

# Investments in the production of high-tech civil products as a factor in sustainable development of a regional economy

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**Abstract.** The article demonstrates the role of commercialization of the enterprises' innovative potential in the military-industrial complex in ensuring sustainable innovative development of the region's economy. The comparative characteristic of various forms of investment in the enterprises' innovative development is presented. The necessity of developing the market of corporate and sub-Federal bonds is also analyzed.

**Keywords:** high-tech civil products, investment, economy, military-industrial complex, innovation

## 1. Introduction

According to the Concept of Long-Term Socio-Economic Development adopted by the Government of the Russian Federation, Russia is to form a wide layer of innovatively active enterprises in the country [1]. Its share in the total number of enterprises should grow to 40-50% by 2020. At the same time, in the innovative development of the Russian Federation, the leading role is played by the enterprises of the military-industrial complex (MIC). At the moment, most of the basic high-tech and knowledge-intensive branches of the domestic industry are concentrated in the MIC. It forms the basis of the scientific and technical potential of the country, and determine its innovative development, in general [2].

## 2. Materials and Methods

The research relies on the data in the field of regional innovation, scientific, and technological development, as well as on theoretical and practical approaches to the development and management of innovation. The methodological basis of the work consisted of general scientific research methods, namely: systems analysis and management, comparative analysis, statistical, comparisons and generalizations.

## 3. Investments in High-Tech Civil Products as a Factor in Regional Sustainable Development

Innovative activity of the regions is based on the innovative strategy of a particular region, in which it is necessary to take into account external and internal factors influencing the regional socio-economic system. The external factors include the federal innovation and scientific-technical strategy and the corresponding legislation, while the internal resources include territorial resources, trends, and priorities for development.

Regions differently adapt to market transformations, have different opportunities, and accordingly, different levels of innovation activity and investment attractiveness.

In addition, the problems of insufficient resource base of the regions, the lack of effective mechanisms for financing work, and incentives for the design and implementation of innovative development programs are exacerbated in modern conditions. The following factors play an important role: insufficient development budgets, lack of innovative projects, incentives for the development of innovation activities and insufficient development of the innovation infrastructure, as well as insufficient efficiency of the activities of regional authorities, intergovernmental relations, and tax legislation. These and a number of other factors impede the activation of the region's innovation activities. Under these conditions, the commercialization of the MIC enterprises' innovation potential is an important factor in development of the regional economy. At the same time, commercialization can be carried out in several directions. The first is connected with the buildup of high-tech civil products, initiated and maintained at the federal level in the interests of developing priority sectors of the economy (energy, transport, medicine, etc.). Another direction is related to the possibility of using the economic and innovation potential of MIC enterprises located in the region for stimulating innovative development of industry in the region and ensuring its economic sustainability.

At the same time, one of the reasons hindering the creation and dissemination of innovations is the lack of financial resources (investments) for the implementation of projects. In recent years, despite the constant increase in spending on research, development, and technological innovation, the situation remains one of the most difficult in this area. The influence of federal, regional, and local authorities on the intensification of participants' activities in innovation processes is insignificant. Economic entities involved in the process of financing innovation often face the lack of innovative facilities and necessary cash resources at their disposal. It should be noted that large-scale innovative projects are capital-intensive and quite risky, respectively. Investments with less risk bring less income for investors. In other words, both effectiveness and investment risks depend on the structure of innovation [3; 7].

Thus, the innovative development of both regional and national economy as a whole is determined by their investment attractiveness. Investment attractiveness depends not only on the effectiveness of ongoing investment projects, but also on developing the financial market infrastructure, ensuring necessary financial resources. At the same time, comprehensive support for innovation activities should be carried out by both federal and regional government bodies.

Investments into innovative projects by private investors remain an important issue. At the moment, the focus is on the MIC conversion. Plans to increase a share of high-tech civilian products at MIC enterprises automatically imply attracting private investors. Therefore, for the implementation of these projects, a strategy must be developed that would allow attracting investments and realizing the potential of MIC enterprises in the civilian sector.

Thus, the key peculiarity of investment strategies is that both state and private investors are involved in investing in innovative activities at the MIC enterprises. In this regard, we need to take into account the principle of balancing the interests of state and private investors of an enterprise when choosing a form of investment in innovative activity.

Attracting borrowed capitals meets this principle, because it allows to increase the return on equity due to the effect of financial leverage; more than that, the return on assets exceeds the average interest rate on loans. Today, the overwhelming majority of companies in Russia have a high proportion of equity capital compared with borrowed capitals, which hinders the growth of their financial potential.

#### **4. Characteristics of the Financial Market**

To date, the main forms of borrowing are: bank loans and bond loans. Speaking of bank credit, it should be noted its higher cost compared to bonds. So, the average cost of investment loans ranges from 12.5% to 14%. The value of corporate bonds is presented in Table 1 [4]. Their cost is lower than the cost of loans by 2-4 points, as a rule. As a result, corporate bond loans become more attractive, and their volumes tend to grow in recent years. It should be noted that the development of corporate bond

market is also ensured by attracting funds from individuals. According to the Moscow Exchange, individuals opened almost 500 thousand new accounts in the trading system for 11 months of 2018 (200 thousand unique accounts in 2017, 96 thousand in 2016). The previous record for the growth of unique accounts was recorded in 2008 (218.4 thousand). The total number of unique accounts opened by citizens in the trading system was 1.8 million at the beginning of December [5].

**Table 1.** Characteristics of corporate bonds.

Bonds	Maturity date (offer)	Yield to redemption / offer as of January 15, 2019	Coupon size
Gazprom Neft-10-ob	01/26/2021	7.86%	7.6%
Rosneft-001R-04-bob	04/22/2027 (05/03/2023)	8.9%	8.65
Sberbank-001-03R	12/08/2020	8%	8%
GTLK-001R-04-bob	04/06/2032 (04/21/2023)	9.55%	9.85
VEB RF-001R-12-ob	12/21/2021	9.08%	9.14

From the public sector perspective, this tool (if compared to stocks) allows one to raise capital without diluting the existing portfolio and eliminates interference with the enterprise management. At the same time, this tool allows investors to diversify assets and get a guaranteed income, higher compared to the deposit. This tool allows one to get profitability in conjunction with the ability to quickly manage an investment portfolio by selling bonds in the secondary market, reducing illiquidity risks, as well as counterfeiting risks due to the non-documentary form of issuance.

It should also be noted that, in terms of yield, corporate bonds are comparable to federal loan bonds. This conclusion is confirmed by the values of yield on government bonds, presented in Table 2 [4]. In the case of providing state guarantees on bonds of MIC companies, these values may be even more comparable, which would make corporate bonds even more attractive.

**Table 2.** Characteristics of federal loan bonds.

Bonds	Maturity date	Yield to redemption / offer as of January 15, 2019	Coupon size
OFZ-26207-PD	02/03/2027	8.32%	8.15%
OFZ-26219-PD	09/19/2026	8.32%	7.75%
OFZ-25083-PD	12/15/2021	8.01%	7%
OFZ-26214-PD	05/27/2020	7.67%	6.4%

The placement of corporate bonds solves the problem of attracting investments in order to increase high-tech civilian products in the interests of developing both the MIC enterprises and priority sectors of the economy (energy, transport, medicine, etc.). However, their placement does not solve the problems of financing the development of the regional economy. Small and medium-sized enterprises of the region, involved in the process of commercialization of the innovative potential of defense enterprises, not only do not have the opportunity to attract investment resources through the placement of corporate bonds, but for frequent and credit resources. Under these conditions, the support of their innovative activity on the part of regional authorities acquires a special role. At the same time, the regions themselves experience serious difficulties in covering budget commitments. Placement of subfederal bonded loans can be a serious factor in the innovative development of the territory and ensuring its financial stability. This form of attracting investment resources is becoming more common among the regions of the Russian Federation. The main characteristics of sub-federal loans of a number of territories are presented in Table 3 [4].

As we can see, their yield is very close to the yield of federal bonds, which makes them investment-attractive, with an insignificant level of risks. More than that, their placement allows one to attract the necessary investment resources for the sustainable development of regions.

**Table 3.** Characteristics of bonds in Russian regions.

Bonds	Maturity date (offer)	Nominal cost	Coupon income	Yield % per annum
Republic of Karelia 35017	04/08/2020	550	16.8	7.70%
Khakassia 2015 ob. 35005	10/11/2020	1000	30.54	7.77%
Mordovia 34002	10/14/2020	800	27.42	7.53%
Oryol Region 2017	11/26/2022	1000	27.74	7.61%

## 5. Conclusion

Thus, we can conclude that the commercialization of the innovation potential of MIC enterprises is the most important factor in the innovative development of not only the relevant industry, but also the regional economy. Issuance of corporate and subfederal bonds should be considered as the most effective tool for attracting investments. A low level of risks and a high level of profitability of these bonds will make it possible to attract investments both in the MIC enterprises and in the regional economy.

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