




## Analysis of Consumer Preferences for Construction and Repair of Residential Buildings and Apartments in the Context of the Covid-19 Pandemic

 Pavel Ilich Samarin<sup>1</sup>,  Vladislav Alekseevich Komarov<sup>2</sup>,  Andrey Andreevich Tkachenko<sup>3</sup> and  Denis Vladimirovich Semenov<sup>4</sup>

<sup>1,2,3,4</sup> Moscow state University of Civil Engineering, Moscow, Russia.

### ARTICLE INFORMATION

Original Research Paper

Doi:

Received November. 2020

Accepted January. 2021

#### Keywords:

pandemic,  
COVID-19,  
construction and repair of  
residential buildings,  
apartments,  
consumer costs.

### ABSTRACT

The article analyzes the dynamics of consumer spending on construction and repair of residential buildings and apartments during the COVID-19 pandemic. In the context of the pandemic the author comes to the conclusion that the population of our country needs both to invest money and to solve urgent problems related to the implementation of the following plans – to organize the repair of their own apartments or the construction of houses or summer cottages on their land plots. In this regard, it can be concluded that the owners of apartments and houses plan to spend significant funds to achieve this goal. It comes from the desire of people to save money from inflation and currency exchange rate growth, as well as an attempt to improve their own land plot in order to receive plant and animal products during its operation, which will reduce food costs. Accordingly, the analysis showed that with the growing demand for the services of construction teams, as well as the significant costs of the population for repairs and building during the pandemic, the volume of expenditures of Russian citizens in the construction industry tends to increase.

### Introduction

In modern conditions, there is a rather serious epidemiological situation due to the spread of a serious infectious disease, called COVID-19. The disease started in China and spread around the world within a short period of time. The rapid course of this disease often leads to death. In March 2010 the World Health Organization recognized the disease as a pandemic, and governments around the world began to impose various restrictions on their citizens in order to preserve their lives and health. The measures that counteract the spread of COVID-19 was the introduction of a self-isolation regime in most countries for citizens over 65 years of age, the temporary closure of enterprises, the introduction of distance learning in schools and universities, the transfer of employees to remote forms of work, etc.

In Russia, these restrictive measures were also taken. Most of the citizens were isolated in their apartments and houses for several weeks. Also, some citizens, especially residents of such megacities as Moscow and St. Petersburg, preferred to spend time in self-isolation in their summer cottages and country places.

The self-isolation regime has significantly changed the lifestyle of many Russians, influenced their preferences, and also made them think about the future: it is known that the forecasts associated with a decrease in tension in the spread of the COVID-19 pandemic aren't short-term, and it is assumed that this disease will cause a significant number of citizens to be unable to work every day for quite a long period. For this reason, today many residents of our country have begun

to think about what they need. On the one hand the need to occupy themselves with something useful, and on the other hand, to prepare the ground for the opportunity to provide themselves with food that can be obtained on a personal subsidiary farm.

In addition, living in an individual home substantially protects citizens from the possibility of contracting infectious diseases, and this is another factor - why so many people during the pandemic began to think about the need to build or repair their personal private homes and cottages.

The purpose of the study is to determine the dynamics of demand for construction materials and services in the building sector by Russian citizens during the COVID-19 pandemic based on an analysis of their costs in this area.

## Materials and Methods

The study was conducted with the involvement of respondents-residents of Belgorod and the Belgorod region who own apartments, country houses or summer cottages, who in the period from 15.03.2020 to 01.09.2020 carried out construction and repair works of these objects. A total of 1,568 people took part in the survey. Data for the survey was obtained by:

- personal survey of research participants in large construction hypermarkets in Belgorod;
- a telephone survey of the authors of ads requesting services for the construction and repair of real estates, published in periodicals and on Internet resources of regional significance.

The data obtained were summarized, systematized and analyzed, and the corresponding conclusions were made. A graphical method was also used to demonstrate the data obtained.

## Results

Recently, researchers have come to the conclusion that the construction industry in Russia is developing in difficult conditions. So, there is an opinion that today it is necessary to talk about the need for large-scale systemic structural modernization of the construction industry, which causes the use of anti-crisis measures and mobilization mechanisms [1]. There is also a drop in the pace of construction of residential buildings on a monthly basis from March to August 2020 by an average of 0.1 % [2]. There is also an opinion that the construction market was negatively affected by the decline in consumer activity [3], which caused some unstable tendencies in the mortgage lending market [4].

According to the authors, the pandemic has led to stagnation in the national construction industry, which already leads to a decrease in the volume of housing commissioning and a reduction in the entry of new sites to the market, and along with a decrease in the purchasing power of the population, it will significantly reduce the profitability of the construction business [5]. The monetary income of the population has decreased, according to some authors, and there is no need to wait for a rapid recovery of the construction industry [6]. It is for this reason that companies working in the construction industry will not be able to fully implement the construction projects started before [7].

The socio-economic situation of the population also raised many questions for researchers [8]. This is due to the fact that a large number of residents of the country were out of work at such a difficult time [9]. This situation can have significant consequences for the economy of our country [10].

However, the market for construction of housing and communal services, as well as the volume of sales of construction materials, tends to grow. It was decided to study the trends in this market and draw appropriate conclusions. The reason for this research was the review of the construction services market in Belgorod and the Belgorod region. The beginning of the pandemic occurred at the beginning of spring, when traditionally all owners of suburban real estate and apartments in multistory buildings carry out repairs and construction work on their own properties. However, taking into account the closure of borders of neighboring countries, such as Ukraine, Uzbekistan, Tajikistan, etc., the city and region had a shortage of personnel in the field of construction: most of the teams that carried out construction work were unable

to enter Russia. Accordingly, the demand for construction services provided by local specialists, both legal companies and individual entrepreneurs, and individuals, has significantly increased. In this regard, the employment of this category of workers increased several times during the period under review, and owners of apartments and houses who want to use their services had to wait for the release of construction teams for a considerable time.

Having identified the presence of a deficit in the construction services market, we assumed that the volume of construction and repair work in the Belgorod market still tends to grow, despite the absence of construction teams from neighboring countries. If we take into account that labor migrants officially registered in Russia and involved in construction work, in general, accounted for only 10% of the total number of specialists providing construction services in the city of Belgorod, then we could talk about an increase in the volume of construction and repair work in the studied market.

Taking into account the above, it was decided to study or analyze the amount of expenses in the context of individual items that residents of Belgorod and the region sent for the repair and construction of houses, apartments and suburban areas.

A total of 1,568 people took part in the survey, each of whom was the owner or co-owner of a separate property that was being renovated or under construction. Most of the respondents were men (80% or 1,254 people) and 314 were women. Accordingly, it can be said that the most active position in this area was occupied by men, and it was for them that this activity was important during the pandemic. At the same time, 1,280 people were interviewed on the territory of large construction hypermarkets and 288 people – by phone.

Respondents were asked to answer a number of questions:

1. Are you building a new house or cottage, completing existing buildings, or planning to make repairs in a finished house or apartment?
2. Why did you decide to carry out construction or repair work during this period?
3. Do you plan to carry out construction work by yourself or with the involvement of construction teams?
4. What is the average cost of services that you plan to pay for the services of builders?
5. How much money do you plan to spend on the purchase of construction materials in general?
6. Do you plan to purchase construction materials using your own savings or make a purchase on credit?
7. Do you plan to ask for help in purchasing of construction materials from specialists with whom you sign a contract for construction or repair works?
8. You are planning to purchase building materials for economy class or rely on the acquisition of premium products of famous manufacturers?

The respondents' answers were summarized in tables and analyzed. Let's look at the respondents' replies in more detail.

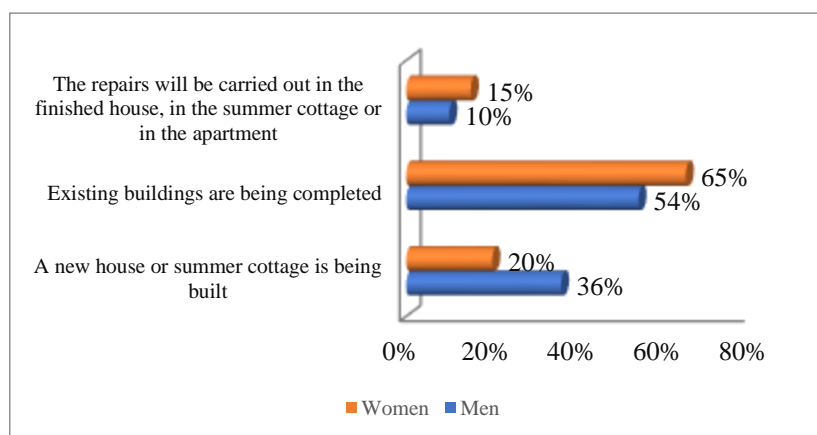
The results of the answer to the first question are shown in Table 1.

**Table 1.** Answers to the question "Are you building a new house or cottage, building existing buildings or planning to make repairs in a finished house or apartment?"

Respondents	A new house or summer cottage is in the process of building	Existing buildings are in the process of completing	The repairs will be carried out in the finished house, in the summer cottage or in the apartment
Men	36%	54%	10%
Women	20%	65%	15%

The survey results are shown in Chart 1.





**Chart 1.** The results of answers to the question “Are you building a new house or summer cottage, completing existing buildings or planning to make repairs in a finished house or apartment?”

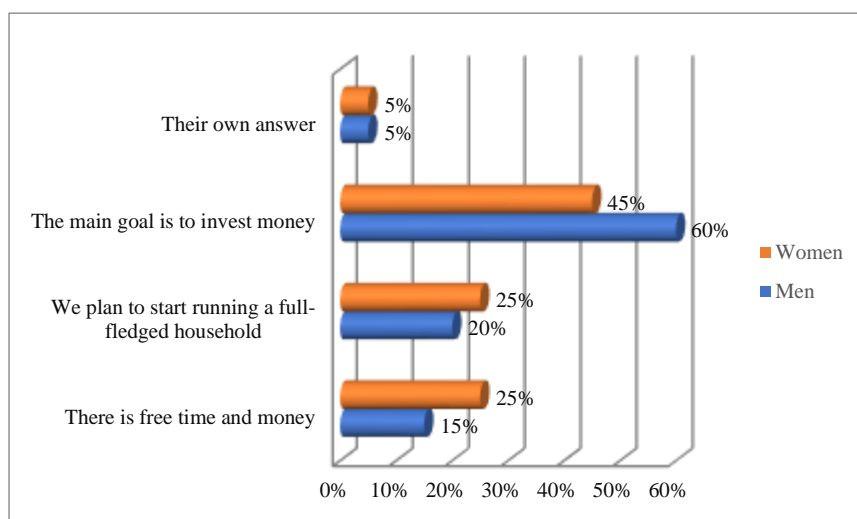
According to the data obtained as a result of the answer to this question, it can be concluded that 36% of men and 20% of women planned to build new houses or cottages. At the same time, 54% and 65% of men and women, respectively, planned to carry out work as part of the completion of the already started construction. 10% and 15% of men and women, respectively, planned to spend money on repairs. Thus, we can say that the majority of respondents have an unfinished house or cottage and planned to carry out work that will allow them to finish the property and put it into operation.

The respondents' reasons for starting construction or repair work are shown in Table 2.

**Table 2.** Answers to the question “Why did you decide to carry out construction or repair work during this period?”

Respondents	There is free time and money	We plan to start running a full-fledged household	The main goal is to invest money	Their own answer
Men	15%	20%	60%	5%
Women	25%	25%	45%	5%

The survey results are shown in Chart 2.



**Chart 2.** Results of the answers to the question “Why did you decide to carry out construction or repair work in the current period?”

Based on the results of the study, the following conclusions were made. The main purpose of a greater number of respondents was the investment of funds. This answer was chosen by 60% of men and 45% of women. Accordingly, fearing the results of the pandemic, which had a negative impact on currency exchange rates and devalued the Russian ruble, respondents determined that the best investment of available funds should be to carry out repairs or construction.

Full-fledged household management is the second option in terms of the number of positive responses. Accordingly, the respondents who chose it considered that the organization of providing their family with crop and livestock products from their own plot would help preserve the health of family members and reduce food costs.

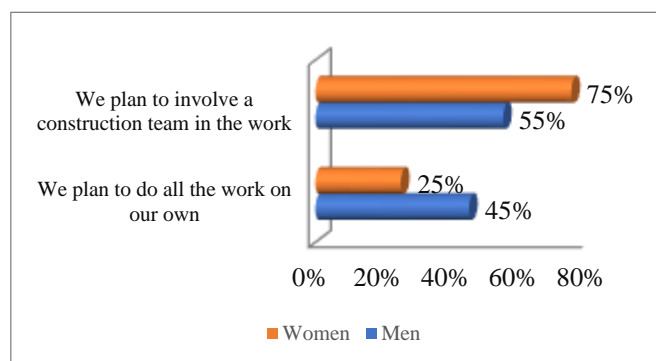
Among their response options were the following: "We have been planning for a long time and at last we've decided", "Children need to move to their own homes», etc.

The results of the answer to the third question are shown in Table 3.

**Table 3.** Answers to the question "Do you plan to perform construction work independently or with the involvement of construction teams?"

Respondents	We plan to do all the work on our own	We plan to involve a construction team in the work
Men	45%	55%
Women	25%	75%

The survey results are shown in Chart 3.



**Chart 3.** Results of the answers to the question "Do you plan to perform construction work independently or with the involvement of construction teams?"

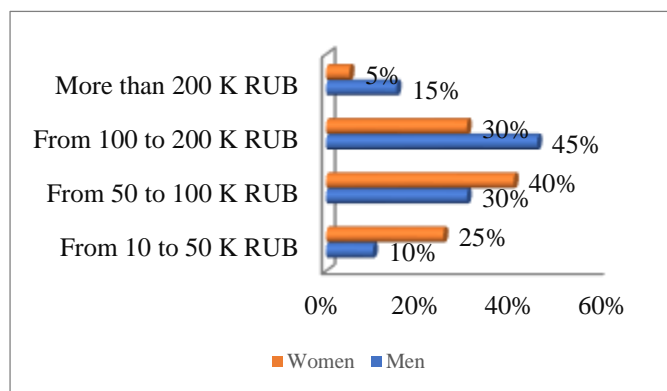
According to the responses of respondents, more than half of both men and women plan to hire specialists, and only 25% of women and 45% of men plan to perform work independently. Consequently, this figure reflects the increased demand for construction professionals in Belgorod and the Belgorod region.

The respondents were also asked about the average cost of services provided by construction teams involved in the work. This question was asked to those respondents who planned to attract hired labor to perform repair and construction work. The results of the responses to this question are shown in Table 4.

**Table 4.** Answers to the question "What is the average cost of services that you plan to pay for the services of builders?"

Respondents	From 10 to 50 K RUB	From 50 to 100 K RUB	From 100 to 200 K RUB	More than 200 K RUB
Men	10%	30%	45%	15%
Women	25%	40%	30%	5%

Graphically, the data in the Table 4 is shown in Chart 4.



**Chart 4.** Results of answers to the question “What is the average cost of services that you plan to pay for the services of builders?”

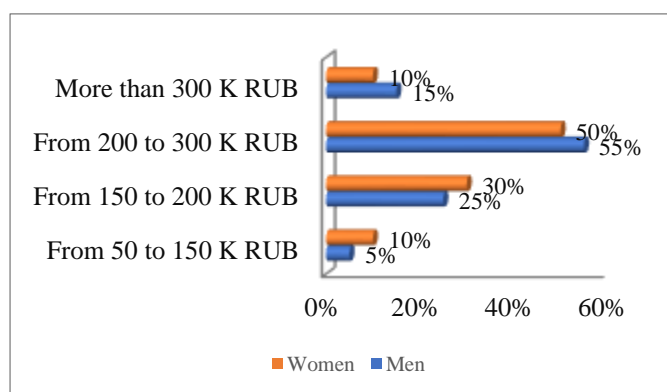
Thus, we can conclude the following: most of the respondents planned to spend between 100 and 200 thousand rubles to pay for construction services. this was indicated by 45% of men and 30% of women. The lowest percentage of respondents determined that they will send more than 200 thousand rubles to pay for construction services – 15% (men) and 5% (women)

The next question was: "How much money do you plan to spend on purchasing construction materials in General?" The answers to this question are shown in Table 5.

**Table 5.** Answers to the question “How much money do you plan to spend on purchasing construction materials in General?”

Респонденты	От 50 до 150 тыс. руб.	От 150 до 200 тыс. руб.	От 200 до 300 тыс. руб.	Свыше 300 тыс. руб.
Мужчины	5%	25%	55%	15%
Женщины	10%	30%	50%	10%

The survey results are shown in Chart 5.



**Chart 5.** Results of answers to the question “How much money do you plan to spend on purchasing construction materials in General?”

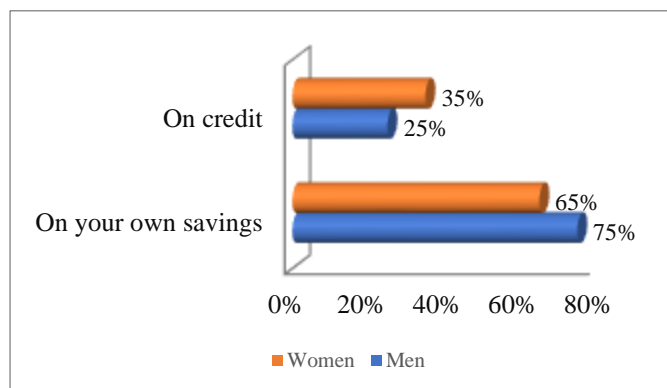
According to the data obtained from the survey, it can be concluded that most of the respondents (55% of men and 50% of women) plan to spend from 200 to 300 thousand rubles on the purchase of construction materials.

Also, during the survey, we found out how respondents plan to purchase construction materials – with their own savings or on credit. The results of the survey are shown in Table 6.

**Table 6.** Answers to the question “Do you plan to Purchase construction materials with your own savings or make a purchase on credit?”

Respondents	On your own savings	On credit
Men	75%	25%
Women	65%	35%

The survey results are shown in Chart 6.



**Chart 6.** Results of the answers to the question “Do you plan to Purchase construction materials with your own savings or make a purchase on credit?”

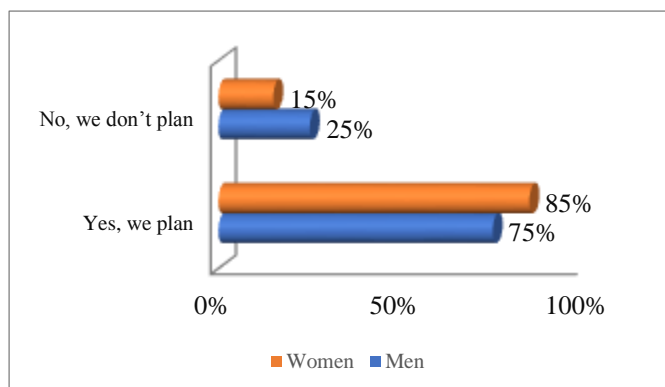
Accordingly, most of the respondents plan to purchase construction materials using their personal savings.

We also found out whether respondents plan to ask for help in purchasing construction materials from specialists with whom you sign a contract for construction or repair. The results of the responses are shown in Table 7.

**Table 7.** Answers to the question: “Do you plan to ask for help in purchasing construction materials from specialists with whom you sign a contract for construction or repair?”

Respondents	Yes, we plan	No, we don't plan
Men	75%	25%
Women	85%	15%

The results of the responses are shown in Chart 7.



**Chart 7.** Results of answers to the question “Do you Plan to ask for help in purchasing construction materials from specialists with whom you sign a contract for construction or repair”

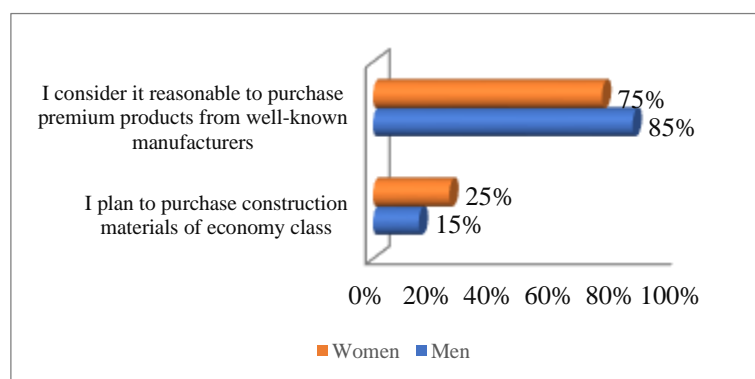
The data indicate that the majority of respondents plan to seek help in purchasing materials from specialists with whom they conclude a contract for construction or repair. This is due to the fact that such specialists usually have the opportunity to get a discount in those stores where they regularly purchase construction materials. Therefore, the cost of building materials will be cheaper.

Consumers were also asked a question: "Are you planning to purchase economy-class construction materials or are you planning to purchase premium-class products from well-known manufacturers?" The results of the response are included in Table 8.

**Table 8.** Answers to the question “Are you planning to purchase economy-class construction materials or are you planning to purchase premium-class products from well-known manufacturers?”

Respondents	I plan to purchase construction materials of economy class	I consider it reasonable to purchase premium products from well-known manufacturers
Men	15%	85%
Women	25%	75%

The results of the responses are shown in Chart 8.



**Chart 8.** Results of the answer to the question “Are you planning to purchase economy-class construction materials or are you planning to purchase premium-class products from well-known manufacturers?”

According to the data obtained, a significant part of the respondents plans to purchase premium construction materials for construction or repair.

## Discussion

The results of the survey showed that most of the residents of Belgorod and the Belgorod region who plan to carry out repair or construction work are men. At the same time, most of the work will be carried out by respondents on their own savings, which indicates that the population has free funds and a desire to invest them in real estate.

The amount that respondents plan to spend on repairs or construction is, on average, from 100 to 200 thousand to pay for the work of builders and from 200 to 300 thousand-for the purchase of construction materials. Accordingly, judging by the volume of expenditures, respondents do not plan to carry out a small amount of repair or construction work, but to make full-fledged investments in the construction or repair of a real estate object. This fact is confirmed by

the fact that the majority of respondents choose premium construction materials, not economy, as well as the fact that most consumers plan to attract professionals to perform construction work.

However, the approach to purchasing construction materials from respondents still has its own specifics: most of them plan to apply for this service to construction teams involved in construction or repair in order to get a discount when purchasing. This indicates that consumers still want to save money. Accordingly, all of the above confirms the respondents' response to the question that their main goal in carrying out repairs or construction is to invest money that is constantly devalued due to inflation and currency exchange rate growth.

## Conclusion

In the context of the pandemic, the population of our country needs both to invest money and to solve urgent problems related to the implementation of certain plans – to organize the repair of their own apartments or the construction of houses or country houses on their land plots. In this regard, it can be concluded that the owners of apartments and houses plan to spend significant funds to achieve this goal. This is due to the desire of people to save money from inflation and currency exchange rate growth, as well as an attempt to improve their own land plot in order to receive plant and animal products during its operation, which will reduce food costs. Accordingly, the analysis showed that given the growing demand for the services of construction teams, as well as the significant costs of the population for repairs and construction during the pandemic, the volume of expenditures of citizens of our country in the construction industry tends to increase.

## References

1. V. V. Dorzhieva Construction industry: development trends, impact of the pandemic and conditions of recovery growth in the context of structural modernization tasks. Scientific works of the Free economic society of Russia. 2020. №3.
2. M. Yu. Golovnin, S. A. Nikitina Channels of impact of the COVID-19 pandemic on the Russian economy // Bulletin of The Institute of Economics of the Russian Academy of Sciences. 2020. no. 5.
3. N. P. Volovik, O. I. Izryadnova, M. V. Kazakova Structural changes in the domestic market in the first half of 2020 // Economic development of Russia. 2020. №9.
4. E. V. Travkina Current trends and prospects of the Russian mortgage lending market development // Theory and practice of social development. 2020. №5 (147).
5. V. D. Badusheva, A. A. Palagin Development of the construction industry under the influence of COVID-19 // Bulletin Of the Academy of knowledge. 2020. №4 (39).
6. M. M. Vasilyeva, M. V. Kuntsman, A. A. Sulygova Production and consumption in a remote environment // Economics and business: theory and practice. 2020. №9-1.
7. S. P. Zemtov, Yu. V. Tsareva Trends in the development of the small and medium-sized enterprises sector in the context of the pandemic and crisis // Russian economic development. 2020. No. 5.
8. T. M. Maleva, E. E. Grishina, A. Ya. Burdyak, Yu. b. Chumakova Epidemiological crisis in the first half of 2020: socio-economic situation of the population // Russian economic development. 2020. No. 10.
9. I. I. Mukhina, E. N. Sindiyashkina Employment and unemployment: crisis or new opportunities // Social and labor research. 2020. №3 (40).
10. A. A. Shirov Opportunities and risks of post-crisis economic recovery // Scientific works of the Free economic society of Russia. 2020. №3.

