loan is 1 billion rubles (with the maximum credit limit of 4 billion rubles for one borrower). The regulator subsidizes 6.5% of the interest rate, as a result, the fixed interest rate for small businesses is 10.6%, for medium-sized businesses - 9.6%. At the same time, the period of subsidizing the credit rate cannot exceed 3 years, although the loan itself can be issued for a longer period of time. The SME lending program integrated 47 banks.

On the other hand, the core mission of modern banks is financial intermediation. It means that their principal objective is to attract funds from

one customer and lend them to another. This is confirmed by the structure of income-generating sources of Russian banks (Figure 3).

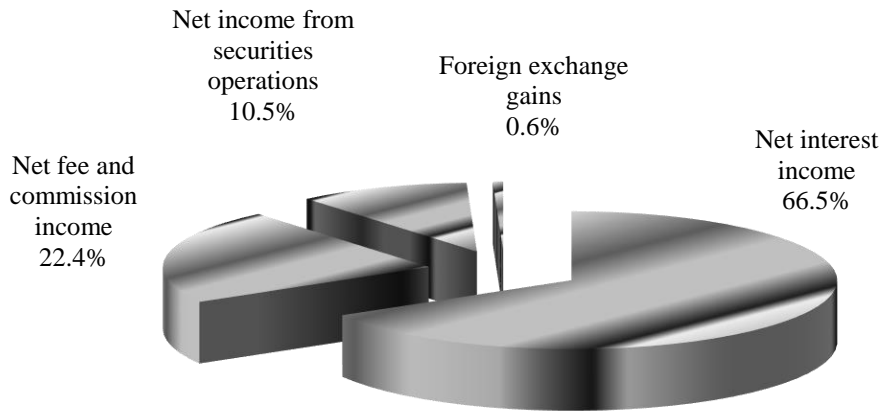


Figure 3. The structure of income of Russian banks in 2016 (the diagram was drawn up by the author based on data of: Report on the development of the banking sector and banking supervision in 2016. - M: Central Bank of the Russian Federation, 2017)

Consequently, in the blind pursuit of profit, the banks ignore the objective need to invest in capital goods, including the innovative ones. Today, banks began withdrawing from the real economy, providing credits only to replenish working capital of enterprises and organizations, and lending mortgage and consumer loans to the population. For many enterprises of the real sector, especially small and medium-sized enterprises, bank loans are practically

inaccessible. Ironically, in this situation banks have significant liquidity.

According to the report of UN experts on trade and development, financial flows growing faster than the real economy is a steady trend nowadays. The best example of this is the dynamics between the investment in non-financial assets and the volume of financial investments of organizations in Russia (Figure 4).

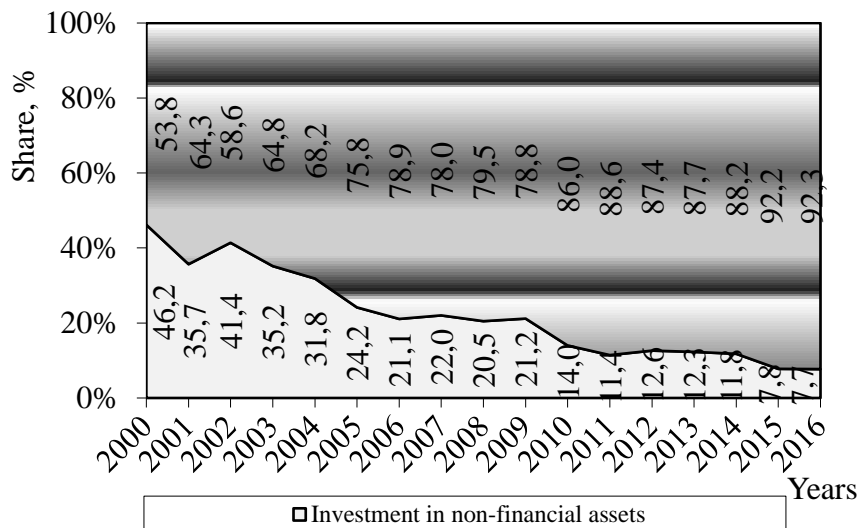


Figure 4. Dynamics between the investment in non-financial assets and the volume of financial investments of organizations in Russia (the diagram was drawn up by the author based on the data of: Investment in non-financial assets. // Federal State Statistics Service.

In general, this is a manifestation of the rapid process of "financialization" of the developed and developing economies (Bulgakova and Denikaeva, 2016; Kiyutsevskaya and Trunin, 2016). This process consists in an outstripping growth in the volume of financial transactions as compared to GDP growth and investment in fixed assets (Misanova, 2017).

Discussion

The primacy of banks' commercial interests over public ones is a serious problem that can be solved through various incentive mechanisms. In our view, the effectiveness of commercial banks and the SME Corporation can be enhanced by preferential financial support for small and medium-sized enterprises involved in vertical cooperation. According to some economists, the vertical cooperation of enterprises (comprising all the cycles - from extraction and processing of minerals to production, its distribution and subsequent disposal of waste) is a distinctive feature of the current stage of economic development (Gubanov, 2014). Modern corporations, holdings and other conglomerates are typical representatives of vertically integrated business structures. Their share in the structure of key macroeconomic indicators (capital accumulation, production of gross value added, investment, exports, research and development, etc.) account for up to 80%, and in particular sectors (electronic equipment, engine building, etc.) - up to 100%.

The vertical cooperation integrates science and industries with the aim of manufacturing high-tech products: computational electronics, new equipment, tools and machinery, modern chemicals and medicaments, synthetic and nano-materials, etc. Vertical cooperation is realized by clustering enterprises operating in different branches of the economy to provide a full production cycle, with the participation of scientific organizations carrying out research and development work and implementing their results into the production cycle. The participants of vertical cooperation have a sustainable customer-supplier relationship, which does not have a static structure, so that new participants are constantly incorporated and some old ones are excluded - in accordance with the current needs and opportunities.

Conclusions

Taking into account the above provisions, it appears that against limited financial resources, the SME Corporation should set the goal to develop a mechanism to increase the availability of bank loans to SME based on the promotion of vertical cooperation between innovative small and medium-sized enterprises and large companies. This cooperation should not take place within naturally formed or artificially created clusters. A small or medium-sized enterprise may perform a particular non-core (secondary) stage of production cycle on the order of a large company (including outsourcing). The innovative solutions have to be pursued as an indispensable requirement for improving the efficiency of this stage. It seems that the implementation of this proposal will make it possible to increase the availability of bank loans to SME, operating in promising areas of national economy, taking into account regional interests and the possibilities of using the population's funds (Shanin, 2012; Tatuev and Bakhturova, 2014).

The small and medium-sized businesses corresponding to the requirements of innovation-based development will have the opportunity to apply for a loan to any bank authorized by the SME Corporation. However, the SME owners will have to present a number of documents clarifying the proposed business model and the financial framework for ensuring the solution of innovative tasks directly within the framework of vertical cooperation with a large company participating in the project. In case of the approval of the application, the bank will provide the necessary documents for the loan to the Central Bank of the Russian Federation to provide a guarantee to the SME Corporation. If a decision to set up the guarantee is made, the SME Corporation will send a signed guarantee agreement to the Central Bank of the Russian Federation, then a loan will be provided to the designated bank. At last, the final borrower will get the loan at the rate of 6.5% plus bank interest premium of 4% on loans for small businesses or 3% on loans for medium-sized businesses.

The main functional and institutional components of the mechanism described above have already been formed in the Russian economy, which will allow to overcome the banks' pursuit of profits and to increase the

availability of bank loans for the participants of the national innovative process.

Reference

- Aganbegyan, A. G., & Ershov, M. V. (2013). O svyazi denezhno-kreditnoi i promyshlennoi politiki v deyatel'nosti bankovskoi sistemy Rossii [On the Relations between Monetary and Industrial Policy in Russia's Banking System Activity]. *Den'gi i kredit [Money and Credit]*. (6), 3-11.
- Bedelbayeva, A. E. (2016). Financial support for small and medium-sized businesses: the experience of foreign countries. *Actual problems of law, Economics and management*. 12, 12-14.
- Bulgakova, A. V., & Denikaeva, R. N. Financial origin of the world crisis: its consequences and lessons ". *Economics and management: problems, solutions*. 2(4), 39-44.
- Galazova, S. S. (2013). System industry benchmarks investment policy by the example of industry. *Vestnik of North Ossetian state University named Costa Levanovich Khetagurov*. 2, 204-209.
- Gubanov, S. (2014). The main challenge of Russia: the transition from the export-raw material model to the neoindustrial. *Problems of theory and practice of management*. 11, 38-45.
- Kiyutsevskaya, A., & Trunin, P. (2016). Evolution of global regulation: have the lessons of the global financial and economic crisis been learned? *Economic development of Russia*. 23(9), 48-53.
- Misanova, I. N. (2017). On the question of financial aspects in the evolution of economic crisis. *Financial economy*. 2, 47-52.
- Shanin, S. A. (2012). Regional investment policy: modern approaches and directions of improvement. *economic Bulletin of Belgorod*. 3 (67), 16-22.
- Stark, R. F. (2011). Modernization of the Russian economy and small businesses. *journal of Siberian Academy of law. economics and management*. 2 (3), 8-12.
- Tatuev, A. A., Bakhturova, T. V. (2014). Modern role of savings of population: controversy and reality. *Bulletin of Institute of Friendship of peoples "the Theory of Economics and national economy management"*. 3 (31), 179-187.
- Zabolotskaya, V. V. (2015). State financial support of innovative activity of small and medium-sized enterprises abroad. *Finance and credit*. 28 (652), 31-43.