

## **Governance Developed industrial Bases of Reproduction of the National Economy**

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**Abstract:** The study identified, based on an analysis of indicators of the industrial sector, the most acute problems of production efficiency and investment in fixed assets undertaken in order to implement new technologies, expanding the range of industries and the creation of new jobs which allows us to formulate the need to build and implement a modern and efficient policy industrial growth, based on the use of determinants of integration of this sector of the economy. Just in justified, firstly, the feasibility of forming transformation of industrial policy, the central backbone element of which is to stimulate the development of vertically integrated structures and secondly, the lack of efficiency of formation of simple corporate structures that enable the integration component industry proven in the world practice the principles of cluster development.

**Key words:** Industry, integration, reproduction, cluster, industrial policy

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### **INTRODUCTION**

The research concerning the specificity of modern reproduction processes, all the more urgent issue of the functional role of industry in economic development. In many ways, the occurrence of this problem is related to the process of social transformation that led to the now almost universally to a significant change in the structure of national economies, accompanied by the creation of new economic activities and new forms of social and economic relations.

At a time when the post-industrial economy has become transformed into a knowledge economy, the lack of clear ideas about the place and role of industrial production can lead to serious strategic mistake. It is from these positions is required to examine the problem of changes in employment levels in the industry, the impact of the industry on questions of other economic activities as well as the level and quality of life.

### **MATERIALS AND METHODS**

The methodological basis for the study, primarily represented by the requirements and principles of the

system approach. It is possible to ensure the unity of the subject and method of research, the necessary and sufficient accuracy of the theoretical results, trends and practical recommendations contained in the thesis. Specific techniques and basic scientific research methods were used theoretical and analytical generalization, functional and structural analysis of statistical categories, calculation and constructive, comparative and contrastive methods, analytical graphics.

### **RESULTS AND DISCUSSION**

**Analysis of the structure of the distribution of the total number of industrial enterprises and organizations of economic activities:** Currently, as a result of you transformation and to identify the role of the industrial sector in the modern post-industrial reproduction processes, the industrial sector also acquired the integrating framework, forming the necessary conditions for production and employment in other sectors of the economy.

In this aspect of high relevance becomes the task of ensuring the further development of the industrial sector of the economy and the development of its integration

Table 1: Table 1 structure of distribution of the total number of industrial enterprises and organizations of economic activities by ownership in 2014.0% of total\*

Variables	Total economy		Mining		Manufacturing		Production and distribution of electricity (gas and water)	
	Unit (thous.)	%	Unit (thous.)	%	Unit (thous.)	%	Unit (thous.)	%
The number of enterprises and organizations-total	4867.0	100.0	10541.0	100.0	23442.0	100.0	40043.0	100.0
<b>Including ownership</b>								
Private	4165.0	85.6	8989.0	85.3	207797.0	87.5	21436.0	53.5
State	116.0	2.4	353.0	3.3	12897.0	5.4	3982.0	9.9
Municipal	239.0	4.9	62.0	0.6	3072.0	1.3	9592.0	24.0
Ownership of public and religious organizations (associations)	150.0	3.1	3.0	0.0	1398.0	0.6	135.0	0.3
Other forms of property, including the mixed Russian, ownership of public corporations, foreign, joint Russian and foreign	197.0	4.0	1134.0	10.8	12278.0	5.2	4898.0	12.2

\*Table is designed and compiled by the author based on the data: Russian Statistical Yearbook, 2015: Statistical Yearbook, M. Rosstat, 2015

Table 2: Structure of shipped goods of own production, works and services by the organizations of industrial economic activities by ownership in 2014 % of total\*

Variables	Mining	Manufacturing	Production and distribution of electricity (gas and water)
Total	100.0	100.0	100.0
<b>Including ownership</b>			
Private property	63.5	52.9	40.2
State ownership	0.2	3.5	6.0
Municipal property	0.0	0.1	8.8
Ownership of public and religious organizations (associations)	0.0	0.1	0.0
Mixed Russian property	14.6	13.2	34.3
Joint Russian and foreign ownership	21.7	30.2	10.8

component. In this connection, we will analyze a number of indicators in order to identify the main problems that hinder the development of industry in the designated manner.

Table 1 provides information about the structure of the distribution of the total number of industrial enterprises and organizations of economic activities by ownership in 2014.

Table 1 shows that in the economy of 4867.0 thousand. The 85.6% of organizations are organizations of private ownership. Similarly, among the 10.5 thousand. Companies engaged in mining, 85.3% are privately owned organizations. Practically also among the organizations engaged in the manufacturing sector of 237.4 thousand. 85.3% of organizations are organizations of private ownership. However, among the organizations involved in the production and distribution of electricity, gas and water, only slightly more than half relates to private property from 40.0 thousand only 53.5%. At the same time among the organizations engaged in the production and distribution of electricity, gas and water, a large proportion of the organizations belonging to the state or

municipal ownership 9.9 and 24.0%, respectively. Overall, the share of the economy of the state and municipal forms of ownership falls of 2.4 and 4.9%, respectively and by sectors of mining and manufacturing 3.3, 0.6, 5.4 and 1.3%, respectively.

In addition, the overall structure of the organization of industrial activities almost no organization, attributable to the property of public and religious organizations (associations). But in the mining and industrial sectors generating significant proportion of organizations that are attributable to other forms of property including the mixed Russian, ownership of public corporations, foreign, joint Russian and foreign 10.8 and 12.2%, respectively. While among the total number of organizations on the economy as a whole this proportion is 4.0%. And among the companies manufacturing 5.2%.

Table 2 provides information on the structure of the volume of shipped goods of own production, works and services by the organizations of industrial economic activities by ownership in 2014.

Table 2 shows that the proportion of organizations which are considered to be private property, accounted for 63.5, 40.2 and 52.9% of the volume of shipped goods of own production, works and services performed in-house, respectively on the extractive, manufacturing and giving rise to industrial sectors. The share of organizations of public and municipal forms of property, the extraction of minerals, respectively 0.2 and 0.0%. The share of organizations of state and municipal property forms employed by manufacturing industries and 3.5, respectively 0.1%. Organizations with state and municipal forms of property employed in generating plants and 6.0, respectively 8.8%. The percentage of all organizations of the industrial activities which are considered to be the property of public and religious organisations

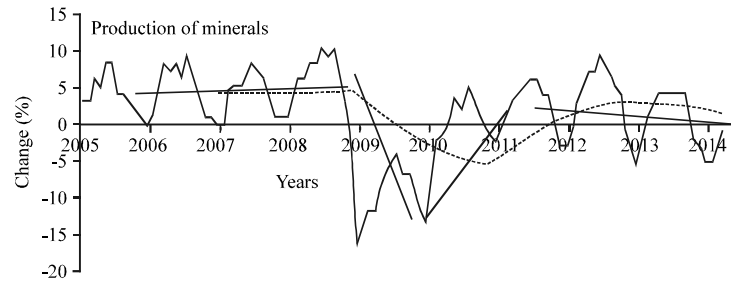


Fig. 1: Structure of fixed capital investments by types of economic activity in the year 2014 in % to the total (chart compiled by the researcher on the basis of the data: the Russian statistical year-book: statistical compendium 2014-m: Rosstat, 2015)

(associations) in the structure of the volume of shipped goods of own production of works and services on its own is close to zero. At the same time, the share of organizations classified as mixed Russian property or joint Russian and foreign property employed in the mining industry accounted for 36.3% of total shipped goods of own production, works performed and services in-house; on the same form of ownership but in manufacturing employment 43.4% on the same form of ownership but employed in generating industry 43.4%.

Thus, on the one hand, it becomes clear that the mining and manufacturing industries, similar to the economy as a whole the proportion of private organizations. While in generating industry to share private ownership accounts for only about half of the total number of units and the rest of the organization submitted to the state and municipal property and forms of mixed Russian property or joint Russian and foreign ownership. On the other hand, a comparison of Table 1 and 2 allows you to note that in all sectors of the industry, the largest share of the volume (in relation to the share of enterprises activity, by forms of ownership) shipped goods of own production, works and services performed in-house form accounts for mixed organizations of Russian property or joint Russian and foreign ownership. While private forms of ownership as well as state and municipal forms of property in this matter have significantly lower rates of specific volume of shipped goods of own production, works and services performed in-house.

**Analysis of the wear and tear of fixed assets and investments by type of economic activity:** Based on a federal state statistics service. It can be seen that the degree of wear and tear of fixed assets in industry sectors is at the average level for the domestic economy. So, in the year 2014 the wear of fixed assets in the field of mining was 51.2%, production and distribution of electricity, gas

and water 47.8%, manufacturing industries 46.8%. While the average on economy the wear of fixed assets amounted to 47.7% (maximum level of wear and tear of fixed assets was observed in the field of fisheries and aquaculture 65.1%, minimum in the sphere of real estate transactions 36.3%).

Thus, it becomes clear that in general in the mining and manufacturing industries a high percentage of private organizations and the private sector and generative state (municipal) organizations are practically equal. Almost the entire volume of fixed assets in industry belongs to the commercial organizations. And the degree of wear and tear of fixed assets is the typical commercial organisations other kinds of economic activity level. At the same time, the positive thing here is though slight but reducing the wear and tear of fixed assets over the past decade. Whereas on other economic activities, even with the prevalence of commercial private form of ownership, slow depreciation of fixed assets was observed.

However, even with positive dynamics in the wear and tear of fixed assets negative is the fact that all sectors of the industry, the largest share of the volume (in relation to the share of enterprises activity, by forms of ownership) shipped goods of own production, works and services performed in-house form accounts for mixed organizations of Russian property or joint Russian and foreign ownership. While private forms of ownership and to an even greater extent state and municipal forms of property in this matter are more modest indicators, i.e., market education on this issue show their lower efficiency.

The main source of sustaining and restoring basic funds are investments. Figure 1 illustrating the distribution of the total investment in fixed assets in the year 2014 by economic activities.

From the Fig. 1, it can be seen that the proportion of industrial activities accounted for slightly >1/3 of the total volume of investments made in capital in the year

2014. With the primary and secondary sectors accounted for almost the same amount of investment 14.3 and 13.2%, respectively. Almost the same amount of investment, both in industry generally falls on fixed capital investments in the sphere of transport and communications and operations with real estate 42.9% of the total volume of investments in fixed capital in the whole economy. The remaining share is 1/5 part (20.1%) is accounted for by investments in fixed capital in other economic activities.

In general, the analysis above suggests that the industrial sector of economy is characterized by the average for the entire economy indicators level of wear and tear of fixed assets and dynamics of investments in fixed capital (excluding generating industry sector). In this case, the bulk of investment in the mining and manufacturing industry sectors represented by own funds, a proportion of these funds is higher than for the economy as a whole. Also, relative to the entire economy, the high proportion of borrowed funds, especially generative industry. While the proportion of public funds in the structure of investments, by contrast is low. In addition, it is noteworthy that the share of investments in fixed capital in foreign organizations and joint Russian and foreign ownership accounted for slightly >10% whereas it is precisely to these organizations account for the largest share of the volume of shipped goods of own production, works and services performed in-house.

Highlighting the problems with basic tools and investments in them, interest is information that describes the business activity of enterprises and organizations of industry. Federal state data illustrates changes in business confidence indices of industrial organizations of economic activities in the period from 2005-2014 years. The index of entrepreneur confidence represents a qualitative indicator that allows responses managers about the forecast of production, supply and demand balances her describe the economic activities of industrial organizations and provide proactive information about changes in economic variables. The indicator represents the arithmetic mean "balances" answers to questions about the upcoming production, the actual demand and the current balance of the finished product.

From graphics to illustrate the dynamics of the business confidence index of organizations engaged in the field of mining, shows that up to the middle of 2008 year, the index was at the level of 5 points. Then in late 2008, early 2009 year decreased drastically and began to recover only in 2009 year. In the period from 2009-2011 years there has been a steady increase in business confidence. Then, the index has slowed down and lost a

certain vector that to this point enables you to mark a new negative trend which by 2014 year experience became more distinctly.

Similarly but with a more pronounced character, developed the index of entrepreneur confidence of organizations engaged in the field of manufacturing industries. So, from the graph shows that until mid-2008 the year the index increased from almost 5-5 points. After that against the background of the occurrence of the global financial crisis in an active phase, began a sharp reduction in the values of the index under review (up to 20 points by the beginning of the year 2009). This was followed by the restoration of index values and by the middle of 2011 year there was value in 0 points. Then pronounced positive dynamics has lost its point. A new negative index value at the end of 2013 year suggest the origination of a new downward trend.

Unlike the business confidence index of organizations engaged in the field of extractive and manufacturing industries, the business confidence index of organizations involved in generating industry, during the period of time do not demonstrate any clear trends (especially if we are talking about values, not peeled from seasonal fluctuations which are represented on the chart). The analysis of the graph allows you to highlight some notable moments. Firstly, mid-late 2008 year had not been marked by a sharp decline in business confidence.

Secondly, in the early to mid-2013 year new was recorded (in terms of the analyzed period) minimum, resulting in negative deviation of the smoothed data and suggests the growth business of uncertainty in the industry in the near future.

In general, information presented on the graphs in Fig. 2 allows to speak about threats of renewed growth negative trend of declining business confidence, however and business activity in the industrial sector of the economy.

Table 3 provides information that allows you to analyze the impact of various factors on restricting business activity of organizations engaged in mining activities in the manufacturing industries, the production and distribution of electricity, gas and water and change the impact of these factors in the period from 2011-2014 years (Bodrunov, 2013).

Let us consider in more detail the factors that have a negative impact on the business activity of organizations engaged in the extractive industry. Table 3 shows that over a period of time in virtually all factors of the decline in the number of respondents indicating their. While most severely reduced negative impact factors

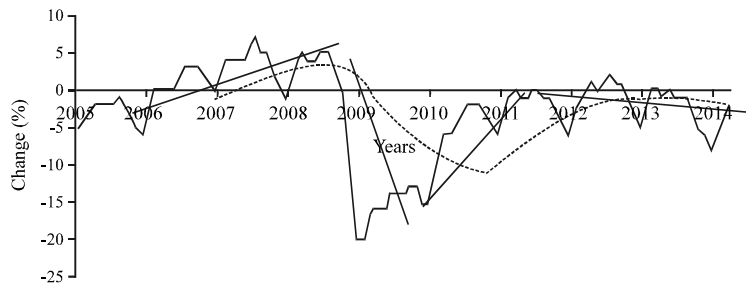


Fig. 2: Dynamics of indexes of business confidence of organizations of industrial economic activities during the period from 2005-2014 years, u. (graphics designed and built by the researcher on the basis of data: industrial production. official statistics//Federal State statistics service. URL: [http://www.gks.ru/free\\_doc/new\\_site/business/prom/uver-dpi](http://www.gks.ru/free_doc/new_site/business/prom/uver-dpi))

Table 3: Assessment of the impact of the main constraints on the business activity of organizations engaged in mining activities in the manufacturing industries, the production and distribution of electricity, gas and water (% of organizations surveyed on average per year) and changes the impact of these factors in the period from 2011-2014 years (2014 in % by 2011)\*

Variables	2011	2012	2013	2014	Tempo growth
<b>Mining</b>					
Insufficient demand on the domestic market	47.5	27.3	24.8	27.7	58.2
The high level of taxation	43.5	41.0	38.8	39.3	90.4
A high percentage of commercial credit	27.5	26.8	25.8	23.3	84.8
The lack of financial resources	49.0	36.0	33.3	31.7	64.6
Lack of skilled workers	23.3	21.0	21.0	19.0	81.7
Deterioration and lack of equipment	35.3	30.5	29.0	26.7	75.7
<b>Manufacturing</b>					
Insufficient demand on the domestic market	54.8	49.0	46.8	48.7	88.9
The high level of taxation	45.8	46.8	46.0	41.7	91.1
A high percentage of commercial credit	25.3	31.3	30.0	27.3	108.3
The lack of financial resources	43.3	41.8	38.0	35.0	80.9
Lack of skilled workers	23.3	25.8	27.3	24.7	106.1
Deterioration and lack of equipment	19.3	25.8	25.3	23.0	119.5
<b>Production and distribution of electricity (gas and water)</b>					
Insufficient demand on the domestic market	22.3	22.8	23.5	21.7	97.4
The high level of taxation	24.3	37.0	37.0	30.3	125.1
A high percentage of commercial credit	17.5	16.5	18.0	13.7	78.1
The lack of financial resources	58.5	63.3	62.8	58.7	100.3
Lack of skilled workers	15.3	13.8	16.0	15.0	98.4
Deterioration and lack of equipment	55.8	55.8	54.8	48.7	87.3

\*Table has been designed and compiled by the author on the basis of the data: the Russian statistical year-book, 2014: statistical compendium. M. Rosstat, 2014. The Russian statistical year-book, 2015: a statistical compendium. M. Rosstat, 2015

such as insufficient domestic demand, the lack of financial resources, deterioration and lack of equipment. However, the influence of these factors remains serious. So, in the year 2014 noted by 1/4-1/3 of the respondents. In addition, the most negative impact on the assessment of the respondents on business organizations in the field of extractive industry provides high-level tax factor. In 2014, his noted order 40% of respondents and from 2011 onwards its influence declined the least-a little <10% of the number of respondents highlighting it.

In the field of manufacturing industries the situation is somewhat different. Firstly, respondents to the year 2014 to specify certain negative factors. Secondly, a general reduction in the influence of the foregoing factors on business activity in this sector has not been as thorough as it can be seen in the extractive sector. So, still

from 35-49% of respondents as a factor limiting business activity indicates the lack of financial resources, high levels of taxation and insufficient demand on the domestic market. And for years considered the number of respondents who reported them, albeit reduced but not by much from 10 up-20% on the number of respondents highlighting them. At the same time increased the negative impact of the remaining factors: a higher percentage of commercial credit; lack of skilled workers; deterioration and lack of equipment.

Things are a bit different in the production and distribution of electricity, gas and water. So, here a large number of respondents (58.7%) noted as a major negative factor limiting business activity, the lack of financial resources. And for years considered the situation with this factor has not changed much is the growth rate of the

Table 4: Characteristics of types of business integration with positions produce regional effects\*

Variables	Integration with a view to strengthening the market power of	Integration with the aim of integrating industrial and financial centers	Integration with a view to innovation and infrastructure development
Degree of self-education integration structures	High	Average	Low
Organizational forms	Trusts, syndicates, trusts, etc.	Financial-industrial groups, transnational and national corporations, holding companies	Clusters
Types of integration	Horizontal	Horizontal, vertical, diagonal combined	Diagonal, combined, a rear
Effects for business	Control of the markets of raw materials and finished products, effects of Monopoli	Reduction of the weighted average cost of capital, access to capital, a lack of investment deficits of resources and working capital	Obtaining synergy and multiplier effects
Effects for the region in the short term	Increased budgetary allocations, the enhancement of social responsibility of business	The implementation of major investment projects, employment growth in the region, business consolidation, increased competition	The emergence of innovative and productive capacities, increased interregional competition, infrastructure development
Effect for the region in the medium and long term	Resolution economics, reducing the competitive status of the region, lowering consumer value regional product	Growth budget, strengthening of social responsibility of business, increase the competitive status of the region, consolidation and monopolization of business through mergers and acquisitions	Innovative leadership of the region's conomy, increase the competitive status of the territories, forming a powerful production centers
Areas of state regulatory policy	Hamper integration	The policy of neutrality, monitoring the legal purity of mergers and acquisitions	Promotion of integration

\*Table has been formulated on the basis of Semidockij and Shamar (2010)

frequency of its mention by respondents amounted to 100.3%. In addition, a significant proportion of respondents (48.7%) notes and deterioration and lack of equipment which was not observed among respondents in the extractive and manufacturing industries.

With the influence of this factor over the period under consideration has declined only 12% with small relative to the number of respondents highlighting it. Moreover, in this sector as in the other two as one of the main negative factors with an adverse effect on business activity, respondents indicated a high level of taxation (30.3%). And this factor has increased in recent years in the 1/4 the growth rate of the number of respondents indicating it amounted to 125.1%.

In general, analysis of the information provided in Table 4, allows you to select a number of negative factors restricting business activity organizations in all sectors of the industry. These include: lack of financial resources; the high level of taxation; deterioration and lack of equipment. Moreover, the first two factors were similar to those cited as factors limiting investment in fixed capital. And limiting capital investment leads to the manifestation of the third number of the above factors limiting business activity.

Thus, identified during the analysis the major problems of development of the industrial sector of the economy point to the need for building from modern effective economic policies of industrial growth (use-oriented industrial sector of the economy as the foundation of the modern economic system of developed states). At the same time, an important point in the building of this policy is to promote the efficiency of

production and investment in fixed assets with a view to the introduction of new technologies, expansion of nomenclature of production and the creation of new jobs is to create conditions for the development of the industrial sector of the economy and the development of its integration component.

**The mechanism for the implementation of the industrial policy of economic integration:** Studies in work study of transformations of the reproductive role of industry in the post-industrial economy revealed a number of important characteristics. In particular, it was found that for modern industry is characteristic of a high level of development of intraindustry and linkages. Thanks to this industry serve the base element of the integration and cooperation of a multitude of industrial processes in the national economy.

Meanwhile, these aspects are not so obvious. That often leads to an underestimation of the role of industry in the national economy. And as a consequence, the residual administration principles, i.e., the primary orientation of the mechanisms of state regulation in other sectors of the economy. However, the development of adverse trends in the industrial sector, due to integration issues, may cause significant harm to the economy as a whole. And the relevance of this problem in modern terms as shown by prior analysis of the major problems of development of the domestic industry is high.

In such conditions requires active participation of the state in promoting the growth and development of industrial economic activities. Should be built from modern effective economic policies of industrial development, focusing on the use of industrial sector of

the economy as the foundation of the modern economic system of developed state. While serious attention should be given to the choice of priority sectors of the industrial production conducive to expanded reproduction at all levels of the economic system.

When building the system of state regulation of the processes of industrial development and integration structures on its basis it is important to ensure effective interaction between authorities at all levels, taking into account the territorial public policy orientation of development of industrial establishments. This step will prevent the possibility of opposing interests. But for this purpose it is necessary to determine appropriate and effective mechanisms and tools of the state affect intra-industry and inter-industry cooperation of production processes which together will form the institutional and economic basis of modern expanded reproduction: increase the number of productions “kernel” and the “shell” vertical integration groupings; improve their competitiveness, etc. as well as to develop socio-economic linkages, entrepreneurial activities and relations of economic agents. Key provisions of a modern industrial policy are (Risins, 2010).

Respect in the design and implementation of industrial policies of the unity of the interests of the state and enterprise that promotes sustainable industrial production efficiency is a basic condition for expansion of integration processes and cooperation.

Comprehensive use of mechanisms of state regulation, municipal administration and corporate management, aimed at ensuring sustainable consumption of various kinds of managerial and production resources.

To achieve an effective balance between social and economic aspects of industrial policy objectives. Particular attention should be paid to the contrary characters social and economic components of industrial policy. So, social aspects linked to parameters relating to quality of life and economic with parameters of economic performance (profit).

Simultaneous implementation of a number of core functions. Regulatory function contributes to the determination of strategic directions for the development of industrial activities. Resource function is responsible for attracting the necessary factors of production available to the state and municipal authorities, entrepreneurs and investors. An innovative feature provides close contact of production and science contributing to the production of innovative products. Social function defines the specifics of the use of labour resources. National security function adjusts the production processes on the basis of the need to respect a high level of national, social, economic and environmental security.

Thus, we can say that industrial policy is a set of activities involving the identification of the main goals and objectives, selection of priorities, establishment of subjects and objects, planning for end effects, the development of criteria and assessment of the effectiveness of government intervention in the industrial sector of the economy. This industrial policy must create and use a specific mechanism which is the system of legal, economic and organizational measures aimed at creating favourable conditions for the emergence of modern competitive industrial production, integrating various forms of intrasectoral and intersectoral interaction as well as the speaker base for sustainable socio-economic development of the territory. To be most effective, this mechanism requires consistency across all the components of the state industrial policy: foreign trade, macroeconomic, regional, local, economic, social, environmental, etc.

Meanwhile, the aforementioned objectives and their implementation conditions necessitate the elaboration of separate directions of the state industrial policy, under which special attention will be given to the use of the effects of integration and cooperation and in accordance with this-its implementation mechanism optimization. Such direction may be implemented in the field of industrial policy both at the national or regional and local levels. While it may constitute the bases of cluster policy.

Cluster development is a new phenomenon, more peculiar to the post-industrial economy and its highest phase a knowledge based economy. However, despite the proliferation of cluster formations in the practice of the most developed countries in the world, many experts maintained the position that it is impossible to artificially create data integration structures that today is confirmed by the absence of a clear definition of cluster policy and its criteria and place among existing instruments of economic policy of the state (Abdulkadyrov and Samigulova, 2013).

Common position, according to which the formation of the clusters is the natural character and interference of the state in it can provoke the emergence of destructive consequences. In particular, there are many examples where the formation of clusters, financed from the state budget, took place over several decades and has required considerable expenditure of public funds. Thus, the role of the state in this process is to create optimal conditions for self-forming and cluster development (Hulhaciaeva, 2013).

However, there are examples of positive action by the state in the creation of new integration groupings. In particular, the implementation of large-scale investment projects was ensured the development of new industries which later performed center of attraction for other

economic activities, collectively assert cluster. But here it is worth to notice that the development of industries that can make the core of a cluster, it would not necessarily lead to actual education. In addition to its industry elements (infrastructure, resources, labor, etc.) the successful cluster formation requires the development of close relations between the parties, aimed at extracting the overall benefits (Ekutec and Polidi, 2013).

Therefore, even if you have formed branches, capable to make the foundation of integration groupings, necessary actions aimed at activation of this vector. In particular, it is necessary to use the potential of removing administrative barriers interlinked development. However, there is a risk of the horizontally-oriented integration groupings, entities which do not enter into innovation-oriented competition and organize corporations, trusts, syndicates or private network-monopoly of education, limiting competition and focused on extracting monopoly rents.

Thus, it becomes clear that the process of forming any cluster may not only be a natural or artificial nature only. Forming the cluster is a set of evolutionary (inertial) and targeted, transforming action. Create a cluster as mentioned is a fairly lengthy process, requiring considerable efforts from a large number of actors. In this regard, the key during cluster formation is not the scale of participation of states in this process and the selection of the most promising and effective management tools.

Within the concept of the triple helix, the state is regarded as one of the three equal sides of the cluster, each of which has specific functions. The main provision of this approach is the adoption of the impossibility of implementing effective innovation development without the joint activities of the state, business and the scientific community. Each institute is provided by the production of knowledge through the creation of hybrid institutional forms that reduces uncertainty (Dezhina, 2007). However, in practice the most common relationship “double helix”:

- State science
- Business-science
- State business

If you increase the intensity and common complication of innovative processes in the society bilateral relations characterized by extremely low efficiency which is typical for domestic economic system.

The task of the state in the development of the cluster is active mediation as well as in addressing a number of market failures related to the mismatch between private and social costs and benefits. Often the cluster entities are characterized by a weak relationship. Despite

the fact that the individual actors in collaboration create positive externalities, insufficient cluster actors interested in the production of ties with other localized actors because they don't bring externalities data clear benefits (Sirotkina and Achenbach, 2012). In many respects, weak ties are subject to high transaction costs arising due to asymmetric information. And in this case the state, exercising the function of a mediator can reduce information asymmetry, acting as a guarantor of fulfillment of obligations by taking risks for themselves and so these measures contribute to the intensity of interactions between organizations in the cluster and make fuller use of capacity for positive externalities. Thus, the participation of the state in the development of a cluster may prove decisive, especially in developing countries, where the state is the main source of changes.

Based on relevant regulations, we can conclude that public policies should be used to cluster two main directions:

- Cluster development within a particular location (state or country)
- The development of a specific cluster
- The main objectives of the central authorities should be
- Promote the formation and development of clusters
- The formation and development of business centres through the implementation of infrastructure projects, including through the mechanism of public-private partnership
- Informational, methodological and educational support to cluster development
- Interregional cluster development
- Financing of regional development programmes

Cluster development throughout the country contributes to the creation of favourable conditions for the emergence of new clusters and must be implemented by the central government. Regional authorities should participate directly in the development of clusters in the region. Among the actions of regional authorities include:

- The identification and analysis of potential formation of clusters
- Assist in identifying goals, objectives and overall strategy of the cluster
- Participation in the cluster projects and assessment of their effectiveness

In this very important issue was the choice of the form of integration actors in the cluster. So, for a modern



economy is characterized by a high degree of business aspirations to economic and spatial integration in order to reduce market risks, increase control over resources and markets selling, obtaining synergetic and multiplicative effects. In the scientific literature stands out horizontal, vertical, diagonal and combined types of integration, preconditions, effects and risks that are well studied Russian and foreign scientists. However, as shown earlier in the research in the study of the integration framework of extended reproduction in the post-industrial era, not all forms of integration led to the formation of a cluster as part of its modern informative aspect. In particular, horizontal forms of integration in fact, leading to the formation of various forms of corporate entities, aimed at extracting monopoly profits. And to omit the leading concentration of cluster projects on issues and problems of spatial and economic integration, considered from the point of view of the interests and the effects of economic agents at the micro level. However, this is clearly insufficient for development and use in practice, methodical approach to formation and development of integration structures to retrieve the socio-economic effects needed to ensure expanded reproduction and development of society.

Relevance this research was motivated by the widespread disparity goals and development objectives of business structures common in regional socio-economic development. To resolve this problem, the researchers had been identified the need to develop forms and methods, allowing the state to have an impact on the integration and business interference in terms of achieving the macroeconomic effects of impacts on social and economic development of the region.

In this aspect, the process of the formation of the instruments of state regulatory policy influence on the processes of integration of business structures shall be determined:

- Budgetary effect-size budget growth of integrated businesses during integration and interference
- Social effect is increase in integrated business social responsibility towards their employees and members of their families
- Infrastructure-effect influence on the development of business infrastructure
- Innovative product development, effect-technologies, markets and institutional relations
- Competitive effect is the development of competition in the region and increase relations values and prices of manufactured products, competitive business status in the global economy
- Commercial effect-increase profits of an entity in the process of integration and consolidation of business

Table 4 presents the expanded characteristic forms of integration groupings from the position of forming reproductive effects.

Information from the table reveals that the cluster formation, despite the positive economic and social impacts, often may not fully occur only under the influence of market incentives. This circumstance, in the framework of the state policy regulating the reproductive processes, requires a combination of measures aimed at stimulating the formation and development of cluster formations. At the same time, the formation of lines of action of the public authorities in the field regional economic clustering should include (Belousova and KozEva, 2012):

- Basic definition of the industry which will form the core of the cluster
- Formation of supporting industries cluster periphery
- Elaboration of a list of infrastructure projects, as well as tools for their implementation
- Institutional and regulatory framework for infrastructure development to ensure future cluster

## CONCLUSION

However, the experience of developed countries shows that an important feature of the directions of cluster policy, the aim of which is the development of clusters within the definitely location (region, country) is the lack of need to create a new additional tool of governance. In this case, cluster policy is merely a new way of using an existing public management tools. In particular, the implementation of specific activities for the development of clusters can be determined by the place and role of the cluster policy of the integrated government economic or industrial policy. For example, in most European Union countries cluster policy applies to innovation policy (Khachirov, 2014). Being inherently synthetic, innovation policy focuses on the target orientation and coordination of industrial, scientific and technical, regional policies and policies of support of small business. A cluster approach in this case, provides systematized and improved innovation component within specified areas and renders them organic introduction in innovation policies of the state. While an important component of the cluster approach is the involvement of the newly established development institutions, mechanisms to support innovative small and medium-sized enterprises, technoparks and business incubators.

In turn, activities aimed at the development of the cluster or the cluster initiatives are coordinated through the efforts of public authorities, businesses and the scientific community with a view to the development of

clusters within a particular location. Because this interpretation is rather abstract, it seemed the use of the term “cluster project which implies a sort of global investment project whose goal is to Stepanov:

- Solving common to all cluster members problems overcoming barriers to competitiveness
- Integration of cluster members (including potential)
- Development of innovative components (technology, marketing, finance, etc.)

The main objective of the cluster of projects is the establishment and maintenance of mutually beneficial relations based on the production and consumption of and synergies to achieve Pareto efficiency. Allocates many clustered implementation many projects, all of which can be divided into several types: the development of social capital; promote the expansion of companies in the cluster; promotion of innovation and diffusion of technology; training; commercial partnership; political lobbying (Proskura, 2012).

Thus, it becomes clear that implementation of sound economic policies for industrial development, focusing on the use of the reproduction of the imperatives of a modern industrial economy, can be carried out on the basis of existing methods and mechanisms of governance. An important aspect of this trend is the correct organization of complex individual methods and mechanisms. So, in Fig. 2 the scheme of realization of industrial policy, the centrepiece of which is to stimulate the development of vertically integrated entities.

From this perspective, the central element of industrial policy must be the cluster design. In particular, should be the most promising for a specific territory industry whose development is carried out primarily by natural means. And production have high potential for combining with other economic activities. In order to develop these industries should be clustered project, taking into account the interests of business and society. In turn, the clustered implementation of the project will lead to the emergence of cluster effects, enabling expanded reproduction and socio-economic development of society. In general, thanks to the implementation of the scheme will be provided by strengthening the natural role of the industrial sector of the economy in the modern economic reproduction.

#### **IMPLEMENTATIONS**

Therefore, the implementation of state policy in the area of stimulating enlarged economic reproduction,

based on integration effects, should include the development of specific mechanisms and instruments aimed at forming and developing economic clusters as the most efficient (in terms of maximizing socio-economic effects) forms of spatial and economic integration. Addressing these issues with the methodological and organizational perspective will enhance the effectiveness of state industrial policy.

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