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## On the issue of public-private partnership in housing construction in the Belgorod region

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**Abstract.** The article discusses the opportunities and prospects for the use of public-private partnership (PPP) tools for the implementation of investment projects in housing construction in the Belgorod region. The application of the PPP concept will allow to attract additional investment resources to the region, will provide an opportunity to strengthen its competitive advantages and unleash innovative potential.

### Introduction

State institutions of social development as a powerful engine of all social-economic processes in the country increasingly face problems which solution requires the involvement of significant resources: financial, managerial, human, and others.

In this regard, the experience of applying the concept of public-private partnership in regional housing construction is of particular interest, as one of the most important areas of constructive interaction of business and government structures for solving the essential socially important task - the provision of housing.

In accordance with the order of the Government of the Belgorod region of February 1, 2016 No. 35-rp, the Department of Economic Development of the region based on data from local authorities and executive authorities of the region created a list of projects with use of public-private partnership and municipal-private partnership mechanisms implemented and planned for sale on the region territory (Order of the Department of Economic Development of the Region of January 24, 2019 No. 56-pr «On Approval of the Register of Projects»).

As of January 1, 2019, 52 projects totaling more than 26 billion rubles were included in the Register. «The region has gained a considerable experience of state support of investors, within which, in accordance with the current legislation, assistance is provided to allocate land plots for the construction of production facilities, the state support is implemented in the form of reimbursement of cost part to pay interest on attracted credit resources from federal and regional budget resources, taxes privilege on



the assets of organizations, as well as state guarantees of Belgorod region for the enforcement of credit obligations by the regional business entities, the regional property is also provided to the enterprises participating in the regional target livestock development programs as a mortgage security for the attracted credit resources»[1].

Despite the fairly significant experience in the use of opportunities and tools PPP in various sectors, in the field of housing this form of interaction between business and government is still rare. Currently, the main trend in resolving the “housing problem” and overcoming the negative consequences of its unresolved is a building commercial housing for sale into property, and the development of the rental market is on the periphery of the methodological understanding and practical activity of the state (municipal) government and business structures. In this situation, a significant part of rental housing is not regulated by the state and is actually “in the shadow”, with the state regulatory tools such as “restructuring the demand for housing and price policy of developers (financial and credit support for developers, the land provision, engineering support, etc.) are actively implemented in relation to the housing market of the Belgorod region. In connection with the relative novelty of this method of market regulation and the lack of knowledge of the processes of PPP functioning in the housing markets of Russian regions, the definition of the conditions for the development of its mechanism becomes topical [2].

### **Goal, tasks, methods of study**

Works of scientists in the field of social and economic substantiation of the prospects and areas of functioning and development of interaction between the state and business served as a methodological basis for the study of the public-private partnership development problems in the field of housing construction.

The study used the methods of situational, structural-functional, economic-statistical, comparative analysis, tabular and graphical interpretation of empirical-factual information. The main objective of the study was to identify the prerequisites and opportunities for the use of PPP tools in the implementation of housing projects in the region.

### **Theory of the question**

«Public-private partnership (PPP) in Russia began to develop in the mid-2000s. The first round of rapid development of PPP is associated with projects financed by the Investment Fund. In parallel with the projects of the Investment Fund, concession projects developed. The global financial and economic crisis has put in jeopardy the implementation of individual PPP projects in Russia because both the government and private business have become even more cautious in investing funds. At the same time, the state and private business need for the development of infrastructure projects has not disappeared. That is why the issue of finding new PPP forms has become topical» [3].

Currently «there are many definitions of public-private partnerships. However, giving a single, comprehensive definition of a public-private partnership is problematic. The nature of public-private partnerships depends on many factors, such as a degree of development of market relations, national characteristics, industry specificity and others. In order to reveal the essence of a public-private partnership, it is important to identify its key characteristics or characteristics, which allow to distinguish PPP from other types of state-business interactions» [4].

PPPs in the regional housing market should be understood as “forms of long-term mutually beneficial cooperation between state and private partners in order to implement the objectives of the region’s housing policy, level increase of housing affordability, and housing management quality. Such cooperation is achieved through the distribution of functions, risks and responsibilities, the sharing of private and public resources among the participants [2]”.

“From January 1, 2016, the Federal Law No. 224-FZ of July 13, 2015 “On Public-Private Partnership, Municipal-Private Partnership in the Russian Federation and Amendments to Certain Legislative Acts of the Russian Federation” [5] came into force.

The adoption of a PPP law, together with an improved concession legislation, creates effective tools for involving the private sector in the public infrastructure development.

“Constructive interaction between business and government structures is an essential condition for the sustainable functioning of a market economy. The nature of this interaction, methods and specific forms may vary significantly depending on the development goals of a country at a particular stage, as well as national models and the maturity of market relations. At the same time, the state invariably has responsibility for the performance of public functions related to national interests, safety, quality of life, competitiveness of the country, but attracts for their implementation both resources of budgets of various levels and private business capital in the form of public-private (PPP) or municipal-private partnerships (MPP) [6]”.

### **Experimental part**

The construction industry is one of the most important in the economy of the Belgorod region. In 2018, more than 10.3 thousand new apartments with a total area of 1215.5 thousand m<sup>2</sup> were built and commissioned in the region, which almost corresponds to the data for 2017. The share of housing built by the population at the expense of own and borrowed funds in the total amount of housing commissioned was 84.5%. In 2019, it is planned to commission 1,400 thousand m<sup>2</sup> meters of housing, of which 880 thousand m<sup>2</sup> - individual.

Providing financial support for the purchase or construction of housing to certain categories of citizens in our region is carried out as part of the federal target program “Housing” for 2015–2020 - this is assistance in purchasing housing for young families, as well as for certain categories of citizens. In 2019, 395.3 million rubles from the federal budget provided for the provision of social benefits to 189 young families in the Belgorod region. Also in 2019, 93.4 million rubles were provided for the provision of housing to certain categories of citizens that will improve the living conditions of 93 citizens.

Now on the territory of the Belgorod region, 44 construction organizations are engaged in the construction of multi-family housing. 134 housing projects are being built - these are more than 10 thousand apartments. Of the total number of developers, 30 of them attract citizens' funds to the construction. Equity participation is due to federal law 214-FL “On participation in the shared construction of apartment buildings and other real estate objects and on amendments to certain legislative acts of the Russian Federation”.

However, among the standard set of social-economic problems in the region there remains the problem of providing the population with affordable housing with its multiplication projections on the demographic situation in the region, on its migration component, on the region labor supply and, ultimately, on the economy state as a whole.

Today, the housing market is stagnant, and it is associated with a huge debt overhang of the population. The population of the region is credited by 110% - and for individual housing construction programs, when people sell land, because they cannot finish building houses, and banks select many mortgage objects because of delays. Unfortunately, due to the fact that the construction industry is “sinking”, there are reductions in construction industries. The northerners, who used to come to the Belgorod region earlier, now prefer other neighboring cities of the Central Federal District: Kursk or Voronezh, where property prices are much lower. The average cost of one square meter of housing in the secondary market is now about 50 thousand rubles - and this is not the highest price. For residential complexes such as “Paris” and other more or less elite new buildings, the average price is 80-90 thousand per square meter.

These statistics show that the housing problem in the region is quite acute. Its solution at the expense of the population funds is hardly possible, since the share of residents in a region with cash incomes below the subsistence minimum in 2019 was 8.6%, and the share of the population with money incomes above 27 thousand rubles per capita is at the level of 23.7% [7]. Thus, most of the region residents do not have the means and opportunity to purchase an apartment or take a mortgage loan due to low

incomes. Such a situation is sufficient for its correlation with the territorial balance of migration and labor insufficiency.

The region is characterized by a migration decline in the population within Russia and loses 3-4 thousand people annually. The structure of migration is especially unfavorable. More than half (52.5%) accounted for people with higher and secondary special education. Moreover, mainly young people of reproductive age are leaving [7]. Accordingly, the unrecorded losses are even greater: those who leave are acquiring families in a new place, which means that the demographic negative of the present time is transferred to future periods. In addition to the obvious demographic damage, the outflow of labor resources adversely affects the quantitative and qualitative characteristics of the regional economy.

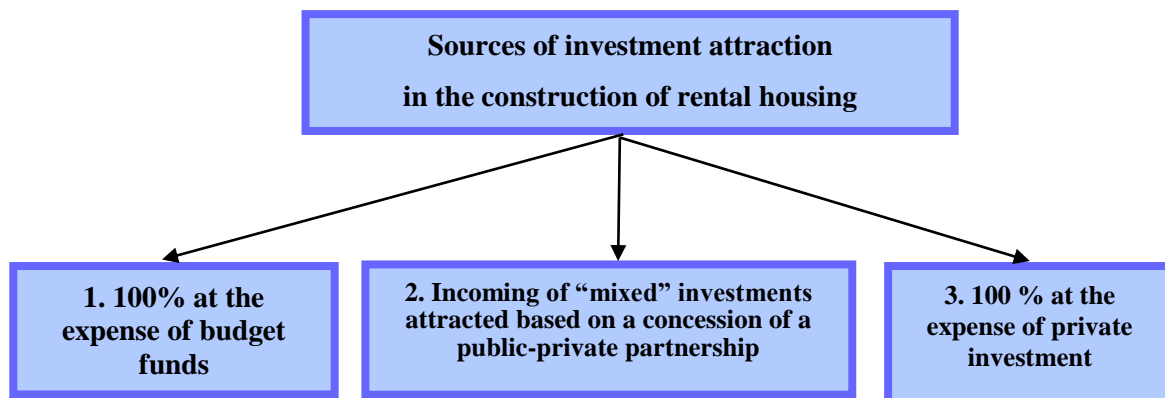
To solve these problems, not least of all, a significant factor is the affordability of housing adequate to the social-cultural needs, financial opportunities and life plans of a person. The real estate market offers two solutions to the issue: the acquisition of home ownership or its rent.

Meanwhile, in developed countries, the share of housing owned by individuals is approximately equal to the share of rental housing. Thus, up to 30% of housing is rented in the USA, about 45% in France, and more than half in Germany - 55%. Not complimenting the United States and Western Europe, it should be noted that rental housing is an immanent quality of the organization of the social and housing sector and a significant segment of the real estate market that is able to damp potential potentially negative social and economic processes and phenomena.

In Russia, the share of apartment buildings is approximately 70% of the total number of housing, while the rented housing in them is only 35% [8]. Low level of rental housing is largely the result of free privatization carried out in Russia, when tenants owned „state-owned “apartments. At present, the social policy of government subsidies for rent does not stimulate people with low incomes to change their living space, that limits the development of the real estate market, leads to a shortage in the housing and rental market and, consequently, to high housing prices.

One of the ways to solve these problems can be the construction of specialized “commercial” housing, intended for rental, in order to form a legal rental market at affordable prices. This type of real estate was previously in Russia and still exists in European countries under the name “commercial apartment building”. Commercial apartment building is a residential building that is being built or created for the purpose of obtaining income by the lessor; housing intended for citizens in long-term temporary use with a pre-specified set of the necessary number of housing and communal or other services. In the list of the main issues that arise when discussing the possibilities of building this type of housing, is the source of funding.

Figure 1 presents three options for investment attracting in the construction of commercial apartment buildings: at the expense of private investment, at the expense of budget funds, based on public-private partnership.



**Figure 1.** Sources of attracting investment in the construction of commercial apartment building

The prospects level of the first option can be formulated as follows. Commercial apartment building is an asset that guarantees profit, and therefore should be attractive, first of all, for private capital. However, in the current economic situation and taking into account the Russian mentality, the high cost of construction, long payback periods and, accordingly, the low profitability of such business projects reduce their attractiveness to an unacceptable level.

According to experts, attracting private investors is associated with certain problems and this type of real estate is not popular among developers and building owners because of the long payback period, which is several times higher than the payback period of apartment buildings where apartments are intended for sale in the real estate market. . If the payback period for the construction of a residential complex or office center is 4–7 years, then the expected payback period for a profitable house is about 20 years, that is, the yield will be 5–6% per year. However, high returns are associated with increased risk. If the market grows, you can earn a lot and quickly, as well as lose everything in a moment of crisis.

The optimal way out of this counterfactual situation - diversification of investments, that is, placing part of the investment portfolio into reliable instruments that do not generate high returns, but guarantee its stability. Thus, the potential of attracting private investment in the construction of commercial apartment buildings is most promising for the transformation from the first to the third variant of the proposed scheme.

However, it should be noted that the private investment option is quite viable in a situation of reduced demand for home ownership due to competition from the rental housing market, but for this, it is necessary to remove it from the “shadow” and form economically reasonable prices for rental housing. Real competition formalization in the real estate market between the segments of "property" and "rent" occurs when the cost of the consumer to maintain their own housing and rent will become comparable values.

The historical experience of Russia and the modern practice of Western countries show that the cost of renting an apartment should not exceed 20% of the total family income. Since the average per capita cash income of the population of the Belgorod region in 2018 was 27,090 rubles, the family with two working members had to pay about 10 thousand rubles per month to rent an apartment [7]. If we proceed from the structure of household consumer spending, where the share of payment for services in 2018 was 22.5%, then the rent will remain as before.

The second investment option, when the municipality builds houses with its own money and provides citizens in need (a kind of hostel, only more comfortable), - is the antithesis of the first, since the motivation basis is not a commercial, but a social component.

Municipalities as investors do not need to buy real estate at commercial prices, for them the price is actually the cost of construction, which in the region, for example, makes up almost 50% of the market value [9], therefore, the profitability of investments in profitable houses for municipalities increases. This simultaneously expands the functional capabilities of local authorities in solving priority social-economic tasks through the mechanism of subsidizing certain categories of the population living in such houses:

- young families in the period of raising the “labor status” of family members and achieving the level of income that allows them to take a mortgage loan;
- public sector employees;
- large families, for the period while the family has such status;
- other categories of citizens who need to live in such houses.

At the same time, the problem of labor mobility throughout the country should be addressed to create new industries in the regions, but it is unlikely that in the near future the budget funds will solve this problem on a sufficient scale.

The third option - investment based on public-private partnership - synthesizes socially oriented state activities and economic pragmatism of business.

The main possible incentives, motives and interests of private investors to participate in the construction of commercial apartment buildings have already been outlined above in the general thesis:

diversification of capital and reduction of investment risks. Moreover, such processes and activities have precedents of approbation. For example, large investors place funds in bonds of state structures with a yield of 5–10%, that is quite comparable with profitable houses.

In addition, large portfolio investors invest for a long time, at least 10 years, and in such long periods of real estate rises by about ten percent a year, i.e. private capital produces total income up to 15% per annum.

Moreover, in contrast to the property sales market, investments in the properties of the rental housing market should be considered as a more reliable tool that guarantees the stability of income, both for objective and for subjective indications. First, apartments will be rented in any situation, since this satisfies one of the primary (or A. Maslow's basic) needs of any person - the need for housing; secondly, the state of the housing problem in Russia creates a stable and guaranteed demand in the rental market. Moreover, with a limited number of land plots in the urbanization zone and high land prices, the ability to save the built object and earn income in the form of rent appears to be the most attractive. In addition, state participation in economic projects of any kind, directly or indirectly, in most cases acts as a guarantor of their implementation, that is consolidated with the interests of business.

Thus, the most effective method of attracting investment in the construction of commercial apartment buildings should be the method of public-private partnership on the following grounds:

- this commercial type of real estate is intended primarily for income generation. The organizational and economic axiom of a market economy is the position that the greatest profitability with the lowest operational costs can be obtained by managing this property by an owner who is interested in maximizing profits and optimizing costs.

At the same time, investment attractiveness and opportunities for expanding the construction of rental housing directly depend on their profitability. Consequently, the main investment in the construction of rental housing should come from private investors;

- the mass distribution of this type of housing will allow to solve a number of social-economic problems: create conditions for improving the provision of housing to the population, improve the labor potential of the regions, increase the investment attractiveness of the territories, improve the demographic situation in the country, increase tax revenues to budgets of all levels by reducing the “shadow” rental market, create economic instruments impact on the real estate rental market.

In organizational and economic terms, this involves the actions of state power structures and management to create favorable conditions for private investment in the rental-housing sector.

As it is known, the implementation of PPP projects in housing construction is accompanied by a variety of risks in the areas of supply, finance, production, construction projects, and the choice of investment source. The main ones include the following: “the rise in prices for building materials; loans arrears of construction organizations; high level of payment for a commercial loan; high degree of depreciation of fixed production assets; low level of labor productivity and production efficiency; lack of qualified managers and workers; weather; accidents at construction sites; unfair competition; changing market conditions; confidential information leakage, etc.”[10].

It should also be borne in mind that the market value of residential real estate tends to annual growth of 10–12% per year. Consequently, with the annual revaluation of fixed assets, there is an opportunity to increase the value of the assets of the company engaged in the construction of rental housing. The increased value of assets allows you to further issue shares and attract additional private investment.

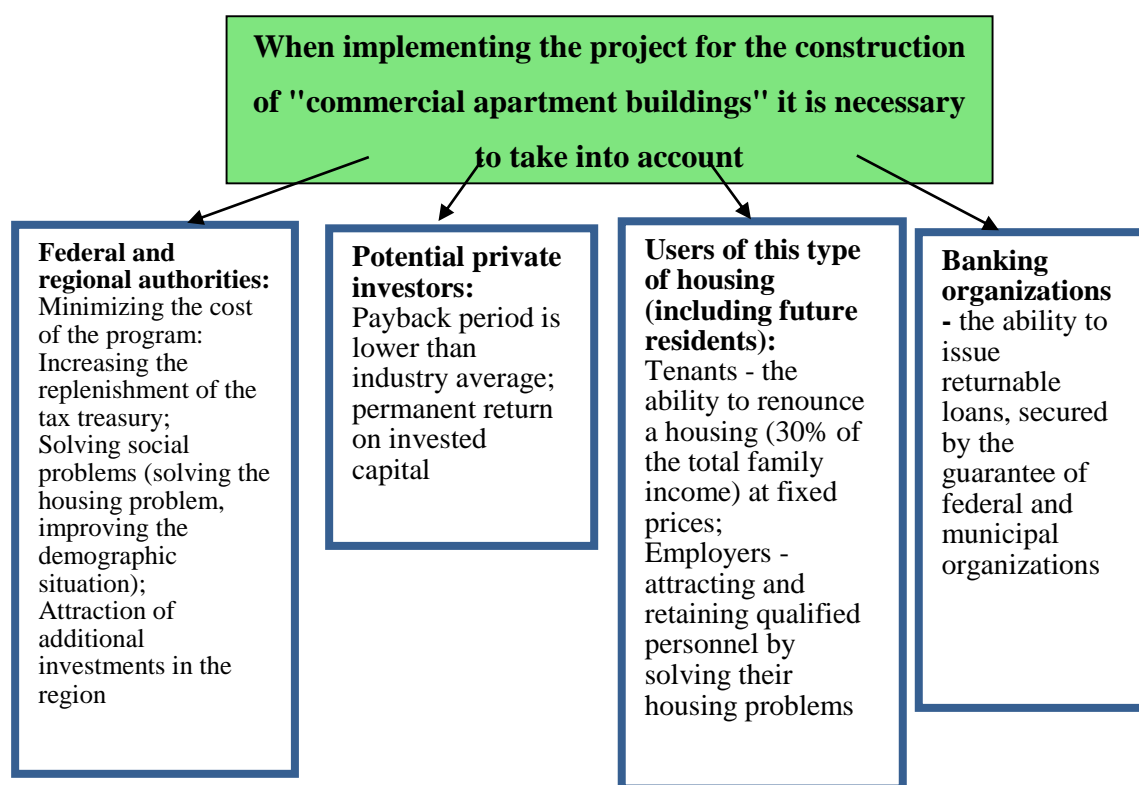
In terms of meeting social, economic, commercial and consumer interests, the main potential project participants are identified:

- federal and regional authorities;
- private investors;
- users of rental housing;
- banking organizations and financial institutions.

The main interests of the subjects of this project are presented in figure 2.

In the current economic situation, the main social beneficiaries are the state and the population [11], but if you implement such a project entirely at the expense of budget funds, in this case there are additional risks of not completing the project due to the possible lack of funds in the budget.

If we talk about the commercial interest of private investors, i.e. about the economic efficiency of the project, it should be noted that the profit from investments in real estate in Russia is about 2-3 times higher than the average for Europe. Thus, the average profit from one project in the construction services market in Russia amounts to 15%, whereas in Europe it does not exceed 5% [7]. In addition, in this aspect, the Russian real estate market is ahead of European markets in terms of profitability. For example, the profitability of real estate in London is at the level of 5%, in Warsaw 8%, in Moscow already 20–30%. Due to the high level of profitability, the intensive growth of investments in this business continues; consequently, the volumes of commissioned premises for various commercial purposes are increasing.



**Figure 2.** The main subjects interests of the project for the construction of „commercial apartment buildings“

Now Russia is recognized as the most attractive place to invest in the construction and purchase all types of commercial real estate. This market has great potential for foreign investors.

Nowhere in Europe, there is no such market volume as in Russia, where more than 75 million m<sup>2</sup> of real estate is built annually. The average rate of return in Europe for the investor is 8%, and in Russia - 15–30% [12].

Accordingly, if Russian private investors refuse to diversify their activities and build, besides commercial, residential rental real estate, then potential investors should be sought in the international market, where private investors invest their funds at 5–8% per annum.

Thus, it should be concluded that the substantial constructive and social-economic productivity of the proposed project does not limit the possibilities for its practical implementation.

## Summary



The formation of an effective economic policy in the region, an increase in its investment attractiveness and competitiveness presupposes, first of all, the creation of conditions for “effective interaction between the state and private business” [13]. The PPP mechanism contributes to the implementation of the country's socio-economic policy at the proper level, ensuring the rent level acceptable to the population, stabilizing relations with landlords by concluding long-term contracts, as well as building partnership and equal relations between interested parties.

In our opinion, the introduction of PPP projects should increase the availability of rental housing for the economically active population of the region. At the same time, for the successful project implementation for the large-scale development of the rental housing market, the following priorities should be solved: the creation of a scheme of interaction between the state, private investors and other stakeholders in the construction of rental housing; creating an enabling environment for private investment in rental housing; balanced development of new and previously built-up areas (dilapidated and emergency housing) by organizing territorial development; functions separation of all project participants.

Thus, the achievement, together with representatives of business, of socially significant goals in the field of housing construction, will allow to fully implement the PPP concept.

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