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SOME ASPECTS OF TAX STIMULATION THE NATIONAL INNOVATIVE SYSTEM IN RUSSIAN FEDERATION

Purpose: the ultimate goal of the article is the consideration of the fundamental aspects of the National innovative system tax stimulation. Methods: in the article the method of the comparative analysis is used for the research of the tax stimulation tools in the innovative development worldwide. Results: the article proposes the system for the tax stimulation of the National innovative system (NIS). The system is provide the creation of the economic conditions which essentially increase the innovatively focused managing subjects activity. The system involves the use of the tax toolkit adjustment taking into account the reveal dependences between the indicators characterizing the human, production, financial, scientific and infrastructural potentials and various kinds of direct and indirect taxes. Conclusion: in conclusion presents general conclusions about the results of the study.
JEL: H21

1. Introduction

Commonly known that the ultimate goal of the National innovative system creation in Russian Federation is the provision of the sustainable development of the national economy and the improvement of the population life quality on the basis of the mental potential use, the generation, the distribution and the realization of the new knowledge.

Various aspects of the innovation, National innovative system in the works analyzed Shumpeter J.A. (Shumpeter, 1982), Porter M. (Porter, 2006), Kondratyev N.D. (Kondratyev, 1984), Kuznets S. (Kuznets, 1955), Drucker, P.F. (Drucker, 1985, 2013), Porter, M.E. (Porter, 1985), Nechaev A. (Nechaev, 2012).

Thus it is necessary to notice that nowadays, on the one hand, there are no uniform standard principles, methods or any model of the stimulation and development of the National innovative system (NIS). On the other hand, the efficiency of innovative processes is consider ably influenced by some quantity of factors.

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For the study used the methods of comparative analysis, system analysis, the method of analogies.

The subject of this study is innovative development areas, taking into account the tax component. The object of study – a mechanism to evaluate innovative development of territories.

1.1. Tools of the tax planning

At the same time for some last years the increasing quantity of the countries applies various tools of the tax planning to stimulate the innovative development of NIS. For example, if in 1996 only 12 countries apply the tax concessions as the tool of the innovative development stimulation than in 2006 19 countries of OESR and also the number of quickly growing developing states (Ivanova, 2009). Besides, such countries as Singapore and the Republic Korea succeeded to make essentially active the innovative development at the expense of the application of the so-called tax holidays (a zero rate of the taxation) for the high technology business.

1.2. Tools of the tax planning in Russia

As a whole the tax stimulation of the innovative activity includes the complex of the various tax tools the application efficiency of which depends on the set of factors.

For the last years in our country the tendency is observed to the number reduction of the privileges to the scientific organizations and the increases in number the privileges for the stimulation the enterprises innovative activity. Besides, in the Russian practice there is no system approach to the existing set of the tax concessions. Only the first and last stage in the system of the innovative process «development – approbation and introduction in production – realizations of an innovation» is covered by the tax stimulation (Uvarova, 2011).

2. Methods

To assess the innovative development of countries and regions use different indicators. In the study of international experience, particular attention should be paid to monitor the implementation of the Europe 2020 Innovation Union.

The annual Innovation Union Scoreboard provides a comparative assessment of the research and innovation performance of the EU Member States and the relative strengths and weaknesses of their research and innovation systems. It helps Member States assess areas in which they need to concentrate their efforts in order to boost their innovation performance. In addition, the Scoreboard covers Serbia, Former Yugoslav Republic of Macedonia, Turkey, Iceland, Norway and Switzerland. On a more limited number of

indicators, available internationally, it also covers Australia, Brazil, Canada, China, India, Japan, Russia, South Africa, South Korea and the US.

2.1. Analysis of the sources in terms of National innovative systems.

Nowadays there is no standard national practice for the forming of the indicators systems for the national innovative systems monitoring (Golichenko, 2006).

Evaluation of innovative development of regions within the Russian Federation is based on the use of parameters studied in the works of these authors. Let us analyze the performance evaluation of innovative development taking into account peculiarities of the Russian Federation.

Source 1: The basic indicators of the National innovative system monitoring used by Golichenko O. (Golichenko, 2006).

Source 2: The indicators used by Ivanova N. (Ivanova, 2009).

Source 3: The indicators used by Dynkin A. (Dynkin, 2005).

Source 4: The indicators used by Drucker, P. (Drucker, 2013).

The results of these analyzes are presented in Table. 1.

Table 1

The indicators used for characteristic of National innovative systems

Group	Indicators	Source 1	Source 2	Source 3	Source 4
The indicators characteriz human potential	Personnel occupied in researches and developments (number of researchers)	+	+	+	+
	Number of doctors and candidates of science on 1 million people.	+	+		+
	Share of employed on innovatively active enterprises in total number of employed	+	+	+	+
	Number of post-graduate students on 1000 persons having higher education				
	Share of the population having higher education in economically active population	+		+	
	Share of the employed in production industries of average and high science level			+	
	Share of employed in highly technological service			+	
	Number of workers in the divisions which carried out scientific researches and developments				+
	Number of the science employees occupied in sphere of research and development			+	
The indicators characteriz production potential	Quantity of innovatively active organizations	+	+	+	+
	Quantity of average and small innovatively active organizations			+	
	Quantity of organizations performing technological innovations				+
	Number of organizations caring out researches and developments		+		+
	Share of shipped innovative goods (in % from gross national product)			+	+
	Volume of shipped innovative goods			+	+
	Export volume of innovative goods, works, services	+	+	+	+
	Volume of innovative goods, works, services	+	+	+	+

	Share of the innovative goods, works, services in sales volume in internal and external markets				+
	Number of organizations carried out researches and developments (in % from total number of the organizations)				
	Share of investments into researches and developments in gross national product	+			
	Share of the productions intensively using highly technological goods	+			
	Development of innovative goods for one employed	+			
	High technology industries in gross national product			+	
	Acquisition of machines and equipment	+	+	+	+
	Acquisition of new technologies	+	+	+	+
	Acquisition of soft ware products		+		
The indicators characteriz financial potential	Internal costs for researches and developments	+	+	+	+
	Expenses on research and development, % from gross national product	+	+	+	+
	Expenses on researches and developments	+			
	Share in gross national product of costs of private companies on research and development			+	
	Costs for technological innovations in total amount of shipped goods	+		+	+
	The revenue of innovatively active enterprises from total receipts, %				
	Share of expenses on basic researches in gross national product	+			
	Export volume of hi-tech goods, in % from total amount of goods export of industrial production			+	
The indicators characteriz scientific potential	Quantity of issued patents	+	+	+	+
	Number of personnel employed in researches and developments (for 1000 persons of the population)				
	Share of venture capital in gross national product			+	
	Number of used high technologies				
	Number of scientific and technical articles for 1000 economically active populations	+		+	
	Quantity of new technologies transferred by the enterprises	+			
	Participation of organizations in joint projects for accomplishment researches and developments	+	+	+	+
	Number of created high production technologies				+
	Quantity of organizations having research or design divisions in total number of organizations				+
The indicators characteriz infrastructural potential	Production and technological infrastructure: - technoparks	+	+	+	+
	- innovative technological centers;				
	- innovative industrial complexes;	+	+	+	+
	- special economic zones;	+	+	+	+
	- centres of collective use.				
	Consulting infrastructure: - centers of technologies transfer;				
	- consulting firms.				
	Financial infrastructure: - venture capital trusts;	+	+	+	+
	- sowing and starting funds				

On the results of the analysis the most often used indicators were allocated for the monitoring of NIS.

3. Results

3.1 Kinds of potential for analysis of National innovative systems.

As a result of the conducted research all indicators of the national innovative systems estimation were grouped according to the several principal types of the potentials, namely:

- indicators characterizing human potential;
- indicators characterizing production potential;
- indicators characterizing financial potential;
- -indicators characterizing scientific potential;
- indicators characterizing infrastructural potential.

3.2. System of National innovative system tax stimulation by means of tax planning tools

Each of the allocated potentials includes the various indicators which change of values is possible by means of the tax planning tools application. System of the National innovative system tax stimulation by means of tax planning tools is presented on fig. 1.

Explanatories:

Income tax: for the purpose of increase the personnel employed in the researches and developments and also the number of workers in the innovatively active enterprises the decrease in the basic rate of IT is necessary for the non-residents from 30% down to 13% for the increase of their income and the attraction of the highly skilled specialists tothe innovative sector of economy without the increase in the payment fund of the enterprise what, in turn, will allow not to increase the cost value of the innovative goods manufactured.

Instalments to funds: for decrease of the loading of the enterprises on the payment fund the decrease in the cumulative tariff of the insurance installments from 30% down to 14% is necessary not only for the economic societies performing the research and development and the practical application (introduction) of the intellectual activity results but also for all innovatively active enterprises as a whole irrespective to the pattern of ownership what, in turn, also will allow not to increase the cost value of innovative goods manufactured.

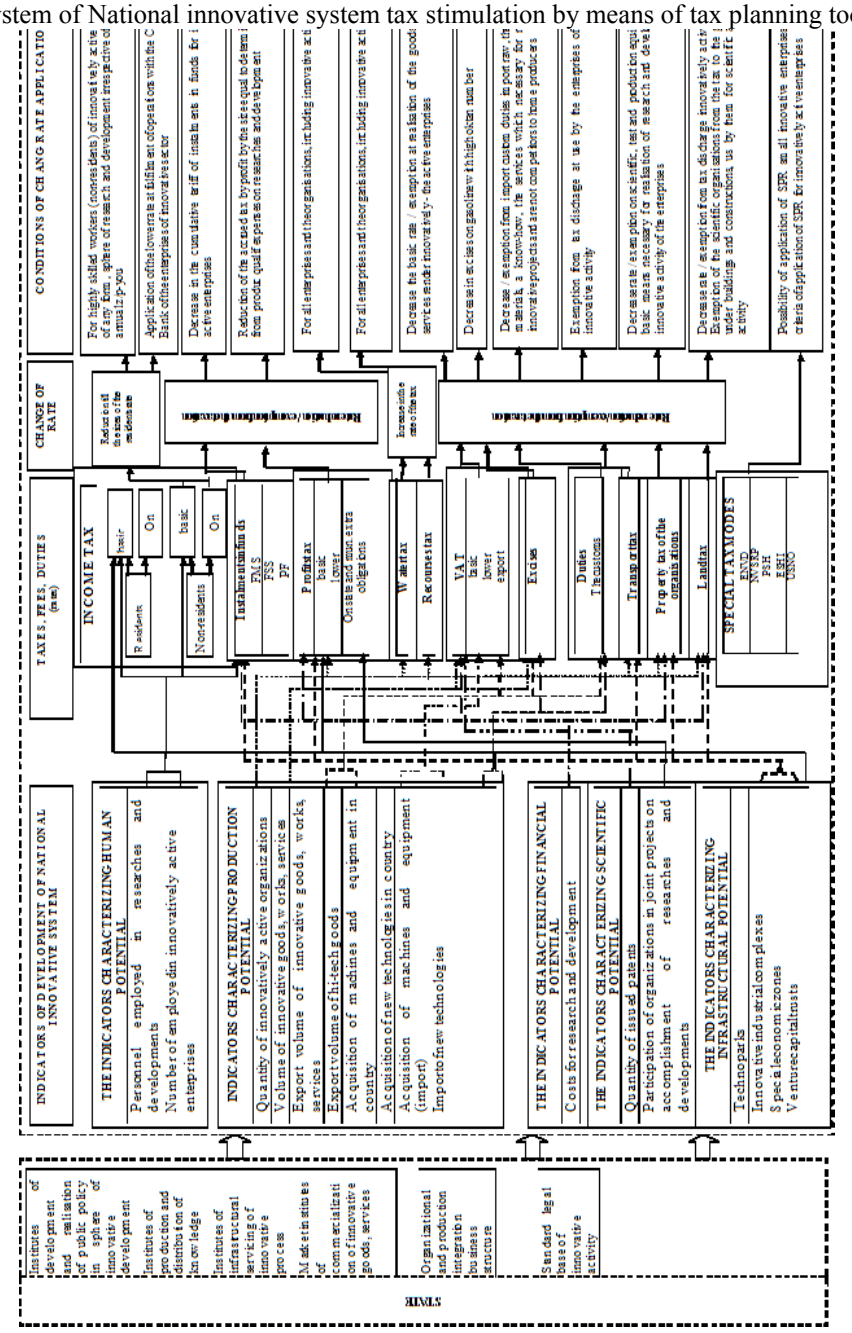
Profits tax: for increase the own means of the enterprises for carrying out the scientific researches and the test developments is necessary to decrease the accrued profit tax for the size equal to the determined percent from the manufactured qualified expenses for the researches and development. Thus to the qualified expenses should be attached the expenses forthe carrying out the research and development, the acquisition of the scientific equipment and the other kinds of expenses.

Water tax: for the stimulation of the enterprises to use the innovative technologies and the equipment of the water turnover closed cycle the increase of the water tax rates is necessary.

Mining tax: for the enterprises raw dependence reduction and activation of the hi-tech productions creation the increase of the mining operations tax rates is necessary.

Figure 1

System of National innovative system tax stimulation by means of tax planning tools



VAT: the expansion of the list of the operations released from VAT payment is necessary including not only the operation of the research and development accomplishment which means the stage of the innovations creation but also the operations of their introduction and distribution.

Excises: for the widespread use of a better kind of fuel the decrease in the excises for the gasoline with high the octane rating is necessary.

Duties: for the realization of the innovative projects and the realization of the innovative activity the exemption is necessary from the import custom duties for the raw import, the equipment, the materials, the know-how and the services which are not competitive to the home producers.

Transport tax, organizations property tax, land tax: the innovatively active enterprises need the exemption from the payment of the abovementioned taxes for the creation of the material base, the acquisition and use of the necessary vehicles for the purpose of the scientific, research and test development srealization and the enterprises innovative activity including small size innovatively active managing subjects.

Special tax modes: it is necessary to give the opportunity of the special tax modes application to the small size innovatively active managing subjects which are the most effective form of the scientific and technical developments commercialization. The change of STM criteria application to the small innovatively active enterprises: the restriction exception on the residual cost of the basic means at the application of the tax simplified system.

4. Discussion

We used a variety of methods for selecting indicators for evaluation of National innovative systems. In the article we only maps the concept of national innovation system. But there are also other concepts of innovative development of territories. In each of these concepts is necessary to study the characteristics of tax incentives to increase the level of innovation development of countries and regions.

4.1. The concept of technological structures.

Firstly, the concept of technological structures: authors Yakovets Y. (Yakovets, 1999), Kuznets S. (Kuznets, 1955) and other. As a result of an economic development non-uniformity there is a replacement of complete complexes of technologically interfaced manufactures – technological structures. As a result of dominating structures replacement appear the new possibilities for economic success of the countries, regions etc. The countries which had the time to create reserves in formation the structure industrial technological systems appear the centers of an interest for the capital and reach qualitatively new level of a development.

4.2. The concept of clusters

Second, the concept of clusters: authors Kondratyev N. (Kondratyev, 1984), Porter M. (Porter, 1985). The theory of clusters is based on the fact that the most competitive firms of one branch are usually concentrated in one region, it is connected with the wave nature of innovations which are extended by the most competitive companies and touch suppliers, consumers and competitors of the given companies what finally promotes the innovative development of the territory.

In our opinion the most interesting is the concept of national innovation system, which we analyzed.

5. Conclusion

Thus, the offered system of the National innovative system tax stimulation allows to provide the transition of the country to the economy of the innovative type at the expense of the tax toolkit adjustment on the basis of the revealed interrelations and interdependence between the indicators of the NIS development grouped by the types of the potentials (human, production, financial, scientific, infrastructural), the types of the direct and indirect taxes, fees, duties and the conditions of their application taking into account the possible variants of the values change and the directions of the economic results achievement.

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