

SMALL BUSINESS IN INNOVATIVE DEVELOPMENT OF RUSSIA

Svetlana Zhura, Northern (Arctic) Federal University

Lidiya Ilyina, Institute of Management

Kristina Polozova, Institute of Management

ABSTRACT

Russia has taken a course of innovative development. Small enterprises play the crucial role in technological changes as they are rich in sources of innovation, which will give an opportunity to use new technologies and business processes, as well as to increase labour productivity and improve the quality of products and services. The article presents a study of small innovative business in Russia, which shows that the level of its development is quite low and significantly inferior to advanced foreign countries. At the same time, the analysis of development prospects after the adoption of the innovative development strategy of Russia has revealed the positive dynamics of the innovation activities of small enterprises, especially in some federal districts, which demonstrates the relevance of its adoption. The article points out that the lack of innovation is caused not only due to the global and national crises in the economy, but also the absence of the Russian small business interest in the development and production of innovative goods. The authors conclude that it is necessary to identify the priority areas of science and technology at the federal level and at the territorial level it should be considered the competitive potentials of socio-economic development of a certain area.

Keywords: innovations, small innovative business, technological innovations, socio-economic development

INTRODUCTION

The number of works dedicated to innovations is constantly growing and now the interest to this issue doesn't become weaker. There is no need to talk about the innovative development of the country, because only the government which applies the scientific achievements in its work is able to achieve high socio-economic development. It is important to point out that Russia has taken a course of improving the socio-economic development level and in March 2010 it was introduced a strategy of innovative development of the Russian Federation for the period up to 2020 «Innovative Russia 2020», drafted on the basis of the concept of long-term development of the Russian Federation for the period up to 2020. The strategy is aimed at transition of the Russian economy to a course of innovative development by 2020. Due to an active innovation policy of the federal center, many regions started to form regional innovation policies aimed at socio-economic development of the territory on the basis of innovative activity growth of enterprises, including small innovative ones.

It is a matter of great concern how small enterprises could influence on the innovative development of Russia at present in relation to the ongoing strategy? This gives rise to research in the field of innovation activities of small enterprises, including different regions of the Russian Federation.

LITERATURE REVIEW

Review of the economic literature dedicated to the innovation issues has shown that there was a different interpretation of innovation and innovative process notions, which in turn complicates the development of innovation management theory. For further research it is necessary to identify these notions. There are two visions of innovations which can be currently found in the economic papers: the broader and the narrower. The first vision identifies innovations as the changes in order to implement and use of new consumer goods, new production and transport facilities, markets, and forms of organization in the industry (Schumpeter, 1934), as changes through the introduction of something new (Collins, 1966). The second vision is expected to take into account a scientific and technical aspect related to the creation and production of new goods, as well as the steps to implement technologically new products or processes (OECD, 1995).

There are two points of view in the literature, in one case an innovation is identified as a process of introduction of amendments, approaches, principles as an alternative to the current ones and in the second one it is represented as a result of the creative process in the form of new products (equipment), technology, method, etc. The representatives of the first view (Allen, 1966, the Harman, 1971) identify the innovation as the introduction of new or improved production processes, as well as the introduction and mass consumption of new products, processes or behaviors. Another group of scholars (Sokolov, Titov, Shabanov, 1997) describes the innovation not as a process of change, but as an outcome of creation and development (implementation) of a fundamentally new or modified approach (innovation) that satisfies specific social needs and giving the number of effects (economic, scientific, technical, social, environmental). Innovation can be identified as an outcome of innovative activity, which was embodied in the form of new or improved product, introduced on the market, a new or improved technological process used in practice. Much attention is paid to the development of high technologies in small companies (HTSFs), which reflects the urgency of research in this area, as well as the ability to use advanced technology for the prosperity of developed and developing economies (Oakey, Groen, Cook, Sijde, 2014).

Some scholars (Isom, Ceteris, Jarczyk, Ceteris, 2009) point out that small companies play the crucial role in technological change, because they have many advantages as sources of innovations. Other scholars (Safronov, Anischenko, 2012) identify small innovative enterprises as small enterprises which fulfill primarily activities aimed at the commercialization of existing knowledge, technologies and equipment. Small companies are successfully engaging in new market shares, have the ability to assess risk. The Intuit Future of Small Business Report (2009) has revealed that in the next decade small enterprises would embrace innovations broader and wider than they did that day. Entrepreneurial spirit will use new technologies and business processes that will increase productivity, improve the quality of products and services, expand the business and save time.

METHODS

In order to study the role of small enterprises in the innovative development of Russia a data analysis has been carried out. The analysis of the number of small enterprises engaged in technological innovations (see Table 1) shows that their number does not exceed an average of 5% in the Russian Federation. There is no big difference among business segments.

The highest rate of innovative enterprises belongs to the manufacturing sector in 2013, which includes the production of electric, electronic and optical equipment – up to 13.5%, chemical industry – up to 13.0% in 2013, coke and oil industry – up to 6.6%, the production of

vehicles and transport equipment - up to 6.7%, the production of rubber and plastic goods – up to 6.4%. In the sphere of mining the ratio of small enterprises engaged in technical innovations is an average of 3%. There is a slightly higher point in fossil fuel extraction in 2009, the maximum was 6.3%. As of 2015 this indicator is also higher, almost 2.6 times, than in the mineral extraction, except fossil fuels. The ratio of innovative enterprises in the sphere of electricity, gas and water production and supply is 2.0% on average annually. Such rates are very small for Russia. For example, now the share of small investment business in the total industrial production of the Western European countries is as follows: Ireland – 75%, Germany – 66%, Finland – 49%, France – 46%, Italy – 40%, the UK – 39% (Golichenko, 2006).

Table 1
THE RATIO OF SMALL ENTERPRISES ENGAGED IN TECHNOLOGICAL INNOVATIONS IN THE RUSSIAN FEDERATION (%)

	2007	2009	2011	2013	2015
Total	4,3	4,1	5,1	4,8	4,5
Mining	3,5	3,1	3,4	3,1	2,8
including:					
Fossil fuel extraction	4,7	6,3	4,2	3,4	4,9
Mineral extraction, except fossil fuels	3,1	1,8	3,0	2,9	1,9
Manufacturing	4,5	4,3	5,4	5,1	4,8
including:					
Food production, including drinks and tobacco	4,5	4,5	4,8	4,4	4,5
Timber processing and wood products manufacture	3,0	2,0	3,4	2,5	3,0
Pulp and paper production; publishing and printing	3,1	4,0	5,4	3,6	3,7
Coke and oil industry	4,5	3,2	6,6	3,3	6,3
Chemical industry	9,9	11,3	13,0	10,7	10,0
Rubber and plastic goods production	6,0	5,0	6,4	4,9	5,7
Metallurgical production и finished metal products production	3,5	2,9	4,3	4,8	5,0
Production of electric, electronic and optical equipment	9,6	10,9	13,5	12,6	11,2
Production of vehicles and transport equipment	3,6	5,1	6,7	5,3	4,6
Electricity, gas and water production and supply	1,6	1,8	3,1	2,2	2,2

We have investigated the technological innovations costs of small enterprises in federal districts of the Russian Federation (Table 2). The table 2 shows that in general the innovations costs of small enterprises have increased by 2013. As of 2015 the Central Federal District occupies the leading position with the proportion of costs 28.52%. There is high cost ratio for the innovative technologies in the Siberian Federal District – 21.78% and in Volga Federal District – 19.68%. North Caucasian Federal District has the lowest ratio in this sphere – 0.13%, besides innovations have decreased in absolute and relative terms compared with 2009 by 8.5 and 15.8 times respectively.

	2009		2011		2013		2015	
	mln. RUB.	%	mln. RUB.	%	mln. RUB.	%	mln. RUB.	%
Russian Federation	6793,5	100	9479,3	100	13510,5	100	12151,8	100
Central Federal District	1967,5	28,96	2734,5	28,85	3489,2	25,83	3466,0	28,52
Northwestern Federal District	668,4	9,84	845,6	8,92	1955,7	14,48	982,4	8,084
Southern Federal District	240,0	3,53	795,1	8,39	1184,8	8,77	957,0	7,88
North Caucasian Federal District	140,4	2,06	110,9	1,17	63,4	0,47	16,4	0,13
Volga Federal District	2104,8	30,98	2545,0	26,85	2967,1	21,96	2391,8	19,68
Ural Federal District	747,6	11,0	853,3	9,0	2126,0	15,74	1295,6	10,66
Siberian Federal District	575,8	8,48	1472,2	15,53	1356,2	10,04	2647,1	21,78
Far Eastern Federal District	349,1	5,14	122,6	1,29	368,2	2,73	283,0	2,33

Analysis of the innovative goods production in the districts reveals the return on investment (Table 3). As of 2015 the first place belongs to the Siberian Federal District, where the rate of innovative products is 4.17%. This district has been characterized by a high rate of innovative production since 2009. This territory is a strategic reserve and a power base of the development of Russia's economy, its innovative character mainly results from the resource orientation, as well as the development of scientific, technical, and educational potential. There are over 100 institutes and research centers in the Siberian Federal District.

	2009	2011	2013	2015
Russian Federation	1,38	1,48	2,07	1,64
Central Federal District	1,76	1,46	1,82	1,71
Northwestern Federal District	1,42	0,88	2,54	0,90
Southern Federal District	1,01	0,96	1,89	2,75
North Caucasian Federal District	0,65	0,74	0,85	0,08
Volga Federal District	1,50	1,78	2,41	1,56
Ural Federal District	0,67	1,74	1,95	0,96
Siberian Federal District	1,73	2,48	2,72	4,17
Far Eastern Federal District	0,14	0,15	0,53	0,20

In 2015 the rate of innovative products in the Southern Federal District is high enough and equal to 2.75%. The industrial structure of the district is distinguished by development of the food industry due to favorable climatic conditions, as well as the light and chemical industries are also well-developed. The Central Federal District has the rate of innovative products 1.71% in the total volume of 2015. There are large centers engaged in training highly qualified specialists in this district, as well as research institutes, cities of science, which promote the development of high-tech industries. Other federal districts also produce innovative products, but

its rate is lower than 1%, which is characterized by imperfection of small innovative business in these regions.

RESULTS

The study of development of small innovation business in the Russian Federation has shown that Russia had made only the first step toward the innovative development. The number of small enterprises engaged in technological innovations is an average of 5%, which is quite low rate. The highest rate of small innovative enterprises belongs to the manufacturing sector in 2013 and in 2015 there was a slight decrease in the level of innovative small enterprises, due to global and national economic and financial problems. Technological innovation costs of small enterprises in federal districts of the Russian Federation have increased by 2013. Central Federal District, Siberian Federal District and Volga Federal District are the leaders by the investment amounts into innovations. The analysis of innovative goods production in the districts has revealed the return on investment. As of 2015 the first place belongs to the Siberian Federal District, moreover the innovative production indicators in this region are high throughout the entire survey period. With regard to the other federal districts there is a high rate of innovative goods produced by small enterprises in the Southern Federal District and Central Federal District. The production rate of innovative goods in these districts is higher essentially due to availability of highly skilled specialists and high-tech developments in various spheres.

DISCUSSION

The study of small innovative business in Russia has revealed that its development level is inadequate and significantly lower than in advanced countries, nevertheless there has been a positive trend of innovative activity of small enterprises since 2009. Inflationary processes in the economy and producers' focusing on current needs have a negative impact on the innovative development of small enterprises. In our opinion, the greatest challenge is a lack of interest of small business in the development and production of innovative goods, which is due to high risk of the innovative activity. In this case the crucial role belongs to the state which should encourage the development and implementation of innovative products at all control levels, in return, these products would facilitate developing the competitiveness of the territories in both domestic and foreign markets. At the federal level the issues of priority directions aimed at the development of science, technology, improving the competitiveness of production of the country should be discussed. Solving cross-cutting issues such as the implementation of major cross-cutting projects based on the creation of innovations that lead to radical changes in the technological base of the country is of prime importance. At the territorial level the innovative development issues should integrate the territorial priorities and the socio-economic development of a particular area on the basis of effective use of existing production, material, raw material and labor potentials.

CONCLUSION

Small business should play an important role in turning Russia into a competitive country which applies the scientific-technical achievements. It is a major factor ensuring the dynamic development of entrepreneurial activity, as well as a prerequisite for the innovative economy functioning. At the same time, the study has showed that small business was currently making an insignificant contribution to the innovative development of Russia. The main reason for this is

the low activity of entrepreneurs in the innovation sector, which is explained by the higher risks of doing business. Therefore, the major challenge of the state is to create a mechanism which will promote the interest of entrepreneurs in the development of innovative products. The mechanism should take into account both the national priorities of scientific and technical research and the features of the development of the territories and their specifics. Thus, further study of this issue is of scientific interest and could be aimed at developing a mechanism for increasing the innovative activity of entrepreneurs.

REFERENCES

- Allen J.A., 1966. *Scientific Innovation and Industrial Prosperity*. London, p. 31.
- Isom C J., Jarczyk D., 2009. *Innovation in Small Businesses: Drivers of Change and Value*. SBA (Office of advocacy).
- Collins National Dictionary, 1966. London and Glasgow, p. 262.
- Golichenko O.G., 2006. *National Innovation System of Russia: Condition and Development Prospects*. Moscow.
- Harman A.J., 1971. *The International Computer Industry. Innovation and Comparative Advantage*. Cambridge (Mass): Harvard University Press, p. 41.
- Intuit Future of Small Business Report, 2009.
- Organisation for Economic Cooperation and Development, 1995. *The Measurement of Scientific and Technological Activities*. European Commission Eurostat, p. 10.
- Oakey R, Groen A, Cook G., Sijde P., 2014. *The Netherlands New Technology-Based Firms in the New Millennium*. Emerald Group Publishing Limited.
- Schumpeter J., 1934. *The Theory of Economic Development* Cambridge. MA, Harvard University Press.
- Safronov M.V., Anischenko Y. *Small Innovative Enterprises: Formation of the Conceptual Framework*. *Topical Issues of Aviation and Cosmonautics. Socio-Economic Sciences and Humanities*. 2012, no. 8, vol. 2, pp. 66-67.
- Sokolov D.V., Titov A.B., Shabanova M.M., 1997. *Prerequisites for Analysis and Formation of Innovative Policy*. Saint-Petersburg, GUEF publ.
- The Ratio of Small Enterprises Engaged in Technological Innovations in the Russian Federation. Available at: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/science_and_innovations/science/# (accessed 19 February 2017).
- Technological Innovations Costs of Small Enterprises in Federal Districts of the Russian Federation Available at: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/science_and_innovations/science/# (accessed 19 February 2017).
- The Ratio of Innovative Goods, Works, Services in the Total Amount of Shipped Goods, Executed Works, Services of Small Enterprises in the Federal Districts of the Russian Federation. Available at: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/science_and_innovations/science/# (accessed 20 February 2017).