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# Innovation Development Management of the Economy of Bashkortostan

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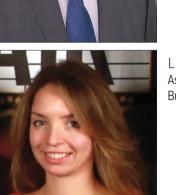
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The main prerequisites determining the need for innovative development of the Republic of Bashkortostan, are the decline in production and the deterioration of economic parameters; mainly raw material orientation of the economy; imperfection of the industrial structure, intra-sectoral and territorial imbalances in the economy; low proportion of the production of the final product; weak competitiveness of products; depreciation of fixed assets; decrease in the quality of natural resources.

In 2010, 86 companies and organizations were involved into innovation activity in the Republic of Bashkortostan. Bashkortostan occupies the fourth place on this indicator among the republics and regions of the Volga and the Ural Federal District (FD) after the Sverdlovsk Region (122 enterprises and organizations), the Republic of Tatarstan (111) and the Nizhny Novgorod region (105). By number of created advanced production technologies Bashkortostan significantly inferiors subjects of the Volga and the Ural Federal Districts. In 2010, in the republic 4 advanced production technologies were created (12th place among the subjects). The largest number of advanced technologies was established in Sverdlovsk (52), Nizhny Novgorod (37) and Chelyabinsk (37) regions. According to the number of advanced manufacturing technologies used Bashkortostan is in fifth place. In 2010, 5673 advanced technologies have been used in the republic. A large number of advanced technologies were used in the Nizhny Novgorod, Sverdlovsk, Samara and Saratov regions. These subjects are the most active and efficient in terms of creation and use of innovative technologies.

In the industrial sector of the Republic of Bashkortostan there has been an increase of innovation activity in recent years. For example, in 2000-2010, in the republic the number of industrial enterprises producing innovative products, increased by 51.2%, producing production, newly introduced or exposed to significant technological changes in the last three years - by 56.8%, while the number of companies which produce products, undergoing improvements for this period decreased by 15%.





In 2010, in the Republic of Bashkortostan, the share of companies and organizations involved in innovative activities in the total number of surveyed enterprises and organizations was 11.1%. In comparison to the average republic level this index in the manufacturing sector increased by 6.7 percentage points, in the mining – fell by 6.6 points. In the structure of manufacturing industry of Bashkortostan share of enterprises and organizations engaged in innovation activities in refining increased by 8.9 points, metallurgy – 9.1, mechanical engineering and metal working – 11.5, light industry – at 10, the chemical and petrochemical – on 53.9 points higher than the average for the country. In the structure of innovation-active enterprises in the Republic of Bashkortostan extractive industries account for only 2%. Among manufacturing industries the biggest share have machine building and metal working – 43%.

In the Republic of Bashkortostan in 2010, the bulk of shipped innovative products was manufactured by enterprises of the industry. Organizations of service industry had 3.4% of the total production. The structure of shipped innovative products is unstable. In the 2002-2010 period in Bashkortostan volume of shipped innovative products increased by 7.3 times, including newly introduced or significantly modified products – 28.7, improved – by 1.2 times. As a result, in the structure of the total volume of republic's shipped innovative products the share of newly introduced or significantly modified products increased from 24.2% in 2000 to 92.7% in 2010, whereas the share of improved products decreased from 15 to 7.3%.

In 2009-2010 in the structure of shipped innovative products of the Republic of Bashkortostan the largest share was accounted for the significantly changed and newly introduced products. A substantial increase in the proportion of innovative products in the total volume of production of the Republic was due to the high rate of introduction of new techniques and technologies, eliminating the production of other products, the share of which in 2000 accounted for 60.8% of the total volume of products shipped.

Our calculations show that in the Republic of Bashkortostan in 2000-2010, the expenditure on technological innovation has increased by 11.3 times, including expenditure on research, development, design of new products, services and methods of production (transfer), new production processes - by 7.8 times, the cost of acquisition of new technologies, machinery and equipment, software, associated with technological innovation – by 10, 6 times, the cost of human resourses training and prepatarion related to innovation - by 4.2 times, other costs - up to 19 times. During the reporting period the structurally highest share (in different years from 45 to 76%) of the costs accounted for the acquisition of machinery, equipment and technology. Development of own innovations consumed significantly less resources. This was due to the fact that innovative enterprises and organizations of the republic mainly introduce innovation created in other regions and countries. For example, in 2006 the cost of own development has increased significantly and amounted to 44.8% of the total costs. In the future, this cost decreased in absolute terms by more than 2 times, amounting in 2010, 18.7% of the total expenditure on innovation.

In the Republic of Bashkortostan in 2000-2010, the amount of shipped innovative products and services and the cost of innovation activity

tended to grow with some deviations from the general trend. During this period, the volume of shipped innovative products increased by 13.3 times, the cost of innovation activity - by 11.3 times. Dynamics of shipped innovative products to 1 RUR of the cost of innovation is unstable: it ranges from 5.3 rubles. in 2000 to 1.8 rubles in 2004 and from 5.7 rubles in 2005 to 2.2 rubles in 2009 In 2010, there was another increase in the coefficient to 6.2. The instability of the dynamics in the course of time is due to the innovations' implementation and development time lag.

In the Republic of Bashkortostan, the main direction of innovation costs by type of innovation is the implementation of product and process innovation. Thus, in 2006-2010 in the republic more than 60% of expenditure on innovation had been carried out in order to ensure process innovations based on the use of new manufacturing equipment, new methods of organizing production process, or their combination, as well as on the results of research and development. In 2010, the significant ammount of the costs (60.8% of the total) belonged to the share of product innovations, including the development and introduction of technologically new or improved products. The cost of marketing and organizational innovations were insignificant and amounted to about 1% of the total expenditure on innovations.

In the Republic of Bashkortostan during 1995-2010 years the main source of funds for technological innovation were own funds. In the period of 2000-2005 the proportion of funds raised on technological innovation was less than 5%. In 2006 and 2008 the share of other sources of funding in total was 27 and 41%. Other sources almost entirely were financed by borrowed funds (including debt). In 1995, of 16%, accounting for the proportion of funds raised, almost half were from the budgets and extra-budgetary sources. From 2002 to 2009, this source of funding is practically missing. In 2010, significantly increased the proportion of foreign investment in technological innovation and amounted to 13.5%.

The industry of the Republic of Bashkortostan, as well as of significant number of Russian regions, is characterized by the predominance of production means of production over production of consumer goods. Privileged position in the structure of industrial production belongs to asset-intensive industries, labor-intensive industries are not well developed. Weak development in labor-intensive industries (machine building and metalworking, light industry, food, wood industries, etc..) causes the lack of jobs, the continuing outflow of the working population to the side, the deterioration of the demographic situation and the inefficient use of labor potential.

In accelerating the innovative development of economy of the Republic of Bashkortostan, as well as of a number of other Russian regions, modernization of branch and territorial structure of the economy on the basis of a more complete and efficient use of production, labor, natural resources, scientific and technological potential plays an important role. Effective structural shifts in the economy, the elimination of sectoral and regional imbalances, overcoming of resource orientation of industry, control and regulation of monopolies in certain sectors, ensuring a high rate of implementation of scientific achievements, advanced equipment and technology, the accelerated development of industries producing

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competitive end products, are priority areas for innovative economic development of the country.

The most important mechanisms of innovation development of economy of the Republic of Bashkortostan are:

- Overcoming the deep strains in the branch and territorial structure of the Republic's economy by eliminating the existing inter-and intrabranch imbalances;
- Orientation of the sectors of the economy to the new modern high technology and technology based on increasing the activity of innovation in enterprises, the introduction of the latest scientific and technological achievements;
- Ovecoming the raw material orientation of industry on the basis of in-depth industrial processing, mineral, forest, agricultural and other resources, the creation of new productions designed for a high degree of processing of raw materials and production of competitive end products;
- The creation in the republic of new economic structures that unite into a single technological complex variety of production – from raw material preparation to complete processing and marketing of products;
- The organization of new industrial centers ("growth poles"), capable of providing a stimulating effect on the industrial development of the country;
- · Accelerating the formation of a network of small and mediumsized enterprises; diversification of markets;
- The development of public-private partnership in the development of production in the country, social and market infrastructure;
- Providing tax incentives and guarantees to companies engaged in active innovation;

- Organization in the country of training and retraining of personnel in accordance with the terms of the modernization of production;
- Strengthening of the position of the economy of Bashkortostan on foreign and domestic markets through expansion of industrial and agricultural products, in line with international standards;
- The creation of investment potential by attracting domestic and foreign investment, etc.

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