5.9. The housing market in Russian cities and housing construction in 2021:

In 2021, the situation on the Russian real estate market was mainly affected by factors that emerged in the initial period of the COVID-19 pandemic (state-subsidized mortgages, increased state support for developers) and trends that commenced to form in previous years (the expansion of the individual housing construction (IHC) segment as an alternative to blocks of flats (BF)).

The growth of real disposable household income by more than 3%, while the government supported the industry and offered preferential mortgages, contributed to high demand for housing, especially in H1 2021. The desire to preserve family capital amid the record inflation rate (8.4%) and rising prices for all types of real estate encouraged Russians to be active on the housing market.

In H2 2021, there was a decline in interest in mortgages. Housing lending commenced to shrink on the back of the gradual increase of the Bank of Russia key rate 8.5% by the end of the year against 4.25% at the beginning of the year. In addition, trends in the primary housing market were shaped by an increase in the cost of building materials and land, labor shortages, as well as the tightening of the program of concessional mortgage lending.

5.9.1. Market price indexes

To characterize the price situation, consider the data of experts of the market evidenced from a number of companies, united by the Russian Guild of Realtors (RGR) (*Table 13, 14*).

 ${\it Table~13}$ Prices in apartment buildings in Russian cities and their dynamic in 2021

	Secondary market		Primary market			
Federal district/city	Average asking price, thousand Rb/m2	Change for the year, %	Average asking price, thousand Rb/m2	Change for the year, %	Price difference between markets, %	
		Central l	FD			
Moscow	255.0	28.5	333	30.6	30.6% higher in the primary market	
Ramenskoe (Moscow region)	135.0	35.0	n/a			
Sergiev Posad (Moscow region)	106.0	35.9	n/a			
Yaroslavl	75.0	26.0	75.0	22.5	Approximately equal	

¹ This section was written by Kulakov K.Yu., Doctor of Economic Science, Professor of the Moscow State University of Civil Engineering; Malginov G.N., Candidate of Economic Sciences, Head of Ownership and Corporate Governance of the Gaidar Institute, Leading Researcher of the Department of Institutions and Financial Markets Analysis, IAES RANEPA; Sternik S.G., Doctor of Economic Sciences, Professor of the Financial University under the Government of the Russian Federation, Senior Researcher, Ownership and Corporate Governance Department of the Gaidar Institute.

	Secondary market Primary			narket				
Federal district/city	Average asking price, thousand Rb/m2	Change for the year, %	Average asking price, thousand Rb/m2	Change for the year, %	Price difference between markets, %			
Voronezh	70.9	16.6	75.3	21.7	6.2% higher in the primary market			
North-Western FD								
Saint Petersburg	197.0	North-Weste	196.0	23	0.5% higher in the secondary market			
Kaliningrad	102.5	14.5	100.5	17.5	2.0% higher in the secondary market			
		Sothern	FD					
-Krasnodar	100.0-120.0	74.6	120.0-140.0	более чем в 2 раза	16.7–20% higher in the primary market			
Volgograd	93.0	65.0	до 150.0	до 90	61.3% higher in the primary market			
		Volga F	D					
Nizhniy Novgorod	110.0	22.2	113.0	15.8	2.7% higher in the primary market			
Perm	75.9	24.0	84.6	17.0	11.5% higher in the primary market			
Samara	70.0	20.0–25.0	70.0	27.0	Approximately equal			
Kirov	59.7	22.0	n/a	n/a				
KIIOV	39.7	Urals F		11/ a				
Ekaterinburg	93.0	16.0	106.0	20.0	14.0% higher in the primary market			
Tyumen	93.5	23.0	91.2	16.0	2.5% higher in the secondary market			
		Siberian	FD					
Novosibirsk	91.0	20.0	98.9	14.0	8.7% higher in the primary market			
Krasnoyarsk	87.0	23.0	92.5	27.0	6.3 in favor of newly built			
Far-Eastern FD								
Vladivostok	150.0	12.0	126.6	5.0	18.5% higher in the secondary market			
Khabarovsk	112.0	12.0	106.0	3.0	5.7% higher in the secondary market			

Source: Russian Guild of Realtors.

According to the RGR experts, the highest rate of price growth in 2021 was observed in Krasnodar and Volgograd, and in both segments of the market: more than 60-70% in the secondary market and 1,9—2 times higher in the primary market. They were followed by the Moscow region cities specified in *Table 13*

with a price hike in the secondary market by 35—36% and Moscow with a price surge in the primary market by more than 30%. Consequently, in 2021, there was a record demand on the secondary market in the capital: 150,565 transactions were recorded against 148,000 a year earlier, which was the largest absolute index for the entire period of statistical observations.

1 Rusregister. URL: https://rosreestr.gov.ru/press/archive/rosreestr-po-moskve-vtorichka-pobila-vse-rekordy/; RBC. URL: https://realty.rbc.ru/news/61b6ec329a79471eebb70dab

The cities where prices for new construction were higher than on the secondary market turned out to be slightly more than those with the opposite ratio. However, the latter include St. Petersburg, Vladivostok and Khabarovsk, following Moscow in absolute price level (over 100,000 rubles per sq. m). Approximate parity of prices was observed in Samara and Yaroslavl.

The most noticeable advance in prices on the secondary market in comparison with the primary took place in Vladivostok (18.5%), in other cities it did not exceed 5-6%. On the contrary, the greatest excess of prices for new construction against the secondary market was observed in Volgograd (over 60%) and Moscow (over 30%). In Krasnodar, Yekaterinburg and Perm the rise was from 10% to 20%, and in other cities it was less than 10%.

The most significant price growth for apartment blocks was noted in the Southern Federal District (*Table 14*).

Table 14

Prices on apartment block market and their dynamics
in Russian cities in 2021

City	Average asking price, Thousand Rb/m2	Annual growth, %
Sochi	250.0	100.0
Novorossiysk	150.0	57.9
Sevastopol	142.0	44.2
Ryazan	71.0	On the secondary market – 40. On the primary market – 36
Saratov	65.0	45.0

Source: Russian Guild of Realtors.

Moscow was followed by Sochi in the absolute price level, and Novorossiysk and Sevastopol competed with Vladivostok.

5.9.2. Construction and commission of new housing

According to Rosstat preliminary data, 92.6 mn sq. m of housing was commissioned in Russia in 2021, which is 12.7% more than in 2020 (*Table 15*). This is a record-breaking figure for the entire post-Soviet period, which allowed not only compensate a slight decline in the first pandemic year, but also surpassed the previous maximum of 2015 by 8.6%. (85.3 mn sq. m). This volume of housing commissioned allowed 4.2 mn families, or nearly 10 mn people, to improve their living conditions. Having said that, the government helped developers with the construction of social, transport and engineering infrastructure, in particular,

¹ This value also exceeded the prices in Nizhny Novgorod (higher prices of new construction) and in the cities near Moscow, where there was no primary market.

they were provided with subsidies under the special program "Stimulus". In 2021, 5.5 mn sq. m of housing were commissioned under this program.

Table 15
Commissioning of residential buildings in 1999–2021

Г	M:11:	Growth rates, %			
Год	Million sq. m of total area	to the previous year	to 2000		
1999	32.0	104.2	105.6		
2000	30.3	94.7	100.0		
2001	31.7	104.6	104.6		
2002	33.8	106.6	111.5		
2003	36.4	107.7	120.1		
2004	41.0	112.6	135.3		
2005	43.6	106.3	143.9		
2006	50.6	116.0	167.0		
2007	61,2	120,9	202,0		
2008	64.1	104.7	211.5		
2009	59.9	93.4	197.7		
2010	58.4	97.5	192.7		
2011	62.3	106.6	205.6		
2012	65.7	104.7	216.8		
2013	70.5	107.3	232.7		
2014	84.2	119.4	277.9		
2015	85.3	101.3	281.5		
2016	80.2	94.0	264.7		
2017	79.2	98.8	261.4		
2018	75.7	95.1	248.5		
2019	82.0/81.0*	108.3/107.0*	270.6/267.3*		
2020	82.2/77.1*	100.2/95.2*	271.3/254.5*		
2021	92.6	112.7	305.6		

^{*} Excluding commissioning of houses on garden plots, the volume of which is given according to the initial data of Rosstat (2019 — 1.0 million sq. m., 2020 — 5.1 million sq. m, there is no such data for 2021).

Sources: Rosstat; own calculations.

The positive dynamics of housing construction in the regional context was observed practically everywhere, 3 including in all regions with a total volume of housing commissioned more than 1 mn sq. m (*Table 16*).

¹ The federal program "Stimulus" has been in effect in Russia since 2016 and is part of the national project (NP) "Housing and Urban Environment". The federal budget remains the main source of funding. Local authorities act as customers for construction works in the building of infrastructure facilities, provided that the developer participates in the integrated territory development project (IDP), which is responsible for preparing the project and obtaining a positive conclusion of the state expert examination.

² URL:http://government.ru/news/44490/;URL:https://www.minstroyrf.gov.ru/press/za-2021-god-v-rossii-vvedeno-92-6-mln-kv-metrov-zhilya/; URL: https://tass.ru/nedvizhimost/13724343?utm_source=yandex.ru&utm_medium=organic&utm_campaign=yandex.ru&utm_referrer=yandex.ru

³ The drop in commissioning took place only in 10 regions, including Crimea and Sevastopol.

Table 16

Region	Rates of housing commission, in % to 2020		
Moscow	156.8		
Chechnya	135.5		
Samara region*	128.7		
Leningrad region*	127.0		
Krasnodar krai*	122.6		
Sverdlovsk region*	121.7		
Stavropol krai	121.0		
Bashkortostan*	118.4		
Orenburg region	113.9		
Tatarstan*	112.4		
Chelyabinsk region*	109.8		
Kaliningrad region	109.2		
Irkutsk region	108.9		
Voronezh region	108.1		
Nizhniy Novgorod region*	107.7		
Dagestan	106.3		
Novosibirsk region	103.1		
Krasnoyarsk krai	103.0		
St. Petersburg	102.8		
Saratov region	102.0		
Moscow region*	101.9		
Rostov region*	101.6		
Belgorod region*	101.4		
Tyumen region (with autonomous okrugs) *	101.3		
Lipetsk region	100.3		

^{*} Regions with housing commissioning over 1 million sq. m.

Source: Rosstat.

As follows from *Table 16*, the increase in housing commissioning was more than 20% in Moscow, Chechnya, Samara, Leningrad and Sverdlovsk regions, Krasnodar and Stavropol krai, and slightly less in Bashkortostan (18.4%). In the Orenburg region and Tatarstan, this index was close to the Russian average (12-14%). Another 15 regions (including Moscow region) demonstrated positive dynamics of housing commissioning, but less than the above value.

Moscow, despite the record growth (almost by 57%), was second by the absolute value of housing commissioning (7.8 mm sq. m) after the Moscow region, which retained its leadership among Russian regions (9.2 mm sq. m) with an increase in housing commissioning of less than 2%. The leading five regions are also Krasnodar krai (about 6.3 mm sq. m), St. Petersburg (about 3.5 mm sq. m) and Leningrad region (about 3.4 mm sq. m). The share of the Moscow region in the

¹ Also, more than 3 mn sq. m for the year commissioned in Tatarstan, but in contrast to previous years, the republic is not in the top five regions.

total volume of housing construction in the country stood at 18.4% (10.0% in the Moscow region and 8.4% in Moscow), thus exceeding the level of 2020 (17%).

Overall data on commissioning include figures for both apartment blocks construction by developers and individual housing construction (i.e., built by private individuals themselves on their own land).

The most important distinguishing feature of 2021 was the fact that the share of housing built by the households at their own expense or with the help of borrowed funds exceeded half of the total housing commissioning (53%) for the first time. The share of apartment blocks has been steadily declining since 2016 (Table 17).

Table 17
Structure of hosing commissioning in 2010–2021

*7	Total,				sing construction from borrowed funds
Year	Million sq. m.	Million sq. m.	Share in total commissioning, %	Million sq. m.	Share in total commissioning, %
2010	58.4	32.9	56.3	25.5	43.7
2011	62.3	35.5	57.0	26.8	43.0
2012	65.7	37.3	56.8	28.4	43.2
2013	70.5	39.8	56.5	30.7	43.5
2014	84.2	48.0	57.0	36.2	43.0
2015	85.3	50.1	58.7	35.2	41.3
2016	80.2	48.4	60.3	31.8	39.7
2017	79.2	46.2	58.3	33.0	41.7
2018	75.7	43.3	57.2	32.4	42.8
2019	82.0	43.5	53.0	38.5	47.0
2020	82.2	42.4	51.6	39.8	48.4
2021	92.6	43.5	47.0	49.1	53.0

Sources: Rosstat; own calculations.

According to Rosstat, the area of individual housing construction projects commissioned in Russia at the end of 2021 amounted to 49.1 mm sq. m, which is 23.4% more against the previous year. The five leading regions by the absolute value of commissioned housing are Moscow region (around 5.8 mm sq. m), Krasnodar krai (around 3.3 mm sq. m), Leningrad region (around 2.3 mm sq. m), Tatarstan (around 2.1 mm sq. m), Bashkortostan (around 1.8 mm sq. m)

In a number of regions this index grew by 1.5—2 times (Karelia, Vologda, Ivanovo, Tula regions, Kalmykia, Krasnodar krai, Astrakhan region, Karachaevo-Cherkassia, North Ossetia, Chuvashia, Altai Republic, Khakassia, Amur region and Jewish Autonomous Oblast). As can be seen from the composition of this group, it is mostly represented by small and sparsely populated regions, almost not overlapping with those where the total housing construction exceeded 1 million square meters, with the exception of Kuban.

Individual housing construction accounted for over 80% of commissioning in Sevastopol, Belgorod region and Chechnya; 70 to 80% in Irkutsk, Nizhny Novgorod

and Lipetsk regions; 60 to 70% in Tatarstan, Leningrad region, Stavropol krai, Orenburg and Moscow regions, Bashkortostan; 50 to 60% in Chelyabinsk, Samara, Perm, Rostov, Voronezh, Krasnodar and Saratov regions.

At the other pole, as expected, are Moscow and St. Petersburg where the contribution of the individual housing construction amounted to 9.3% and 7.2%, respectively. The intermediate position was taken by Dagestan, Sverdlovsk and Kaliningrad regions, Krasnoyarsk krai, Tyumen region (with autonomous okrugs), where the individual housing construction accounted for 40 to 50% of the commissioning amount.

The upward trend of physical volumes and of the share of individual housing construction in the total annual housing commissioning in recent years cannot be considered outside the specifics of this construction segment. The very fact of commissioning a detached house often diverges from the actual completion of construction work and the start of living in it. Often owners for a variety of reasons (for example, to avoid the growth of tax burden) did not hurry with this process, despite the constant extension of the process of "dacha amnesty" for more than 15 years.

Recently, however, new factors have emerged that have contributed to the registration of previously constructed housing:

- since 2019, it has been possible to hand over houses built on garden plots with subsequent registration for permanent residence in them, with this practice expanding in 2020—2021 due to the pandemic. Accordingly, as of August 2019, housing commissioning starts to include homes built on garden plots;1
- in 2021, there was a new stimulus for registration of houses built long ago, because the presidential initiative led to the adoption of the law "On amendments to the Federal Law on gas supply in the Russian Federation" of 11.06.2021 No. 184-FZ, which allows to connect gas to the borders of plots (in those settlements that already have gas supply) for free. However, this right can be exercised only by those owners whose house has been commissioned and registered.

The latter circumstance resulted in another wave of statistically observed commissioning of way back built houses, which led to a record increase in the delivery of individual housing for 2021 (over 23%). The real construction boom, however, was not observed, just the owners became much more active in obtaining the title to the previously developed sites.

Of course, there are objective reasons for the growth of individual housing construction in many regions.

On the one hand, the coming-of-age population, when some households (e.g., those of pre-retirement and recently retired people) stop being strongly tied to the urban infrastructure and move out of the city.

¹ In accordance with the provisions of the Federal Law of 29.07.2017 № 217-FZ "On the conduct by citizens of gardening and horticulture for their own needs and on Amendments to Certain Legislative Acts of the Russian Federation".

On the other hand, the construction of apartment blocks in a number of small and medium-sized cities has been curtailed or seriously curtailed in recent years. Developers are not active enough due to insufficient solvent demand on the part of the residents of such settlements. That is why the population of small and medium-sized cities has no other options to improve their living conditions but to build their own houses. These long-term trends have been accompanied by a "pandemic effect," which has increased the number of city dwellers seeking second homes outside of metropolitan areas. Still, the record-breaking numbers are largely due to the inclusion of previously-built homes. At the end of 2021, the volume of housing commissioned by the population exceeded the level envisaged in the certificate of the national project "Housing and Urban Environment" at the time of its completion in 2029.

Against this background, the implementation of the other part of this national project — apartment block construction — looks much less rosy. The volume of commissioned housing in 2021 went up by 3.8% compared to 2020, returning to the pre-pandemic level of 2018—2019, which was inferior to the indexes of the previous 4 years (2014—2017). More than half (56.7%) of housing commissioned (excluding those built by households) was commissioned in 10 regions (with at least 1 mn sq. m. commissioned in each region), and the share of the top five (Moscow and the Moscow region, St Petersburg, Krasnodar krai and the Tyumen region with autonomous districts) was over 42% of the total apartment blocks commissioned.

A more conclusive indicator — the volume of housing under construction — can be used to assess the real construction activity in the housing sector. This indicator is published by DOM.RF on the data from the Unified Information System of Housing Construction (UISZhS)₂ and reflects the activities of developers, i.e. professional real estate developers. Moreover, these statistics are available not only by region, but also by city.

Under the program of integrated development of territories, 661 territories are being worked on, where 144 mn sq. m of real estate will be built in the next few years, including 117 mn sq. m. of residential housing.

According to the Construction Ministry, a comprehensive approach to the renovation of settlements makes it possible to commission residential housing in volumes comparable to the mark (120 mn sq. m.) scheduled for 2029 in accordance with the targets of 2020.3

According to the UISZhS, at the end of 2021, there were 21 cities with a volume of housing under construction more than 1 mn sq. m. These territories form 60% of the Russian housing market: Moscow — 15.86 mn sq. m. These territories form 60% of the Russian housing market: Moscow — 15.86 mn sq. m, St. Petersburg — 9.64 mn, Krasnodar — 5.54 mn, Yekaterinburg — 3.23 mn, Ufa — 2.84 mn, Novosibirsk — 2.37 mn, Tyumen — 2.12 mn, Rostov-on-Don — 2.08 mn, Krasnoyarsk — 1.78 mn,

¹ There is no such indicator in the official reports of the Federal State Statistics Service. However, it can be calculated as the difference between the total volume of housing commissioned and housing commissioned by the households at the expense of their own and borrowed funds.

² URL: https://xn--80az8a.xn--d1aqf.xn--p1ai/

³ Garant. URL: https://www.garant.ru/news/1380714/

Voronezh — 1.47 mn, Lubertsy (Moscow region) — 1.26 mn, Perm — 1.25 mn, Samara — 1.23 mn, Vladivostok — 1.19 mn, Izhevsk — 1.15 mn, Ryazan — 1.14 mn, Kaliningrad — 1.11 mn, Krasnogorsk (Moscow region) — 1.06 mn, Kazan — 1.06 mn, Nizhny Novgorod — 1.05 mn, Murino (Leningrad region) — 1.02 mn sq. m.

Consequently, Moscow, St. Petersburg and Krasnodar are the usual leaders in the absolute volume of current construction. The leading cities that have raised the volume of apartment blocks under construction: relative to the end of 2020 are Nizhny Novgorod, Izhevsk, Vladivostok, and the outsiders are Kazan, Krasnoyarsk, and St. Petersburg.

It would seem that the price hike against the backdrop of steadily high demand for apartments should have led to increased investment in new development projects and a growth in market supply. However, so far the mortgage pumping of the market has had little effect on the volume of apartment blocks under construction nationwide. The volume of residential housing under construction - as a more informative indicator for assessing the current state of the market - is not growing noticeably. In 2021, the volume of apartment blocks under construction gained 2.5% to 96.4 mn sq. m., which indicates the absence of any prospects for a breakthrough growth in this segment in the short term. Besides, the above mark was lower than the volume of construction seen in April 2020, that is, at the launch of the program of concessional lending for new construction at an annual interest rate of 6.5% (99.8 mn sq. m).3

Among the objective factors limiting the current construction growth most often cite:

- the transition to project-tied financing, the consequence of which was the final loss by the markets of small cities and the already low margins of projects. Banks are not willing to finance construction in risky (in their opinion) areas;
- the increase in the construction costs (a serious rise in the cost of building materials amid a shortage of labor), which leads to the fact that not everywhere increases in costs are offset by rising prices for finished construction;
- lack of a sufficient number of developed land plots, lagging infrastructure development in the cities.

This being said, the new residential housing finance scheme continued to spread. According to the data as of the end of 2021, the share of apartment blocks construction with the use of escrow accounts as a whole hit 76.8%. Chelyabinsk, Ulyanovsk, Chuvashia, Udmurtia, Orenburg, Penza, Nizhny Novgorod regions, Perm, Stavropol and Primorsky krais, Khanty-Mansi Autonomous Okrug, and Tatarstan were among the leading regions by this parameter (over 90%). In Moscow, its mark

¹ Total square meters of premises under.

² Overview of the market for apartment block construction in the Russian Federation. December 2021. P. 2. URL: https://дом.рф.

was at the national average level (76.1%). Three regions were somewhat behind Moscow in terms of volumes of commissioned housing: Krasnodar krai (72.3%), Moscow region (68.3%), and St. Petersburg (65.9%).

In general, we can talk about a significant slowdown in the pace of apartment blocks construction in recent years. The moderately positive dynamics in 2021 was largely maintained due to growth merely in a few regions.

5.9.3. The construction industry and measures of its state support

In order to overcome the COVID-19 induced difficulties, the government implemented programs to help the construction sector.

First of all, it is worth mentioning the extension of the family and preferential mortgage programs with some modifications.

According to many experts, it is this measure that will optimally stabilize the industry. It stokes the real estate demand, making it possible to maintain the supply of real estate at the proper level. Also, the balance between supply and demand should be facilitated by tightening the terms of the preferential mortgage program while softening the terms of the family mortgage program, which meets the current demographic demand.²

In addition, as of September 1, 2021 amendments to the RF Urban Development Code came into force, reducing the approval procedures in construction. Excessive and duplicative norms were not included in the new list of national standards and sets of rules. The novations will remove barriers to innovation, cut the time and cost of construction while maintaining a high level of safety.

On the recommendations of the Bank of Russia and the Ministry of Construction, the approval terms under the scheme of project-tied financing were cut from 45 to 30-40 days, under which more than 3/4 of the apartment blocks projects were under contraction at the end of last year.

Among legal novations we should also mention the changes to the Urban Development Code of 01.07.2021 which approved the "Procedure of Design Documentation Submission for State Expert Review together with the State Environmental Expert Review." All documents are sent electronically through the Glavgosekspertiza AIS portal, from where they are automatically forwarded to the environmental expertise.

They also introduced definitions of "standard design" (instead of the excluded institute of cost-effective design documentation for reuse) and "working documentation".

In order to stimulate renovation of the residential housing stock the opportunities for financial support to the subjects of the Russian Federation for resettlement of citizens from hazardous housing have been extended. Now the Fund for Assistance to the Reform of the Housing and Utilities Sector provides it to the regions in excess of the limit set for the RF subject for the current year, but not in excess of the calculated limit of funds for the resettlement of emergency housing stock for the forthcoming period until 2024 inclusive.

¹ URL: https://дом.pф. Overview of the market for apartment block construction in the Russian Federation. December 2021. Pp. 9, 10.

² The issues of concessional lending are analyzed in more detail in the following section.

Due to rising prices for building materials and in accordance with the RF Government Decree No. 1315 dated 09.08.2021, in order to partially offset their costs under the law on public procurement (No 44-FZ) by agreement of the parties the developers are allowed to raise the contract price, but not more than by 30%.

Within the Address to the Federal Assembly of the Russian Federation dated 21.04.2021 the President of Russia noted the need to develop the construction industry. Thus, a proposal was made that with the help of subsidies from the federal budget the company DOM.RF will be able to originate loans to developers at a minimum rate (3-4% per annum). Pilot projects to test such a model will be residential construction projects in Tula, Tyumen, Kuzbass and the Sakhalin region.

All of the aforementioned programs and mechanisms were put into practice last year with certain degree of success. They allow to somewhat reduce the developers' transaction costs owing to a better structuring of the regulatory framework and simplification of bureaucratic procedures.

However, it should be noted that these measures did not satisfy all participants of the construction market. For example, the companies SGM-Most, Stroytransgaz, Avtoban found themselves in a difficult situation. In a letter to the president, their managers described the state of the industry as "crisis-related". The article published by RBC discloses problems of the construction industry also pertaining to residential construction. Among them are losses, bankruptcy of a number of companies and reduction of the number of employees in the industry.

In response to this letter, the Ministry of Economic Development proposed a number of measures, among which the following appear to be the most significant:

- to establish a minimum level of profitability of public construction contracts of no less than 20% of their costs, because, according to the National Association of Builders, now the estimated profit in construction projects does not exceed 4-7%;
- obligate state contractors to provide advances on construction contracts in the amount of up to 70%. At present, advances provided for in government contracts usually do not exceed 30%.2

The gradual digitalization of developers is a new trend in 2021. More and more developers are using BIM technologies to optimize and speed up the design process. For example, thanks to the creation of a digital model of construction, when adjustments are made to one parameter, the rest are automatically recalculated. This technology also contributes to the growth of the share of online sales, the tools of which are constantly being upgraded.

In general, some liberalization of the industry took place in 2021. It received considerable support from the state. It is possible to speak about the positive impact of the implemented programs and norms, as the housing commissioning turned out to be record-breaking. However, one should take into account the specifics of this indicator, due to the long production cycle and the increasing role of the individual housing construction. Further actions of the government in this

¹ RBC. URL: https://www.rbc.ru/business/19/07/2021/60f589349a79479a3bb3abb7

² RBC. URL: https://www.rbc.ru/business/29/10/2021/617a766c9a7947717b6b9a59

sphere will depend on the development of the pandemic situation, the dynamics of real cash incomes of the population, as well as the impact of macroeconomic factors, i.e. the implementation of some initiatives is postponed until the emergence of new challenges in the industry, affecting a broader segment of real estate developers.

Thus, at a press conference in late December last year, the President of Russia instructed to draft "proposals to expand the contribution of large industrial companies in the construction of residential housing and social infrastructure facilities in areas where they operate." Large companies have taken part in this before in some regions. However, until recently it was of target nature, mostly formal, on a voluntary-compulsory basis. Potentially, such an approach could become more widespread.

5.9.4. Concessional mortgage lending programs

Against the backdrop of record inflation and rising home prices in recent years, mortgage lending terms were very attractive in 2021.

According to the reports of DOM.RF and the Bank of Russia, the total number of mortgage loans originated in 2021 was estimated at 1,908,000 to the tune of Rb5.7 trillion.2 The growth in volumes compared to 2020 exceeded 28%, while the number of loans went up by merely 7.2%. As a result, mortgage debt for the year surged by more than 26%. At the beginning of 2022, its value amounted to Rb11.7 trillion (taking into account securitized loans and acquisition of the right to demand - Rb12.9 trillion).

Having said that, the level of mortgage interest rates throughout 2021 stimulated the activity of home buyers, especially in the primary market. In this segment, taking into account preferential programs, banks' loan offers were noticeably lower than the inflation rate. At the end of the year, banks commenced to review the terms of loans on the secondary market, however many borrowers managed to buy an apartment under previously approved contracts at lower interest rates. As a result, the weighted average rate on mortgage loans in 2021 (7.49%) was lower than in 2020 (7.67%) (mainly due to the primary market), although it rose to 7.81% by the end of the year.3

In 2021, the basic programs of preferential mortgages, which appeared in recent years, 4 continued, although their terms and conditions have undergone some changes.

Regarding the *Preferential mortgage* program pertaining to the new construction, which was the most popular one in 2020,5 commencing from the middle of the year there was an uptick in the interest rate (from 6.5% to 7%) with

¹ URL: http://www.kremlin.ru/acts/assignments/orders/67556#sel=6:1:Uhh,7:6:Vye

² ДОМ.РФ. URL: https://xn--d1aqf.xn--p1ai/upload/iblock/5a5/5a5d4aef263441a366e4fb529 6b93270.pdf; ЦБ РФ. URL: https://cbr.ru/statistics/pdko/Mortgage/ML/

³ Overview of the mortgage lending market in 2021. ДОМ.РФ. February 2022. Pp. 2, 6.

⁴ Some programs (for example, military mortgages, assistance to mortgage borrowers in a difficult life situation, a number of regional programs) are not considered here.

⁵ Blog DomClickк. URL: https://blog.domclick.ru/post/ipoteka-s-gospodderzhkoj-2020-kak-oformit-i-budet-li-prodlena

a multiple reduction of the maximum amount of loan to Rb3 mn (throughout regions) against Rb6 mn previously (for Moscow and outer Moscow, St. Petersburg and Leningrad region - Rb12 mn) according to the RF Government Decree No. 1060 dated 30.06.2021.

The tightening of terms and conditions from July 1, 2021 markedly narrowed the potential scope of the program. According to experts' estimates, only in one third of the country's regions the average value of real estate was lower than Rb3 mn.1 Changing the terms and conditions of the program expectedly led to a drop in the volume of credit: the average monthly loans in H2 2021 plunged compared to H1 2021 by 45% in quantity and by 64% in volume. Before the modification of terms, the program covered 83% of apartments in new construction offered for sale, however after the tightening of terms and conditions, its coverage in the regions nosedived to 33%, and in Moscow, St. Petersburg, and Moscow and Leningrad regions the use of the soft mortgage program became virtually impossible.2

In general, the results of 2021, especially in the second half of the year, demonstrated that the program of preferential mortgages, the most popular at the time of its launch and the first year of its operation, began to experience a sort of decline. The latter was triggered by the increased demand for new buildings and the rise in the cost of construction materials, which led to an increase in the price of new-built property.³ However, we can say that preferential mortgages helped to stabilize the pandemic induced situation in the real estate market.

By contrast, the *Family Mortgage* program became a kind of driver of the mortgage market in 2021 since its conditions remained practically unchanged. The interest rate (6%) and the maximum loan amount of Rb6 mn remained the same (for Moscow and Moscow region, St. Petersburg and Leningrad region - Rb12 mn). Moreover, it became available to families where the first and subsequent children were born after January 1, 2018, whereas previously the recipient was families with children starting from the second child. According to statistics, there are almost twice as many families with one child as families with two or more children,4 which confirms the relevance of last year's innovations.

In H2 on average, 2.5-fold as many loans were originated each month under the program as in H1 2021. Under the terms of the Family Mortgage program, about 80% of apartments in new buildings are available to families, which is explained by the higher maximum loan compared to the preferential mortgage program. More than a third of loans under the family mortgage program were issued to refinance earlier loans, which helped reduce the payment burden of families with children.5

¹ CIAN. URL: https://www.cian.ru/stati-lgotnaya-no-ne-volgotnaya-chto-stalo-s-ipotekoi-s-1-iyulya-319129/

² Overview of the mortgage lending market in 2021. ДОМ. PΦ. February 2022. P. 5.

³ Council of Federation. URL: https://ach.gov.ru/news/vystuplenie-natali-trunovoy-na-pravchase-v-sovete-federatsii-s-uchastiem-ministra-stroitelstva-i-zhi?highlight-search-result=%D0%9B%D0%AC%D0%93%D0%9E%D0%A2%D0%9D&highlight-search-result=%D0%98%D0%9F%D0%9E%D0%A2%D0%95%D0%9A

⁴ MOS.RU. URL: https://www.mos.ru/news/item/97087073/

⁵ Overview of the mortgage lending market in 2021. ДОМ.РФ. February 2022. P. 5.

According to Sberbank, the average down payment under the family mortgage program at a reduced rate in December 2021 stood at 27.9% of the property value. Typically, families with children take a mortgage for 20 years, but pay it off in full in 4.5 years on average. Experts from Expert RA, Moody's and the NKR rating agency note that this program may become the most popular with households in the future.

Less popular programs are discussed in more detail below.

The *Rural mortgage* program was put in place in January 2020 as part of the "Comprehensive Development of Rural Areas" program.

The provision of the program is the population of the settlement (territory), which is not included in the urban district, which must not exceed 30,000 people.

The program applies to:

- rural settlements and territories;
- small settlements and inter-rural territories that have joint areas within the boundaries of the municipal district;
- workers' and urban type settlements, which are part of urban districts;
- towns with a small population (up to 30,000 people), tied up with neighboring rural areas by close ties: common use of infrastructure facilities, joint economic factors (including labor and social).3

Furthermore, Rural Mortgage does not apply to intercity municipalities of Moscow and St. Petersburg, as well as municipalities and urban districts of the Moscow region.

The loan is secured by a pledge of the credited real estate under the following restrictions:

- the borrower and each of the co-borrowers may be granted no more than 3 home loans in the last annual interval;
- the borrower and each of the co-borrowers may be granted no more than one loan under the state program Rural Mortgage;
- the borrower and the co-borrowers may not use as a down payment the funds of the social payment received under the state program Integrated development of rural areas;
- construction period must not exceed 24 months with the bank's right to increase the preferential interest rate (from 0.1 to 3%) on the loan agreement, if the borrower fails to meet this deadline.

The changes for 2021 were as follows:5

¹ Lenta. URL: https://lenta.ru/news/2022/02/01/domclick/

² RBC. URL: https://www.rbc.ru/newspaper/2021/10/05/6157296c9a794794fbcf787a

³ RF Government Decree dated 30.11.2019 № 1567. URL: https://base.garant.ru/73186746/

⁴ DomClick Sber. URL: https://help.domclick.ru/%D0%B8%D0%BF%D0\(^\text{N}\) BE%D1\(^\text{8}\) 82\(^\text{D}\) 0\(^\text{8}\) BA\(^\text{D}\) 0\(^\text{8}\) BE\(^\text{D}\) 0\(^\text{8}\) BE\(^\text{D}\) 0\(^\text{8}\) BE\(^\text{D}\) 0\(^\text{8}\) BE\(^\text{D}\) 0\(^\text{8}\) BE\(^\text{D}\) 0\(^\text{8}\) BE\(^\text{D}\) 0\(^\text{8}\) BA\(^\text{D}\) 1\(^\text{8}\) 1\(^\text{R}\) 1\(^\text{R}

⁵ RF Government Decree. URL: http://static.government.ru/media/files/Fh71ilwTV7EdJpVpaEwwZ fLxFs1KAAT9.pdf; DomRF Bank. URL: https://domrfbank.ru/mortgage/articles/rural_mortgage/;

- citizens were given the right to build on state or municipally-owned land plots, leased under an agreement for 20 years, whereas previously borrowers could count on a preferential mortgage only if they owned a land plot;
- the possibility of using maternity capital for the first installment was officially embedded (before that there was neither a prohibitive nor permissive provision);
- a special category of territories (rural areas of the Leningrad region and the Far Eastern Federal District) with a maximum loan amount of Rb5 mn also joined Yamal-Nenets Autonomous Okrug (under the general rule -Rb3 mn);
- within six months from the date of ownership registration, the borrower will need to register in the selected housing and notify the bank, which otherwise may increase the interest rate;
- the height of houses built under the program is limited to 5 stories in order to prevent the possibility of misuse.

Accordingly, the program necessary for the development of rural areas of the country (including the stimulation of the agro-industrial complex (AIC)) has been adapted to the realities of the Russian real estate market. However, its rationality and targeting raise questions. According to studies, the main customers of rural mortgages were urban residents, not rural residents, such as agricultural workers, whose share is less than 5%.1 A possible, but far from obvious positive from this is that the relocation of urban residents can bring a modern lifestyle with a higher level of consumption in the backward areas, contributing to their development.

The Accounts Chamber concluded that for rural residents of 14 regions preferential mortgages are practically inaccessible, as the payments on such a loan will leave rural residents with funds equal to the subsistence minimum or even below that. The Accounts Chamber suggests that the Comprehensive Development of Rural Areas program should be radically revised. With all that said, of course, the strength of the Rural Mortgage program is the opportunity to work with the secondary market, access to which not all concessional lending programs provide.

The *Far Eastern Mortgage* program, which is valid from 2019 through the end of 2024 stipulates that the property must be located in a subject of the Russian Federation that is part of the Far Eastern Federal District. It is available only once in a lifetime.

The feature of this program is a low interest rate (2% per annum) with a maximum loan size of Rb6 mn. However, de facto banks do not provide loans at this rate.² There is also no possibility of refinancing mortgages taken before December 1, 2019.

PBK. URL: https://realty.rbc.ru/news/5fa3ec849a7947771d9ceacd; Journal Tinkoff. URL: https://journal.tinkoff.ru/news/jpoteka-v-sele-izmenilas/

¹ Vedomosti. URL: https://www.vedomosti.ru/economics/articles/2021/03/24/863043-selskoi-ipoteki

² Sovcombank. URL: https://sovcombank.ru/blog/ipoteka/dalnevostochnaya-ipoteka--chto-eto-usloviya-stavka

A specific condition is the need to register in the housing within 9 months after its purchase for a period of 5 years or more. Nevertheless, this makes the program attractive to those wishing to remain in the Far Eastern region. It is designed to help retain the young population there, since its main recipients are citizens no older than 36 years. There is an opportunity to use maternity capital. The program seems necessary for the development of the Far East.

From 2021, young families living in monocities can acquire housing on favorable terms not only in new buildings, but also on the secondary market (ready-made residential premises or residential premises with a plot of land). This change will make it possible to purchase housing on favorable terms in places where there is no new construction.

Among all the subsidized programs, the Far Eastern mortgage program demonstrates the lowest absolute quantitative indexes due to its limited territorial coverage. Moreover, in terms of the growth rate in 2021, it was second only to the family mortgage program, ahead of the preferential mortgage for new construction and rural mortgages.

In general, the picture of preferential lending in the past year is presented in *Table 18*.

Table 18
Concessional mortgage lending in 2020–2021

	Number of loans				Total amount			
Credit category and program	thousand		share, %		Rb bn		share, %	
	2020*	2021	2020	2021	2020*	2021	2020	2021
Mortgage loans, total	1780.0	1908	100	100	4445	5699	100	100
Concessional mortgage for new building	343.9	335	19.3	17.6	1008.8	1032.0**	22.7	18.1
Family mortgage	85.6	131	4.8	6.9	241.7	449.5**	5.4	7.9
Far Eastern mortgage	13.6	17	0.8	0.9	52.0	68.5	1.2	1.2
Preferential loans (total on 3 programs)	443.1	483	24.9	25.4	1302.5	1550.0	29.3	27.2
Rural mortgage	45.0	51.2	2.5	2.7	87.2	98.0	2.0	1.7
Preferential loans (total on 4 programs including Rural mortgage)	488.1	534.2	27.4	28.0	1389.7	1648	31.3	28.9

^{*} Indexes for 2020 were recalculated on the basis of data from DOM.RF 2022 overview.

Source: URL: https://дом.pф; Overview of the mortgage lending market in 2021. ДОМ.PФ. February 2022. P. 5; Banks Today. URL: https://bankstoday.net/last-articles/v-rossii-uzhe-dva-goda-rabotaet-selskaya-ipoteka-usloviya-i-osobennosti-oformleniya-v-2022-godu; own calculations.

Concessional loans accounted for about 29% of the total amount of mortgage lending (more than 31% in 2020). Among them, the program of loans for new construction at a rate of 6.5—7% dominated (62.6% of the total amount of concessional lending against 72.6% a year earlier). The Family mortgage program accounted for 27.3% against 17.4% a year earlier. The programs Rural mortgage

^{**} Calculated on the basis of data on the average monthly origination of the program in H1 and H2 2021.

and Far Eastern mortgage had a complementary character (about 6 and 4%, respectively).

The volume of lending increased for all programs: to the greatest extent — for family mortgages (by 86%), to the least extent — for preferential mortgages (merely by 2.3%). The growth under Far Eastern mortgage and rural mortgage programs amounted to approximately 32% and more than 12%, respectively. In contrast to the volume of lending, the number of loans did not grow in all programs. They decreased by 2.6% in the concessional mortgage program, while the family mortgage program grew by more than 1.5-fold, and the Far Eastern mortgage and rural mortgage programs grew by 1/4 and almost 14%, respectively.

Consequently, the importance of concessional programs in total lending declined somewhat in terms of amounts, but not in terms of the number of loans. The main shift was the increase in the share of the Family mortgage program.

5.9.5. Dynamics of demand and the price situation in the primary market of Moscow

In 2021, a high demand for primary housing was the main trend in the capital. The number of transactions in the market of new construction was increasing from month to month, as more and more buyers, who were planning to buy residential housing, rushed to buy it before the completion of the program of concessional mortgage lending. If in January and February in the primary housing market of the Old Moscow, according to the company "Best-Novostroy", there were 3,700 and 5,100 transactions, respectively and in June — 6,600 transactions. And sales peak in the first half of the year was in April — 6,900 transactions.

New terms of preferential mortgages reduced the number of transactions related to new construction, but demand remained high. While in July, there were only 3,900 deals in new construction, in November this figure rose to almost 5,500 transactions.

Compared to the national average, in Moscow the number of mortgage transactions in the new construction market has peaked. Prior to the revision of the concessional lending program, their share in the primary market rose to 72%. However, with the introduction of new concessional mortgage terms, the share of transactions on credit fell to 63—64%, dropping to 57% at the end of the year. However, this result is still high for the capital market.

Another trend in the market of new construction was a record increase in prices (*Table 19*).

As follows from CIAN data, the average price per square meter in 2021 gained 19.5%, slightly behind the previous year (21%), but exceeding the value of prepandemic 2019 (11%). The highest rate of price growth (more than 2% per month) was observed in Q1, July and November, while their decline occurred only once — in December.

The next trend in the market of new construction in Moscow was the reduction of the average floor area of the exhibited apartment. According to the company

¹ URL: https://best-novostroy.ru/

Table 19

Average price dynamic for apartments in new buildings in Moscow in 2021

Date	Price for 1 sq. m, Rb	Chain growth rates, %	Basic growth rates, %
31.12.2020	222 822.00	100.00	100.00
31.01.2021	227 787.00	102.23	102.23
28.02.2021	237 070.00	104.08	106.39
31.03.2021	243 469.00	102.70	109.27
30.04.2021	246 886.00	101.40	110.80
31.05.2021	248 886.00	100.81	111.70
30.06.2021	251 051.00	100.87	112.67
31.07.2021	257 045.00	102.39	115.36
31.08.2021	257 105.00	100.02	115.39
30.09.2021	261 240.00	101.61	117.24
31.10.2021	265 065.00	101.46	118.96
30.11.2021	272 496.00	102.80	122.29
31.12.2021	266 193.00	97.69	119.46

Source: CIAN. URL: https://www.cian.ru/analitika-nedvizhimosti-online/?dealType=sale®ion=ms k&category=newBuildingFlatSale; расчеты авторов.

"Metrium", from the beginning of the year the average floor area of a lot in the new buildings of the mass segment has decreased by 10,9% (from 54,9 to 48,9 square meters). The reason for this is simple. Amid rising prices, demand has shifted to more affordable compact apartments. In order to maintain demand at an acceptable level, market players began to increase the share of small size residential housing. This trend is especially noticeable in the mass segment of Old Moscow. This step allowed to keep the supply budget at the acceptable level for buyers.

Furthermore, in 2021, the share of apartments with both "white box" finishing and finishing in mass new buildings in Old Moscow reached an all-time high. By the end of the year, they were already more than 80% on sale. The demand for such options is due to the possibility to move in almost immediately after getting the keys. In addition, the cost of renovation can be built into the final price of the apartment and included in the mortgage.

Finally, another important trend was the high share of investment deals in H1 2021. Against the background of significant growth in real estate prices at quite low bank deposits rates, new buildings were a profitable asset for investment. This trend was also stimulated by preferential mortgages. Under the original terms, which were in effect until July 1, 2021, investments in apartments on the primary market were profitable. While before the onset of rush demand in summer 2020, the share of investment deals in new buildings was on average 15%, in H2 2020 and up to the middle of 2021 it reached 30—35%. Since July, the number of investment purchases has been declining.

¹ URL: https://www.metrium.ru/

^{2 &}quot;White box" is a pre-finishing in a new building, i.e. an intermediate variant between a concrete box and ready to move in finishing. New buildings in recent years are increasingly being commissioned in this condition.

It should also be noted that in 2021, there was a trend towards ergonomic and functional planning, which was reflected in the apartment plant of modern projects. Euro-format apartments with spacious living-room kitchens that are easily transformed according to the residents' needs comprise more than a half of all planning solutions in new buildings in Moscow. Besides, there is an increased demand for apartments with individual designs: they include variants with private terraces, mezzanine, second entrances, penthouses with wood-burning fireplaces and city villas with patio.

Among other things, the pandemic has strengthened and consolidated the trend for quality amenities in new buildings. If earlier buyers focused on the location of the project, its transport accessibility and social infrastructure, now, in addition to these criteria, buyers are considering projects in terms of quality of landscaping, environmental friendliness of materials, durability of equipment, cost of future operation, use of all kinds of smart technologies both in construction and for the actual operation of residential housing.

¹ The apartment plan is the shared structure of the space-planning solutions used in the construction of the house. It takes into account how many types of apartments there will be in the complex, what areas and planning. It also takes into account the class of housing, its location and cost.

² ДОМ.РФ. URL: https://xn--80az8a.xn--d1aqf.xn--p1ai/% D0%B0%D0%BD%D0%B0%D0%BB%D0 %B8%D1%82%D0%B8%D0%BA%D0%B0/%D0%BA%D0%B2%D0%B0%D1%80%D1%80%D0%B8 %D1%80%D0%B8%D1%80%D0%B8%D1%84%D0%B8%D1%8F/