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## FEATURES OF FORMATION OF «DEVELOPMENTAL INSTITUTIONS» IN RUSSIA: A CASE OF THE SIBERIAN REGIONS<sup>1</sup>

The article is devoted to the features of the process of "developmental institutions" formation in the Siberian regions. The importance of the institutional environment and informal personalized connections affect its formation is articulated. The research is carried out according to the methodological base of public choice theory, especially — economics of bureaucracy, and the concept of D. North. Functional roles, which "developmental institutions" are performed in the Siberian regions, are disclosed: "affiliate" of the regional administration under its full organizational and financial control; "independent agent", which expresses the interests of academic science and small innovative business; "subdivision" of federal innovative structure that promotes commercialization of innovations in the region; "conductor" of the federal level big business interests that favor large-scale projects realization in the region. As a result, different combinations of the elements of the institutional environment and informal personalized connections between subjects, who are involved in the process of "developmental institutions" formation in the Siberian regions, determine further success or "failure" of these organizational-economic structures.

**Keywords:** region, "developmental institutions," institutional environment, informal personalized connections, rent-seeking behavior

### Introduction

At the present time, the authorities of the Russian regions are taking steps to create conditions to shift their territories on the way of the socio-economic development, which implies active generation and commercialization of innovations. Innovations have crucial importance for the Siberian regions because their economies are generally based on raw materials extracting industries and/or raw materials processing industries (e.g., processed energy commodities, metallurgy and chemical industry). In this case, the innovation commercialization makes solid grounds for an additional opportunity to diversify regional economies, to reduce dependence from natural resource extracting, to create high-paying jobs and to improve the standards of living for the population.

The task of the Russian economy modernizing and its shifting to the way of innovative development represents one of the key problems in present political and economic agenda. The federal government proposed to create "developmental institutions" as a one of the instruments to solve this problem. "Developmental institutions" are the organizational and economic structures, those facilitate allocation of resources in favor of the projects to realize new potential of economic growth via investment implementation in the social and engineering infrastructure, in developing industries and in human capital, as well as through new technologies' formation and competitiveness strengthening of domestic medium

It is important to note that demonstration of administrative zeal and "readiness" to follow the federal government general line to modernize the economy and generate innovations is the priority for some regional authorities. In this case, regional authorities are solving two crucial problems: (1) highlight their loyalty to the central authorities in the country, and (2) provide solid grounds to get federal budget resources to create "developmental institutions" in the regions. These actions lead to the situation when political loyalty and possibility to control the budget resources flows become the reason of active rent-seeking behavior of those regional officials and affiliated entrepreneurs who are involved in "developmental institutions" formation. Regional officials and affiliated entrepreneurs are initially seeking not to generate productive innovations, but to create redistributive innovations, which are enabled to strengthen their status positions via investing resources to establish and/ or strengthen informal personalized connections. The federal government made it clear to imple-

and small businesses. However, the problem is in the fact "developmental institutions", which have been already created in some Russian regions, do not fulfill their tasks. They are transformed ("degenerated") into the structures that maintain political rent extraction by those entrepreneurs, who are closely affiliated with the regional authorities, and bureaucratic rent extraction by the public officials, who are responsible for innovation policy implementation in the regions and control the flows of budget resources spent on "developmental institutions" formation and functioning.

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ment economy modernization and accumulated a high amount of budget resources to achieve this purpose [1]. However, regional authorities' motivation, in a fact, does not involve innovative maneuvers until they are not well paid from the federal budget. On the other hand, central political authorities are most interested in a short-term political loyalty of the regional officials and not in their effective performance in the long-term perspective [1, p. 224-225; 4, p. 56].

The hypothesis of the paper consists in the following: institutional environment of the Siberian regions leads to the situation when "developmental institutions" are created with the different quality in the sense of innovative activity stimulation. In this case, the "developmental institutions" governing bodies perform the crucial role.

The purpose of the paper is to highlight the features of "developmental institutions" formation in the Siberian regions.

### Significance of the institutional environment, common specificity of "developmental institutions" formation in Russia and informal personalized connections

In the process of regional "developmental institutions" formation, it is crucial to take into account the institutional environment formed in a particular region of the Russian Federation. Institutional environment is a "set of basic legal, political and social rules and norms that define the incentives for the subjects in economy" [38, p. 133]. In the context of regional "developmental institutions" formation, the key point is the interaction between actors who are involved in their formation, have the appropriate resources and incentives, as well as use a variety of methods to create "developmental institutions". Some researchers note that institutions are the result of deliberate actions taken by individuals who are located in dense networks of personalized ties and their behavior is regulated with formal rules and informal norms embedded in the social structures of society [see 41, 42]. Moreover, "the formation of institutions is determined by the personal interests of individuals, such as a desire to maximize the budget, to seek rent, to seek power, to get prestige" [34, p. 53-54]. For instance, countries with a similar set of economic resources may choose various ways of the development according to the differences in the institutional structure because institutions affect incentives to innovate and develop new technologies, incentives to reorganize production and distribution, as well as incentives to accumulate physical and human capital [37, p. 214]. In other words, institutional environment determines the set of opportunities that make it more profitable to realize the redistributive activity, which consists in searching the formal and informal privileges and benefits, but in the other conditions, it is more lucrative to implement productive activity that leads to innovative rent extraction and improving the living standards of the population in the regions.

Russia is a country with historically formed socio-economic differentiation, which provides: (1) initially different opportunities for economic development of the regions, (2) fragmented institutional environment, i.e., the wide range of sets of fundamental political, social and legal rules that regulate economic activity in a particular region, (3) localized institutional agreements, i.e. agreements between economic actors in the region that determine the way they compete. The key point for the process of "developmental institutions" formation in the Russian economy has fragmented institutional environment, which determines formation of various "developmental institutions" at the regional level.

Fragmentation of the institutional environment is highlighted in localization and segmentation, which are tightly inter-related, but different forms. The effectiveness of local institutions is limited with the scope of territorial communities that acting as a closed network structure. Segmentation of the institutional environment means that the relationship between economic agents is defined by their belonging to the closed network structures. Thus, localization and segmentation are inter-related aspects that strengthen inhomogeneity of the institutional environment. As a result, a multi-level system of the "rules of the game" is formed that guarantees the functioning of the Russian economy as a segmented but unified structure [12, p. 169-170]. These features of the Russian economy institutional environment predetermine the fact that the created system of "developmental institutions" is a two-level and reflects the diversity of the Russian regions.

Two-level system of "developmental institutions" formation determines sustainable connections between public officials of the federal and regional levels, and their "dense" interaction with the owners and/or top managers of the large companies who demonstrate interest to create "developmental institutions" and generate innovations. In this context, a key aspect for the regional officials is to get federal budget funds allocated by the central government to create "developmental institutions", to accumulate regional budget funds, as well as to attract funds from the private sector.

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On the other hand, the owners and/or top managers of the large companies and business-groups are interested in investing financial and human resources in "developmental institutions" formation if they receive certain benefits, privileges and preferences that can provide public officials. In a fact, public officials, who are responsible for the elaboration and implementation of innovative policy in the regions, supply a certain set of "developmental institutions" and the rules for their formation and further functioning, while economic agents from big business form "demand" to obtain official benefits, preferences and privileges.

From our point of view, the interaction between public officials and big business representatives, supplying and demanding "developmental institutions", is realized on the political-bureaucratic market, which is an institutional "hybrid" of classical political market as a mechanism to make collective decisions about funding and producing public goods, when voters, political parties and pressure groups are the subjects of the political market; and bureaucratic market, embedded in the state structures of federal and regional authorities, which is a mechanism to allocate resources by narrow special interest groups using their status positions within a formally unified power hierarchy [8, p. 77-78; 17, p. 81-83]. The following features characterize "hybrid" political-bureaucratic market in contemporary Russia [13, p. 99]:

- 1. The actual coalescence of political, bureaucratic and economic "bargains", but with their formal separation.
- 2. Reciprocal processes of "bureaucratization" of political and economic transactions and "politicization" of economic and bureaucratic "bargains".

"Bureaucratization" means that the competitiveness of political and economic actors is determined by their status in the power-bureaucratic hierarchy. On the other hand, "bureaucrats" and "entrepreneurs" behave like "politicians" and they do their best to increase their political (power) resource via investment implementation to strengthen the network of personalized connections. Moreover, authorities' representatives try intensively not only to extract economic benefits, but also to solve the main task concerning the strengthening of status positions in the power-bureaucratic hierarchy. As Keith Darden notes, a distinctive feature of the post-Soviet states is that public officials perform political and administrative functions within the bureaucratic hierarchy at the same time, and the loss of official position leads to the loss of informal remunerations (benefits, privileges, etc.) [6, p. 132].

In the context of "developmental institutions" formation in the Russian regions political-bureaucratic market is a means of interaction between regional public officials and private big business representatives in contemporary Russian economy, and it determines the following: firstly, the administrative bargaining between different levels of authorities over the allocation of financial resources from the federal budget in favor of some regions to create "developmental institutions"; secondly, the "competition" between public officials in the regional administration to allocate funds from the regional budgets and to get status positions in "developmental institutions"; and thirdly, adjustment of the interests of the regional public officials and the owners and/ or top managers of the large companies and business-groups who are interested in innovations commercialization.

The federal government initiated a two-level system of "developmental institutions" formation in the Russian economy and invested significant budget resources. In this case, the key tasks for bureaucratic hierarchy are to control resource flows and to realize the administrative bargaining on its distribution, whereas positions of public officials determine the amount of resources they can control to implement their private interests using both formal and informal rules and norms [8]. In other words, the administrative control over financial flows and mostly informal channels of its distribution actualize competition for economically lucrative positions in the bureaucratic hierarchy, but not for its effectiveness.

Moreover, the lack of a clear purpose for the majority of regional "developmental institutions" determines the soft budget constraints1 of their formation, which are immanent for political-bureaucratic market. For instance, the federal government decided to allocate 8,869 million rubles from the federal budget in accordance with the state program "Formation of technoparks in the Russian Federation in the high-tech sphere" in 2007–2010 [21]. Actually, in the beginning of 2011, when the time was up, it was found out that more than 12 billion rubles had been allocated from the federal budget to create technological parks in the high-tech sphere [15]. Another example illustrating the signs of soft budget constraints while creating regional "developmental institution", is the technology park formation in Novosibirsk Akademgorodok. Authorities of the

<sup>&</sup>lt;sup>1</sup> Detailed information about the direct relationship between soft budget constraints and "rent-seeking" behavior is reflected in [9].

Novosibirsk region decided to create the technology park in 2006 and allocate 17 billion rubles for this purpose. A year later the estimated amount of resources was increased and achieved 21 736 million rubles [see 27, 33]. Deputy of the General Director of JSC "Kuzbass Technopark" Alexandr Karetin noted that it was necessary to provide solid grounds for goals and objectives to implement successfully the state program, and highlighted his vision of the reasons that determined its inefficient performance — contributing to the rapid economic growth when public interest is not confronted with the selfish interests of some officials [22, p. 285-287]. As an international experience shows, Schumpeterian<sup>1</sup> nepotism is uncommon in economic activity because "public officials" rarely develop and define the rules of the game that are favorable for productive economic activity" [16, p. 105-106].

In other words, the informal personalized connections (i.e. useful acquaintanceship and personal contacts) play a key role in the process of the new ideas emergence and spread and in the commercialization of the product innovations. On the other hand, these connections are essential to create administrative and bureaucratic barriers and thus to obtain political rent by narrow groups of entrepreneurs who want to establish and strengthen these connections with public officials.

A case of Silicon Valley in the United States illustrates the importance of useful acquaintanceship and personal contacts for entrepreneurs from the small innovative companies because these connections provide a quick access to the resources that cannot be found within the firms themselves. Such connections are a kind of "social glue" that simplifies the transfer of information and knowledge among a wide range of entrepreneurs and thus contributing to the generation of innovations [36, p. 222]. According to the figurative expression of Hervé Lebret, "personal connections between participants of the innovative process lead to the phenomenon that may be called as an informal process of "contamination" with start-ups" [11, p. 34].

Institutional environment in the Russian economy has the "viscosity" with a quite different quality, which dampens innovative incentives in the most cases. High level of administrative incompetence, bureaucratic red tape and the explicit evidences of corruption lead to the fact

that investments in political resources successfully oppose to investments in profit getting from "Schumpeterian" innovations, as well as innovative development projects, become an instrument to obtain benefits from taxation, grants and subsidies by those entrepreneurs who are able to guarantee maximum resources transfer for those actors who make political decisions [14, p. 54-56; 3, p. 123]. Also, it is interesting to note that there is a quite different understanding of "failures" that may occur in the process of innovative projects realization. "Failure" in Silicon Valley was a project that had not got money and then it became extremely successful [11, p. 90]. "Failure" in JSC "RUSNANO" was a budget-funded project that got budget money and then ultimately failed [see 31].

Having identified the importance of the institutional environment and informal personalized connections in the process of "developmental institutions" creating, let's proceed to the features consideration of their formation in the regions of Siberian Federal District.

# Features of "developmental institutions" formation in some regions of the Siberian Federal District

We use two main criteria to select the regions of the Siberian Federal District:

- 1. The structure of the regional economy, which affects the relation of economic agents to the process of innovations generation and commercialization.
- 2. The presence of "developmental institutions" in the regions that were created with the direct participation of the federal and regional authorities' representatives.

The Kemerovo and Krasnoyarsk regions we refer to the so-called "resource type" regions because their basic industries are raw materials extracting industries and/or raw materials processing industries. This is coal and iron industry in the Kemerovo region and non-ferrous metallurgy in the Krasnovarsk region. On the other hand, the Tomsk and Novosibirsk regions are the regions with relatively diversified economy, and these regions are the leaders in the sphere of generation and commercialization of innovations. "Developmental institutions" had been created in all selected Siberian regions with the direct participation of representatives of federal and regional authorities. These are the following "developmental institutions": JSC "Kuzbass Technopark", JSC "Technopark of Novosibirsk Akademgorodok" JSC "Special Economic Zone Tomsk" and JSC "Krasnoyarsk region Development Corporation".

<sup>&</sup>lt;sup>1</sup> We regard "nepotism" in a broad sense, i.e. acquaintanceship with the «right» people and/or useful ties that make it possible to obtain certain benefits and privileges.

We are interested in consideration of the structure of "developmental institutions" governing bodies whose members, firstly, determine the general directions of their functioning and, secondly, affect greatly on the stimulus of economic agents to be involved in the innovative activity. We regard "innovative activity" as an introduction of fundamentally new or significantly improved products, services and technologies in domestic and/ or global markets. To compare the "developmental institutions" performance we use the indicators that characterize the overall intensity of innovative activity in selected Siberian regions. These indicators are the following: share of innovation active organizations and expenditures on technological innovations. From our point of view, it is also quite inquisitive to compare selected Siberian regions with some US states and German states (länder) according to the indicators of innovative activity (we use the data that we have to compare regions).

JSC "Kuzbass Technopark" was created in 2007 in accordance with the state program "Formation of technoparks in the Russian Federation in the high-tech sphere". To build innovative infrastructure it was suggested to allocate 300 million rubles in the form of subsidies from the federal budget in 2008-2010 [5]. The only founder of "Kuzbass technopark" was Kemerovo region in the person of the Committee for State Property Management, who formed 100% of share capital, which amounted 15 million rubles.

governing body of JSC "Kuzbass The Technopark" was the Board of Directors, which included 15 persons (in 2010). Fulfilled analysis showed that the representatives of the regional authorities (7), especially from regional administration, and the regional large business representatives (3), who were closely affiliated with the regional authorities, dominated in the Board. Moreover, the Board included two mayors of the largest cities in Kuzbass - Novokuznetsk and Kemerovo as well as one representative from the local academic science community and one representative from the local university science community. The Board of Directors was chaired by the first Deputy of the Governor, who combined two positions. It seems that in this case, regional "developmental institution" became a kind of "affiliate" of the regional administration, which was completely under its organizational and financial control [see 26, p. 127-130].

JSC "Technopark of Novosibirsk Akademgorodok" was created within the state program "Formation of technoparks in the Russian Federation in the high-tech sphere", which determined investments from the federal budget in the amount of 1,310 million rubles during 2007-2010. The Novosibirsk region was the founder in the person of Department of Property and Land Relations, which formed 99.9771% of share capital.

The governing body of JSC "Technopark of Novosibirsk Academgorodok" was the Supervisory Board, which included 12 persons (in 2011). It should be mentioned that the Supervisory Board consisted of representatives of local academic science community (3); regional managers-"technocrats", who performed specific functions in "developmental institution" (3); representatives of small innovative business (2); representatives of regional (2) and municipal (2) authorities [28]. From our point of view, regional "developmental institution" functioned as a relatively "independent agent", which expressed the intertwining interests of local academic science community and small innovative business and contributed to the promotion of innovations commercialization in the Novosibirsk region as one of the leading regions of the Siberian Federal District in the sphere of innovations generation and commercialization. A high level of education and research fields development, embedded scientific traditions and well-developed infrastructure (Akademgorodok) built conditions for the prevalence of these interests, and "developmental institution" was headed by the manager-"technocrat" who had managerial experience in the scientific and research fields.

JSC "Special Economic Zone Tomsk" was created in 2005 with the involvement of budget resources from federal and regional levels in the amount of 650 million rubles. The founders were JSC "Special Economic Zones" (74% of share capital) and the Department of State Property Management of the Tomsk region (26% of share capital).

The governing body of JSC "Special Economic Zone Tomsk" was the Board of Directors, which included 7 persons (in 2010). Most of the Board members comprised of managers-"technocrats" of the federal (3) and regional (2) levels [29]. In addition, the Board included two representatives of the regional authorities. Such governing body structure was evidence of the managers-"technocrats" dominance that was the visible reason for the relative independence of "developmental institution" from the regional authorities and for the apparent influence of the federal level interested in the direct control of a special economic

<sup>&</sup>lt;sup>1</sup> Managers-"technocrats" are the persons who hold positions in "developmental institution", which is the only and/or principal place of work, and they are initially neutral in their interplay with the narrow interest groups acting in the region.

						Table 1
Structure of the "developmental institution	ons" governing boo	lies in s	ome regior	s of the Siberian F	ederal Dis	strict
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Members of governing body	Kemerovo region	Novosibirsk region	Tomsk region	Krasnoyarsk region
Representatives of regional authorities	7	2	2	1
Representatives of municipal authorities	2	2	_	_
Managers-"technocrats" of federal level	-	_	3	3
Managers-"technocrats" of regional level	_	3	2	1
Representatives of federal level big business	_	_	_	4
Representatives of regional level big business	3	_	_	_
Representatives of small innovative business	_	2	_	_
Representatives of academic and university science community	2	2	_	_

Table is build by the author on the basis of the regional "developmental institutions" official sources.

zone in the Tomsk region. One must say that the Tomsk region had traditionally been considered as a leader in science, education and innovation fields not only among regions of the Siberian Federal District, but also in Russia as a whole. In this sense, regional "developmental institution" served as a kind of "division" of the federal innovative structure (JSC "Special Economic Zones"), actively building conditions for the commercialization of the productive innovations according to the region specificity that were the presence of long-standing academic traditions, as well as a mature innovative infrastructure.

JSC "Krasnoyarsk region Development Corporation" was created in 2006 with 120 million rubles involvement from different sources. The founders of the corporation were Company "Basic Element" (25% of the share capital), JSC "RusHydro" (25% of the share capital), JSC "The Gulidov Krasnoyarsk Non-Ferrous Metals Plant" (25% of the share capital) and the State Corporation "Bank for Development and Foreign Economic Affairs" (25% of the share capital).

The governing body of JSC "Krasnovarsk region Development Corporation" was the Board of Directors, which consisted of 9 persons (in 2012). The fulfilled analysis of the Board structure indicated that the Board included managers-"technocrats" of the federal (3) and regional (1) levels, representatives of the federal level big business (4), and representative of the regional authorities (1) [30]. From our point view, regional "developmental institution" was a kind of "conductor" of the federal level big business interests in the region. This situation was justified by the fact that in the Krasnovarsk region were being implemented large-scale investment projects related with the desire of regional authorities to realize new industrialization of the region's economy rather than with an innovative development,

Table 2
R&D Expenditures Comparison of Siberian Regions, US
States and German Länder (USD thousands)

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Region, State, Länder	Siberian Regions, US States and German Länder R&D Expenditures (USD thousands)	Year
Tomsk region	273	2012
Novosibirsk region	543	2012
Krasnoyarsk region	370	2012
Kemerovo region	34	2012
Massachusetts	4 879	2011
California	149 812	2011
New Jersey	17 069	2011
Pennsylvania	71 098	2011
Baden-Württemberg	23 854	2010
Niedersachsen	8 005	2010
Hessen	9 476	2010
Bayern	19 051	2010

Based upon: Russian Regions. Social-Economic Indicators. 2013. — Moscow.: Rosstat, 2013. — P. 797; National Science Foundation. Social, Behavioral and Economic Sciences // URL: http://www.nsf.gov/statistics/staterd/; Bundesbericht Forschung und Innovation 2012. — Berlin: Bundesministerium für Bildung und Forschung, 2012. — P. 228.

and this fact made grounds for an active big business resources involvement [see 25]. One-third of the Board consisted of the federal level managers-"technocrats" and this fact indicated the importance of the investment projects for the central political authorities because new industrialization meant raw and infrastructural development of a vast area in the east of the country as well as geostrategic tasks realization to preserve the territorial unity of Russia.

Having considered the governing bodies' structures of the regional "developmental institutions",

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Table 3
R&D/GDP (%) Comparison of Siberian Regions, US
States and German Länder

Region, State, Länder	Siberian Regions, US States and German Länder R&D/GDP (%)	Year
Tomsk region	2,17	2011
Novosibirsk region	2,53	2011
Krasnoyarsk region	0,79	2011
Kemerovo region	0,12	2011
Massachusetts	5,53	2008
California	4,22	2008
New Jersey	4,28	2008
Pennsylvania	2,39	2008
Baden-Württemberg	4,7	2010
Niedersachsen	2,7	2010
Hessen	3,1	2010
Bayern	3,2	2010

Based upon: Russian Regions. Social-Economic Indicators. 2013. — Moscow:: Rosstat, 2013. — P. 797; Science and Engineering Indicators 2012. - Arlington VA: National Science Foundation, 2012. — P. 8-89; Bundesbericht Forschung und Innovation 2012. — Berlin: Bundesministerium für Bildung und Forschung, 2012. — P. 228.

Table 4
Innovation Active Organizations (%) in Selected Siberian
Regions

Region	2007	2008	2009	2010	2011	2012
Tomsk region	16,9	16,0	15,3	18,4	15,7	11,4
Novosibirsk region	4,9	5,4	5,6	5,5	8,2	8,6
Krasnoyarsk region	12,3	14,0	12,2	10,0	10,2	9,5
Kemerovo region	6,7	6,0	4,8	5,9	6,4	6,1

Source: Russian Regions. Social-Economic Indicators. 2013. — Moscow: Rosstat, 2013. — P. 821.

let's present a table where the relevant information is summarized (see Table 1).

In our opinion, the structure of "developmental institutions" governing bodies in the Siberian regions shows the measure of readiness to which their leaderships are ready to create conditions for shifting to the innovative path of economic devel-

opment because authorities play a crucial role to accept the "rules of the game", which are favorable for those economic actors who are ready to be engaged in innovative activity. For a start, let's compare selected Siberian regions with some US states and German länder according to the R&D expenditures realized in the regions and R&D/GDP (%) (see Table 2 and Table 3).

For instance, overall R&D expenditures of all selected Siberian regions are four times less than R&D expenditures of Massachusetts that is "outsider" amid represented US states and German länder. On the other hand, in California 149 812 thousand dollars are invested in R&D and it is almost in 123 times bigger than four Siberian regions invest in R&D together.

It is important to note that selected the Siberian regions, which are the leaders in the sphere of innovations commercialization, have almost the same meaning of R&D/GDP (%) indicator as US states and German länder (and Novosibirsk region is even ahead of Pennsylvania). At the same time, "resource" type regions are the losers if compare them with US states and German länder: minimum gap is between the Krasnoyarsk region and Pennsylvania (in 3 times), as well as maximum gap is between the Kemerovo region and Massachusetts (in 46 times).

Despite the fact that selected regions of the Siberian Federal District are the "losers" if compare them with US states and German länder according to the R&D expenditures, let's consider the indicators characterizing the overall level of innovation activity in the Siberian regions. In this case we are eager to regard the period beginning from 2007 because this is the point when "developmental institutions" began to function (see Table 4 and Table 5).

The Tomsk region is the traditional leader among represented the Siberian regions according to the amount of innovation active organizations. The Novosibirsk region shows the stable growth of innovation active organizations, whilst the Krasnoyarsk region and the Kemerovo region demonstrate instable fluctuations of this indicator. At the same time, the Kemerovo region is the rugged outsider.

Technological Innovations Expenditures (million rubles) in Selected Siberian Regions

Region	2007	2008	2009	2010	2011	2012
Tomsk region	2371,9	2170,1	3446,6	2038,5	4094,3	6710,3
Novosibirsk region	2537,0	2500,8	3069,4	3866,0	5563,1	5745,8
Krasnoyarsk region	5644,8	8091,3	8030,9	14617,7	19643,9	24979,5
Kemerovo region	2583,1	2552,3	901,1	1697,2	2990,4	2978,9

Source: Russian Regions. Social-Economic Indicators. 2013. — Moscow.: Rosstat, 2013. — P. 823.

Table 5

From our point of view, the Novosibirsk and the Tomsk regions' authorities try to involve intensively managers-"technocrats" of federal and regional levels, as well as representatives of the small innovative business because these regions have an adequate institutional environment that stimulates innovative activity and makes solid ground to invest a significant amount of resources in technological innovations. The Krasnoyarsk region authorities are eager to realize the policy of new industrialization with the participation of federal level managers-"technocrats" and representatives of federal level big business that determines the fact that The Krasnoyarsk region is the leader according to the amount of technological innovation expenditures. Representatives of the regional authorities and regional big business, which is engaged in the traditional economic activities (construction, power generation, coal mining), are clearly dominated in the Kemerovo region. Vivid example that illustrates the impact of such dominance on the behavior of innovative entrepreneurs is the potential opportunity for them to be included in the administrative reserve of the regional administration that provides access to obtain certain privileges and preferences [23]. In other words, personalized ties of administrative and bureaucratic nature are actualized for innovative entrepreneurs that may indicate the importance of status obtaining in the state bureaucratic hierarchy for innovators. To compare with, the Silicon Valley venture capitalists prefer personal achievements of innovators, their competence and experience but not their official status or even academic diploma<sup>1</sup> [11, p. 182-183]. The Kemerovo region is the outsider according to the

number of innovation active organizations and technological innovations expenditures among the selected Siberian regions. In this sense, regional authorities and regional big business representatives' dominance in the governing body of "developmental institution" may be the reason of the destructive influence on innovative activity in the region.

### Conclusion

To create "developmental institutions" as an instrument to implement the shifting to the innovative path of the economic development, it is essential to take into account the specificity of the institutional environment of the Russian economy that forms the incentives for the actors who are involved in their formation. Also, informal personalized connections of economic actors, who are involved in innovative activity, play a very important role because they can create insurmountable administrative and bureaucratic barriers for those entrepreneurs who are ready to generate productive innovations or, conversely, they can facilitate access to additional sources of funding for rent-seeking entrepreneurs who are eager to imitate the stormy innovative activity.

Cases of the Siberian regions, where "developmental institutions" have been created, show that these structures can be initially transformed into "affiliates" of the regional administrations that affect negatively on the behavior of economic actors involved in innovative activity. Dominance of regional authorities' representatives in the governing body of "developmental institutions" may even block innovative activity. According to this fact, it is very important to take into account scientific, educational and entrepreneurial environment of the region, which must be an adequate to the regional authorities' aspiration to create "developmental institution". Otherwise, public officials will be compelled to play the role of "innovators" by themselves.

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<sup>&</sup>lt;sup>1</sup> It is interesting to point out that Hervé Lebret, comparing behavior of American and European applicants during the interview to get position in innovative firm, notes that European, first of all, wants to know about how many persons will be at his command, whilst American tries to find out what problems he has to solve.

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