

# Housing market of Krasnodar region: current conditions and development trends

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**Abstract.** The paper substantiates socio-economic importance of housing construction for the development of the Krasnodar Region, considers the pace of housing development, identifies the determinants of the housing market development in the region. The study focuses at the analyzing of the housing construction market structure and the determining of the prospects for its development in the Krasnodar Region based on the macroeconomic indicators of the socio-economic development of the region taken from official data sources. As a method for studying the determinants of the development of the housing construction market in the region, the observation and collection of factors that impact the socio-economic characteristics of the region were used, which made it possible to identify the main groups of growth factors and containments for development of the housing construction market. For analyzing the structure of the housing construction market, measuring the rate of housing development, the state of mortgage lending, housing market price dynamics, estimating the housing stock by apartment space, distributing apartments depending on the type, technology and cost of construction, a combination of comparative and economic-statistical methods of research were used. In determining the rating of developers of the Krasnodar Region, the method of content analysis of electronic resources containing information about the most construction companies, as well as their performance indicators, was applied. The results obtained in the process of studying the structure of the housing construction market in the region can become an objective basis for determining housing development trends in the Krasnodar Region.

## 1 Introduction

The construction industry plays a significant role in the Russian economy. More than 50% of total investment in fixed assets comes from the construction of buildings and facilities. As a result, the industry generates 6% of total gross added value for the economy as a whole [1].

In 2014 to 2016, the construction industry faced global systemic challenges such as a collapse in oil prices, an introducing of anti-Russian sanctions, cost rising of building

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materials, which led to a decrease in investment activity and a drop in demand for construction projects in the industrial and commercial segments.

It should be emphasized that due to the implementation of state support measures, the main mechanism of which was subsidizing the interest rate on mortgage loans, negative macroeconomic trends practically did not affect the housing sector.

The housing construction market of the Krasnodar Region is one of the largest and most dynamically developing market in Russia. In 2018, the region accounted for about 6.0% of housing built in the country and about half of housing in the Southern Federal District [1].

An analysis of the development of housing construction and development of the territories of municipalities of the Krasnodar Region showed that the housing construction market of the region is being formed and has developed under the influence of various factors.

The main growth factors are: participation in investing in housing construction, net migration of the population due to arrivals from other regions and from outside the Russian Federation (annually about 80 thousand citizens), favorable for living and work climate, developed transport infrastructure, major ports on the coast of the Azov and Black seas, a continuous investment inflow and variety of construction sites.

Retirement, aging housing stock, the desire of the population through investment in housing to improve housing conditions and preserve their savings, also have a positive impact on the development of the housing market

The key factors holding back housing construction growth in the Krasnodar Region are:

- limited regional resources due to the availability of especially valuable agricultural land;
- limited opportunities for project financing using escrow accounts;
- lack of sites for integrated housing construction, provided with utilities;
- unstable lending policy, in which the solvent demand of the population does not allow most citizens to take advantage of mortgage loans;
- relatively high interest rates for mortgage loans offered by credit organizations in relation to world practice.

Since the housing construction market of the Krasnodar Region solves large-scale socio-economic problems, and in combination with effective state regulation, plays a decisive role in meeting the housing needs of the region's population, research related to analyzing and assessing the region's housing market structure is especially needed.

Issues of development of the construction complex, increasing the competitiveness of construction companies; identifying the factors affecting the housing development; identifying trends in housing development in terms of its heights range; introducing the concept of "smart city"; innovation and digital technology in the construction industry; the use of BIM technologies in the design, construction and operation of real estate, taking into account world experience, was reflected in the works of such scientists as: Asaul V.V., Berezina A.O. [2], Bolotina S.A., Krasnopolsky A. [3], Alexandrova E.B. [4], Koshcheeva V.A. [5], Mikhailova A.O. [6] et al.

Of the works of foreign researchers, one can distinguish Peng Wong and Ron Wakefield's "The Australian Residential Property Market: A Study on Foreign Real Estate Investment" [7], which allows us to better understand the relationship between the main indicators of the Australian residential real estate market and the steady flow of foreign investments, and research by Zunoon Parambath and Nilupa Udawatta "A Framework for Property Developers to Survive in Recession", which examines the impact of economic conditions on the development of the real estate sector; establishes the causes, consequences of the recession for property owners and determines survival strategies in a recession [8].

One cannot fail to note the work of Richard B. Peiser, Anna B. Frey "Professional Real Estate Development: The ULI Guide to the Business", which describes the real estate

development processes for variety of main projects. The authors demonstrate with practical examples the basic methods of real estate development, including economic feasibility analysis, design, construction, financing, marketing and management [9].

A comprehensive literature review was carried out in this study to achieve the set goal.

The goal of the study is to analyze the structure of the housing construction market in the Krasnodar Region and to determine the prospects for the housing sector development in the region.

Achieving the goal of the study predetermined the formulation and sequential solution of the following interrelated tasks:

- to analyze the development of housing construction and provide a rating of developers of the Krasnodar Region;
- to characterize the state of mortgage lending in the region;
- to evaluate the level and dynamics of prices in the housing market as a whole in the Krasnodar Region;
- to analyze the state of the region's housing stock by the floor space of apartments, distribution of apartments by type, technology and cost of construction;
- based on the results of the study, provide possible ways of developing the housing construction market in the Krasnodar Region.

## **2 Materials and methods**

The focus of this study is to analyze the structure of the housing construction market and determine the prospects for its development in the Krasnodar Region based on macroeconomic indicators of the socio-economic development of the region, taken from official information sources. As a method for studying the determinants of the development of the housing market in the region, we used the method of observation and collection of factors that occur in the socio-economic characteristics of the region, which allowed us identify the main groups of growth factors and deterrence of the development of the housing market.

As mentioned above, to analyze the structure of the housing construction market, assess the rate of housing construction development, the state of mortgage lending, the dynamics of housing prices, assess the housing stock by the floor space of apartments, the distribution of apartments by type, technology and cost of construction, a combination of comparative and economic statistical research methods were used.

When determining the ratings of developers of the Krasnodar Region, the method of content analysis of electronic resources containing information about the largest construction companies, as well as their performance indicators, was applied.

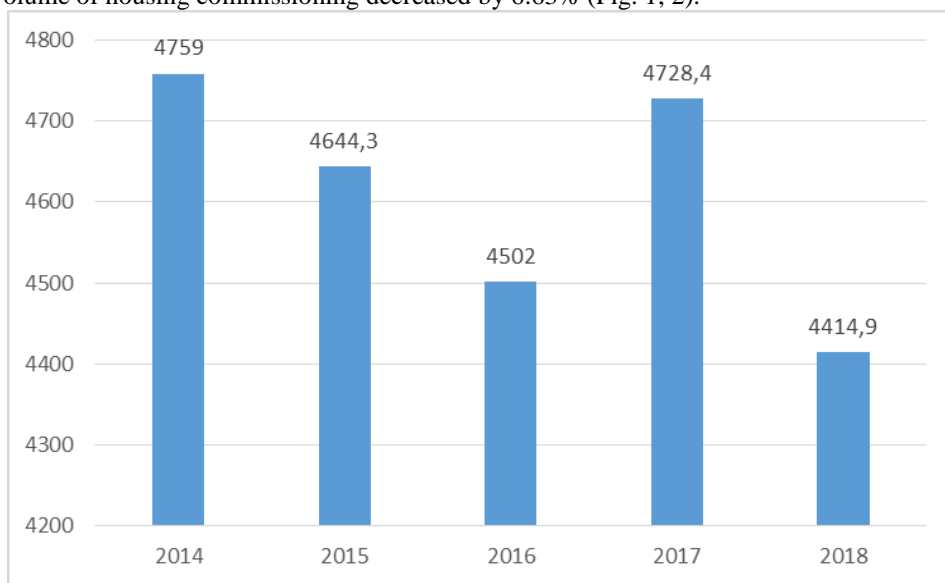
The housing market of the Krasnodar Region was chosen as the object of study.

The paper used data from the official bodies of the Federal State Statistics Service of the Russian Federation, Office of the Federal State Statistics Service for the Krasnodar Region and the Republic of Adygea, Construction Department of the Krasnodar Region Administration, legislative and by-laws, reference and analytical materials of the Ministry of Construction and Housing and Communal Services of the Russian Federation and Internet resources, information and analytical materials of construction companies of the Krasnodar region.

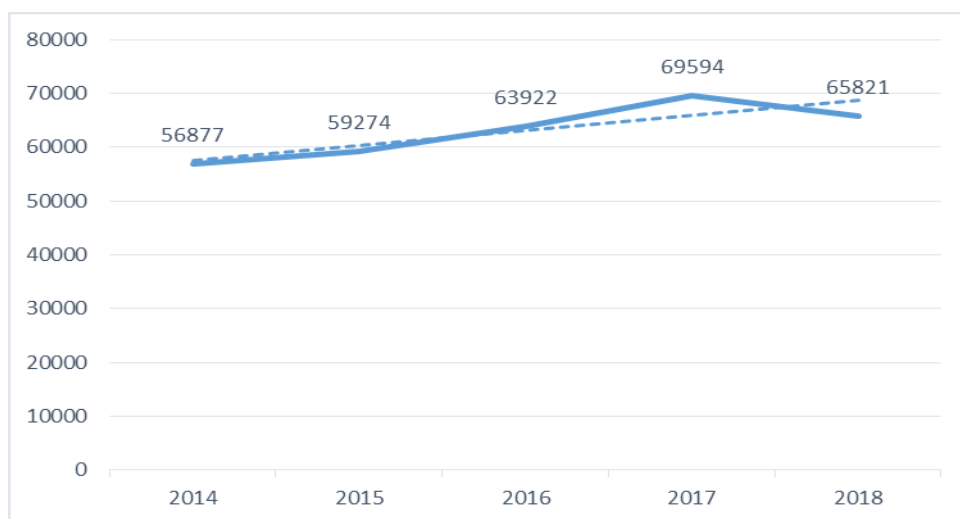
### 3 Results and discussion

#### *Housing construction*

In 2018, 65.8 thousand apartments with a total floor space of 4414.9 thousand square meters were commissioned in the Krasnodar region, and is compared to last year, the volume of housing commissioning decreased by 6.63% (Fig. 1, 2).



**Fig.1.** Commissioning of residential buildings in Krasnodar region, thousand square meters [10]



**Fig.2.** Number of apartments built in Krasnodar region, units [10]

The average floor space of apartments built by developers amounted 53.5 square meters. The average actual cost of 1 square meter of the total floor space of apartment buildings built in 2018 equaled 48,015 rubles, in 2017 – 39,385 rubles.

Of the total floor space of commissioned housing in 2018, there were 3,512.8 thousand square meters built in urban areas (91.7% by 2017), while 878.5 thousand square meters in rural areas (97.7%).

The share of individual housing construction in the total volume of housing construction reached 36.1% as compared to 38.3% last year. In total, individual homebuilders built 12.9 thousand apartments (houses) with a total area of 1585.9 thousand square meters (87.6% by 2017)[10].

#### *Region homebuilders rating*

A content analysis of electronic resources containing information about construction companies of the region showed that there were about 100 development companies operating in the Krasnodar Region in 2018, the four of which were included in the rating of the largest developers of Russia. Those are construction companies: YugStroyInvest (16th place), the union of VKB-Novostroyki (18<sup>th</sup> place), Neftestroyindustry-Yug (23rd place) and Alfa Construction Company (28th place). It is worth noting that 200 construction companies that erect more than 55 million square meters of housing were included in the above rating.

The most recognizable projects erected by those companies are: Panorama residential complex and Gubernsky residential complex, which are being built by the YugStroyInvest group of companies and the Turgenev residential complex from YugStroyImperial.

#### *Mortgage lending dynamics*

In period of 2014 to 2018, the housing mortgage lending market showed record growth amid falling interest rates.

In the Krasnodar Region, the regional department of the Russian state registry (Rosreestr) registered 124.5 thousand mortgage transactions in 2018, which is 15.6% more than in 2017.

According to the data of the Southern Head Office of the Bank of Russia in the Region, the mortgage loan portfolio increased by 28.8% over the year, amounting to 179.7 billion rubles. Mortgage loans of the Krasnodar Region account for 38% of the Southern Federal District mortgage portfolio.

According to the results of 2018, the average size of a mortgage loan in the region amounted to 1.88 million rubles, which is 7.4% more than a year earlier. By the average amount of a mortgage loan, Kuban took 16th place among the regions of Russia. On the first line is Moscow (4.80 million rubles). This is followed by the Moscow Region (3.34 million rubles) and St. Petersburg (2.77 million rubles).

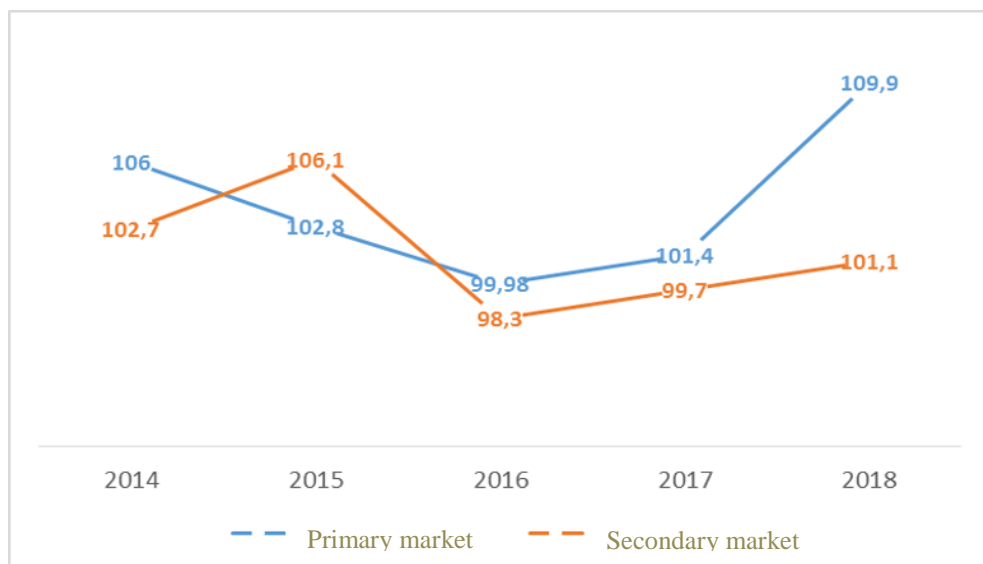
#### *Housing Market Prices*

Krasnodar Region is one of the most attractive regions of the Russian Federation for internal migration. Therefore, the housing sector is developing extremely actively. In recent years, the region has been a leader in the number of housing being built. But still, demand remains high, which accordingly affects pricing.

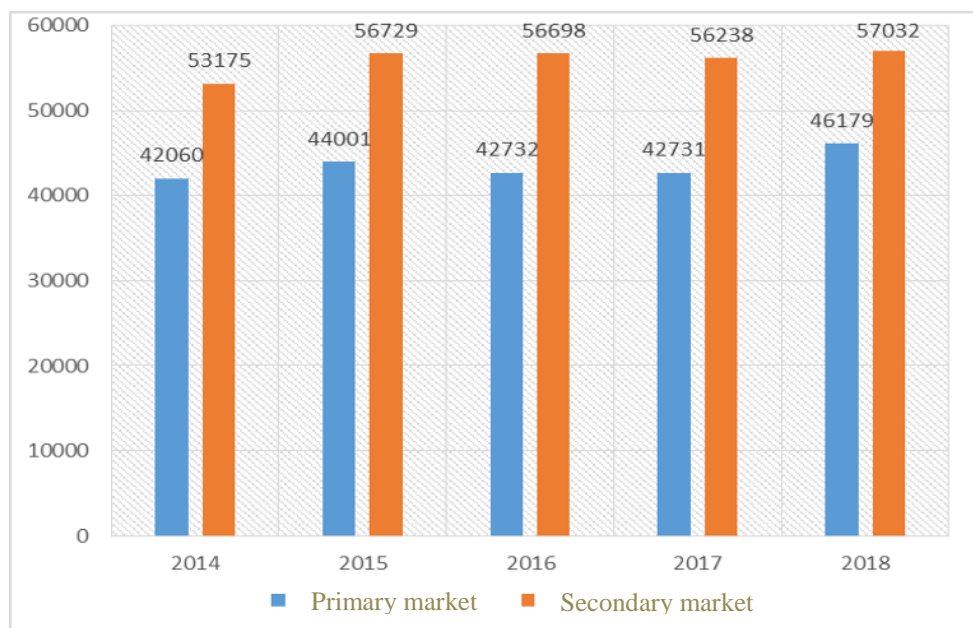
According to sample statistical observation in 2018, compared with the previous year, price indices in the primary and secondary housing markets were 105.5% and 98.0%, respectively [11].

In the primary market, the cost of standard apartments increased by 6.7%, high quality apartments - by 4.6%, elite ones - by 3.2%. In the secondary market, a decline in prices for elite apartments was recorded - by 2.9%, of high quality and standard - by 1.3%.

Price indices and the dynamics of average prices in the housing market over the past 5 years for primary and secondary housing in the Krasnodar Region are presented in Figures 3-4.



**Fig.3.** Housing market price indices (percentage of previous year) [11]



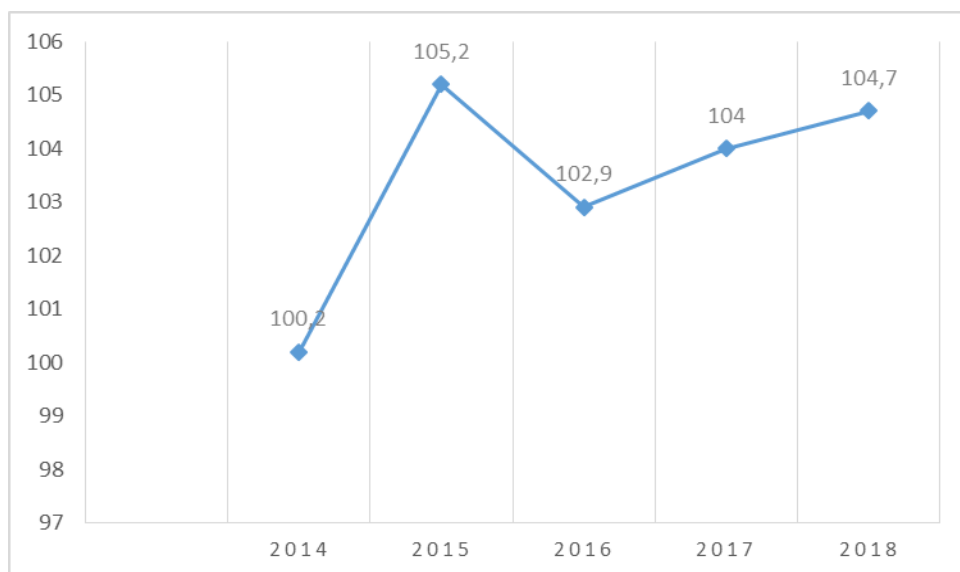
**Fig.4.** Average prices in housing market in Krasnodar region, (rubles per square meter of total floor space) [11]

Figure 4 shows that the average apartment prices in both the primary and secondary markets in the Krasnodar Region have an obvious upward trend. However, the average prices for elite apartments in the primary market in 2018 compared to 2017 fell by 5.5% (from 66369 rubles to 62752 rubles), in the secondary market average prices for similar apartments did not increase significantly by 0.24%.

A review of the housing market in the Krasnodar Region showed that in 2019 a significant increase in the value of residential real estate is forecasted. This is due, firstly, to the expected changes in the financing of multi-unit buildings. Residents of the region are

especially active in registering equity participation in existing projects because they expect price increases after the entry into force of amendments to the Federal Law "On the equity participation in construction".

Secondly, with an increase in the cost of housing construction and a change in the Rules for improvement of new housing estates in the Krasnodar Region.



**Fig.5.** Composite price index for construction products (costs, services) for investment purposes (percentage of previous year) [11]

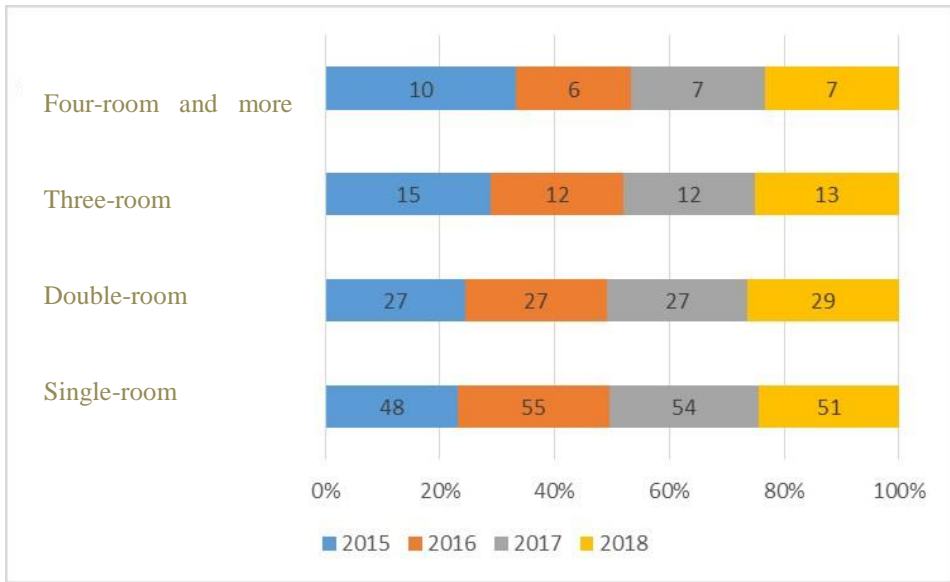
High inflation rate combined with a depression in business activity in 2018 provoked an increase in selling prices for construction materials. For example, manufacturers of sand and gravel mixtures raised selling prices by an average of 19%, and the most popular type of long products used in housing for reinforced concrete structures rose by 29%.

The tightening of the Rules for the improvement of new sub-districts in terms of ensuring safety, landscaping, the installation of coatings, lighting, and the placement of small architectural forms also became the reason for the rise in price of housing.

Thirdly, do not forget the main factor in price dynamics which is the balance of supply-and-demand. At the moment, there is a shortage of supply in the secondary price categories in the secondary real estate market, especially in the segment of the most affordable housing (worth up to 3 million rubles). Given the decline in real incomes of the families and the associated reduction in its solvency, the said apartments are in greatest demand among buyers.

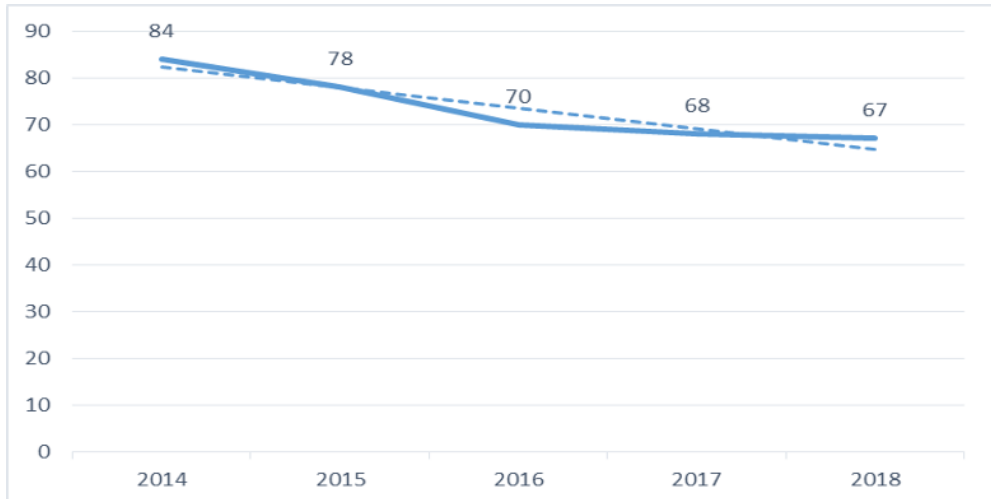
#### *Apartment types and floor spaces*

In terms of the availability of rooms, Russia, including the Krasnodar Region, is noticeably lagging behind other member states of the Organization for Economic Cooperation and Development. According to estimates, in Russia this figure is 0.9 rooms per person. While in the countries of the Organization for Economic Cooperation and Development, this indicator is twice as large and equals 1.8.



**Fig.6.** Distributing apartments by type in Krasnodar Region, percentage of total commissioned [10]

Figure 6 shows that in the housing market of the region there are single- or two-bedroom apartments with an average cost of 1 sq. m. in 55-70 thousand rubles are most popular. A similar trend is characteristic not only for the Southern Federal District, but also for the Russian Federation as a whole due to a decrease in real incomes of the families, a decrease in the availability of borrowed funds and a deterioration in the economic situation.



**Fig.7.** The average size of apartments in the Krasnodar Region, sq. m. [11]

Figure 7 shows that even official statistics recorded a decrease in the total floor space of apartments. If in 2014 the average floor space of dwellings built have ranged from 81.1 to 84 square meters, then in 2018 this indicator, according to the Office of the Federal Statistics Service for the Krasnodar Region, decreased to 67 square meters. In this average



footage, a cottage development is taken into account. The average floor space of apartments in multi-storey buildings is significantly lower and amounts to about 60-65 square meters.

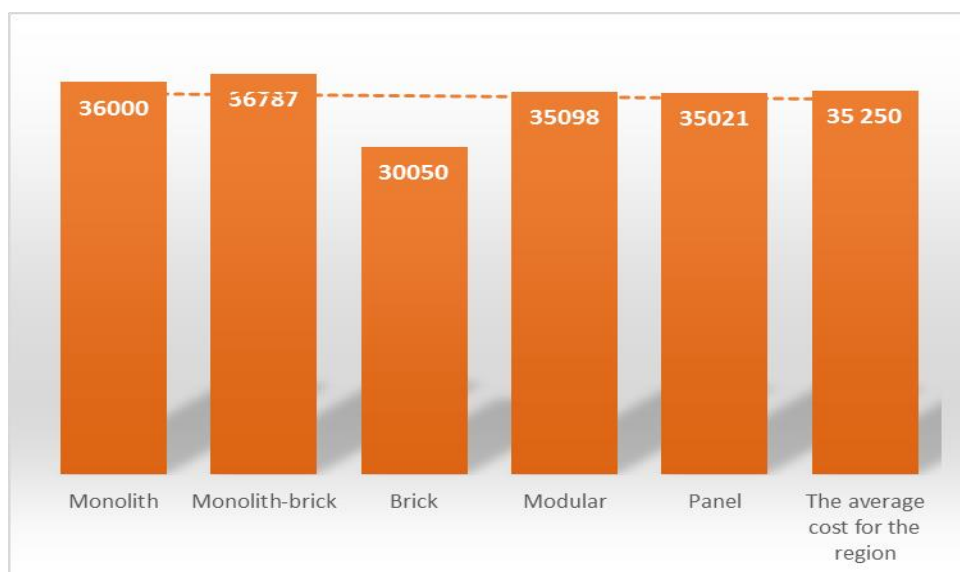
Analyzing the residential real estate market of the Krasnodar Region showed that in recent years there has been a steady trend towards an increase in the supply of finished apartments. Demand for them is concentrated in small-sized apartments, where buyers are cost-sensitive to the finishing work and prefer quick move-in over an individual design.

Also, consumer demand is due to the fact that with mortgage lending, decoration is included in the price of the apartment and is carried out by the homebuilder at a lower cost. This gives additional benefits to customers: it allows to reduce the amount of cash and time costs until the moment of move-in.

#### *Technology and construction costs*

As the housing class rises, there is an increase in the share of more expensive exterior wall materials - monolith, monolith-brick and brick.

In the Krasnodar Region, brick is used to a lesser extent, monolithic and monolithic-brick construction are most represented: their share in the total volume of housing under construction is up to 48%.



**Fig.8.** Technology and cost of construction in Krasnodar region [10]

On average, the share of monolithic-brick construction in Russia is lower, although it occupies one of the leading positions - up to 30% of the total. The average cost of construction in the country (according to project declarations) varies between 37.4-55.9 thousand rubles per square meter depending on the materials of the external walls used: the most budgetary is brick construction (37.4 thousand rubles per square meter on average in Russia), while the unit cost of monolithic construction reaches 55.9 thousand rubles per square meter [1].

## **4 Conclusion**

Analysis of the structure of the housing construction market in the Krasnodar Region based on macroeconomic indicators of the socio-economic development of the region gave the following results:

- migration growth of population of the region (annually about 80 thousand citizens), favorable climatic conditions for living and working, and other factors contribute to the annual increase in housing construction;
- annual increase in the number of apartments put into operation is due to the high growth rate of the share of single-room apartments. This causes an annual decrease in the average floor space of apartments commissioned;
- about 100 development companies operate in the region's housing construction market, four of which are included in the rating of the largest homebuilders in Russia;
- land mortgage lending market showed record growth amid falling interest rates. The average mortgage loan at the end of 2018 amounted to 1.88 million rubles, which is 7.4% more than a year earlier;
- reviewing the housing market in the Krasnodar Region showed that after coming into force of amendments to the Rules for the Improvement of New neighborhoods in the Krasnodar Region, as well as with an increase in the cost of housing construction due to the rise in price of building materials, there has been a significant increase in the cost of residential real estate in 2018 (except for the elite segment apartments);
- decrease in the average area of apartments is a response to the needs of the market, which are caused by a decrease in real incomes of the families and an increase in the cost of a square meter of housing.
- the most represented in the region are monolithic and monolithic-brick construction: their share in the total volume of housing under construction is up to 48%.

Based on the study, the authors formulated a number of recommendations aimed at developing the region's housing market:

1. When developing new neighborhoods in the Krasnodar Region, it is proposed to use the best international practices, including “green growth”. Areas in which housing construction is carried out in accordance with modern standards are becoming centers of economic growth, points of attraction for businesses and economically active people.
2. To stimulate demand, further development of mortgage lending market is necessary. To strengthen competition in the housing mortgage market, a developed secondary market is needed - the market for mortgage securities. The development of mechanisms for issuing mortgage securities will provide banks with access to sources of long-term financing of mortgage loans and credit risk management tools.
3. An additional tool for the development of the housing construction market may be the building of rental housing. Rental apartments will become a real alternative to the acquisition of housing in the property, and not just a temporary solution to the housing problem.
4. In order to increase the volume of housing commissioning, housing construction must be carried out in an industrial way according to modern building standards, which ensures cost reduction. To carry out modernization of housing construction in the region, to introduce a set of measures aimed at the use of modern building technologies and the production of innovative materials in the region.

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