Residential real estate market as an indicator of sustainable development of the region
(on the example of Pskov region)

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Abstract—The article investigates development of the primary residential real estate market and the housing affordability coefficient in the Pskov region. It was concluded that the primary market for residential real estate in the region is actively developing. Such indicators as the average area of apartments, the percentage of houses built of brick are higher than the average in Russia. The relevance of this study lies in the fact that the transition to a new system of financing of housing construction will lead to an increase in the cost of construction and thus increase the price of supply of 1 sq. m. Taking into account that real incomes drop, it is clear that the coefficient of affordability of housing will increase. The question is: how many people will be able to buy a house.

Keywords—real estate market, the national project “Housing and the urban environment”, the mortgage, the price of 1 sq. m., the volume of new housing supply, housing affordability index.

I. INTRODUCTION

One of the components of sustainable economic development is the social component. The successful development of society is connected with the provision of residential real estate. [1,2,3]

Sustainable real estate is a crucial practice implemented by successful countries. [4]

The housing issue remains one of the most socially significant issues, it requires an immediate solution and constant attention from the state in our country. [5]

The national project “Housing and urban environment” was developed and adopted in 2018 to solve the housing problems of citizens. The national project includes such parts as: "Mortgage", "Housing", "Formation of a comfortable urban environment" and "Ensuring constant reduction of the housing stock unsuitable for living". [6]

The aim of the study is to analyze the primary market for residential real estate in the Pskov region (the dynamics of the current construction, the dynamics of changes in the price of the supply of new buildings, assessing the mortgage activity of the population and to conclude that it is possible to increase the availability of housing for residents of the region. On the basis of the analysis to formulate possible models for the development of the housing sector in the Pskov region.

Analytical data are based on materials from the official sites and project developers declarations, public register of issued building permits, and the reporting of official statistical data of Rosstat, Federal state statistics service, Bank of Russia.

The analysis, synthesis methods have been used in the research.

II. ANALYSIS OF INDICATORS OF THE RESIDENTIAL REAL ESTATE MARKET OF THE PSKOV REGION

Construction of residential real estate in the Pskov region shows a positive trend. In 2018, 233,600 square meters were commissioned, which is 15.5% more than in 2017. The region occupies 67th place among 85 regions of the Russian Federation in terms of housing commissioning. The region took 15th place, according to the dynamics of absolute growth of housing commissioning in 2018, and 6th place—in the dynamics of relative growth.

There were 47 houses, in which there are 4,973 residential apartments with a total area of 260,551 sq. m in the Pskov region at the end of 2018 at different stages of construction.

![Dynamics of changes in the volume of current construction in the Pskov region (in thousand sq. m.)](image)

Source: compiled by the authors.
Construction of residential real estate in the Pskov region is carried out under permits issued in the period from 2011 to 2018. The maximum volume of construction - 38.7% - falls on objects with a permit issued in 2017. The maximum volume of commissioning, according to the project declarations, is planned in 2019 with an indicator of 48.7% and 2020 – 41.9%. The period of transfer of commissioning of residential facilities is an indicator, characterizing the effective management of the construction industry in the region. In the Pskov region this figure is 2.8 months, while the average in Russia, according to the statistics in January 2019, was 5.6 months.

The main volume of construction (62.3%) falls on houses with 9 to 12 floors, which allows to integrate new residential buildings into the overall architectural concept of the city. In Russia, the maximum volume of construction is carried out with the number of floors above 18. This leads to transport and social problems, as well as to the violation of the architectural complex of the city. Brick is the most common material of the walls of houses under construction in the Pskov region. 33.8% of the total floor space built belongs to the buildings made of brick. In general, in the Russian Federation, the share of brick construction in terms of the area of residential units in houses under construction is 18.7%.

The average area of a residential unit under construction in the Pskov region is 50.4 m². In the Russian Federation, this figure is 49.2 m².

According to data in January, 2019, the average price of supply in the market of housing under construction in the Pskov region amounted to 38241 rubles per square meter, in the Russian Federation – 70 332 rubles.

Pskov region ranks 20th among 85 regions of the Russian Federation in terms of the mortgage rate. According to the statistics in December 2018, the mortgage rate in the primary residential real estate market was 9.43%, which is 0.37% lower than during the same period in 2017, and the weighted average mortgage rate was 9.49%, which is 1.18% less than in 2017, and 2.66% less than the corresponding value in 2016 [7].

In 2018, residents of the Pskov region were granted loans in the amount of 41 082 million rubles, and the share of mortgage loans amounted to almost 21%, which is 3.5% more than the corresponding value in 2017 and 3.1% more than in 2016.

According to the Bank of Russia, in 2018 the total volume of mortgage loans in the Pskov region amounted to 8 829 million rubles, which is 45.6% more than the level achieved in 2017 and 90.6% more than the same value in 2016. The average size of the mortgage loan in 2018 amounted to 1.63 million rubles, which is 5.2% more than in 2017, and 14.2% more than in 2016.

Affordable housing is housing of a certain quality and size that a family with a certain level of income can purchase at market value [8].

The housing affordability ratio is a classic indicator of housing affordability. Housing affordability ratio (housing price to income ratio) is calculated as the ratio of the average cost of an apartment of 54 sq. m. to the average income of a family of 3 people per year. The value of this indicator corresponds to the number of years during which the family can save up for an apartment, assuming that all the received cash income will be saved up for the purchase of an apartment [9].

TABLE I. CLASSIFICATION OF HOUSING MARKETS BY ACCESSIBILITY CRITERION

<table>
<thead>
<tr>
<th>Market category</th>
<th>Value of c</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing affordable</td>
<td>Up to 3 years</td>
</tr>
<tr>
<td>Housing moderately unaffordable</td>
<td>From 3 to 4 years</td>
</tr>
<tr>
<td>Housing seriously unaffordable</td>
<td>From 4 to 5 years</td>
</tr>
<tr>
<td>Housing severely unaffordable</td>
<td>More than 5 years</td>
</tr>
</tbody>
</table>

Source: www.demographia.com

TABLE II. THE FACTOR OF AVAILABILITY OF HABITATION IN THE PSKOV REGION

<table>
<thead>
<tr>
<th>Year</th>
<th>Average price of 1 sq. m, RUB</th>
<th>Per capita income, RUB</th>
<th>Housing affordability ratio (year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>38500</td>
<td>21917</td>
<td>2.63</td>
</tr>
<tr>
<td>2017</td>
<td>38554</td>
<td>23144</td>
<td>2.5</td>
</tr>
<tr>
<td>2018</td>
<td>38003</td>
<td>23320</td>
<td>2.44</td>
</tr>
</tbody>
</table>

Source: Compiled by the authors

The analysis of the housing affordability ratio allowed us to conclude that housing in the Pskov region is affordable.

The crucial role of targeted state influence on the state and dynamics of the real estate market is shown by the Russian experience in the formation of the real estate market, as well as the history of the formation of market relations in economically developed foreign countries [10]. The formation of prices for residential real estate in the current year will be dominated by internal factors in the market, such as changes in the Federal law "On participation in the shared construction of apartment buildings and other real estate and on amendments to some legislative acts of the Russian Federation" dated 30.12.2004 (№ 214-FZ) [11;12]. The increase in prices for new buildings,[13] which is recorded in many cities of the Russian Federation has been provoked by the transition to project financing of the construction market of residential real estate from 1.07.2019. So, in the Pskov region the price of 1 m² in February, 2019 was 39 855 RUB.

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It is worth to emphasize that the real incomes dropped in the Pskov region about 2.9% on average for 10 months of 2018, according to Rosstat. [14]

III. MODELS OF REAL ESTATE MARKET IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT IN THE PSKOV

In connection with the above, the following models of housing sector development are possible to improve housing affordability in the Pskov region.

1. Implementation of preferential mortgage programs. As part of the implementation of such programs, it is necessary to limit the rate of mortgage lending. In our opinion, mortgage interest should not exceed the inflation rate.

2. Introducing a larger number of land plots into economic circulation and possible seizure of unused plots of state institutions and agencies.

3. Model of cost optimization per square meter of housing by reducing the cost of connection to all networks. In this regard, it is possible to release developers from the fee for technical connection. If there are competitors in the market of enterprises supplying electricity, water and heat, it will be possible to reduce the fee for connection to the networks.

It is worth to emphasize, a combination of instruments seems likely to be the most suitable response to institutional factors [15].

IV. CONCLUSION

The increase in the cost of housing, the fall in real incomes, the increase in interest rates on mortgages - all this will lead to an increase in the coefficient of housing affordability. This does not correspond with the national project’s goals.

Thus, the provision of sustainable development at the regional level in terms of the social component is called into question.

REFERENCES


