

#MARKETBEAT

FULL Q4 2021

JANUARY



CONTENTS





GLOBAL CONTEXT

Labor Shortage

Shortage of labor force is a result of young people in developed countries entering the labor market later and later. At the same time, elder generation retires earlier than expected as they have accumulated wealth during the economic growth period. Supposedly, hybrid work leads to lower productivity. Labor force shortfall will become one of the key factors constraining business development and accelerating inflation.



GLOBAL TRENDS 2022

Carbon Neutrality

A shift to carbon neutrality demands not only investments but also transformation of business models which may lead to real estate supply shortage and accelerated development costs growth at the levels exceeding inflation.

Affordable Housing

European municipalities are concerned about rapid growth of residential rent prices at the background of limited income growth among younger people. This may lead to “rental” migration.

Energy Crisis and Inflation

Growing energy cost for European consumers will become a long-lasting driver for a shift to energy-saving technologies. However, in a short-term it will additionally support growing inflation both for consumers and business.

Health and Security

Security and living standards will be among the most important topics in commercial real estate. WELL technologies will become an essential characteristic of a quality office space.

Источник: *Emerging Trends in Real Estate 2022, PwC*

“ *The real estate market will see a noticeable change in 2022. Investors and developers now have to look for alternative investments and implement new principles and technologies in business practices.* ”



Sergey Riabokobylko
Executive Partner
General Director
Cushman & Wakefield

DECREASING REAL ESTATE INVESTMENTS IN RUSSIA

We expect investment volumes to continue decreasing due to a mismatch of buyers and sellers' positions. Investors expect higher capitalization rates while owners do not accept them. The gap in expectations will constrain investment activity.

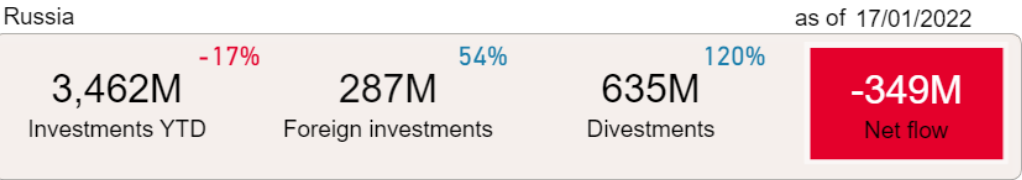
3.5 bn EUR

In 2021
Investment in Russia

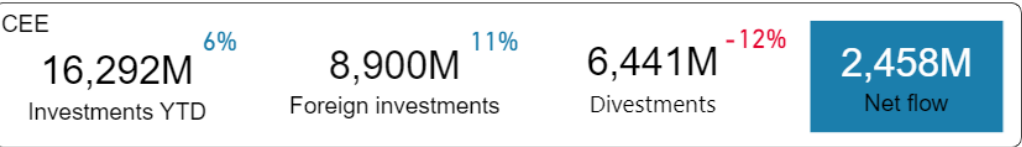
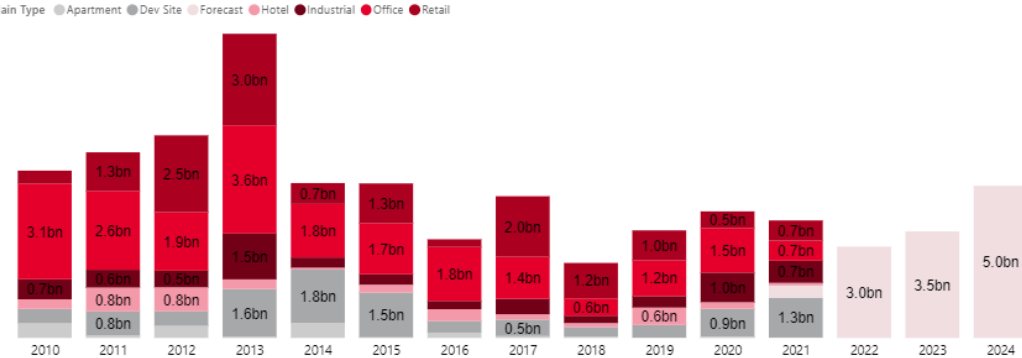
3 bn EUR

In 2022
Investment in Russia (Forecast)

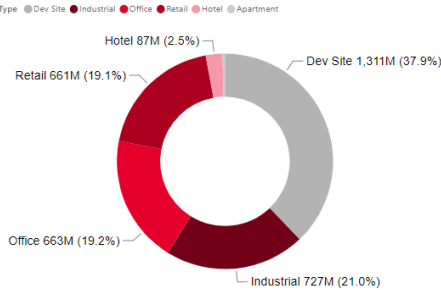
Источник: Real Capital Analytics



Investment volumes in Russia actuals and forecast, EUR



Investment volumes Russia



Office investment volumes



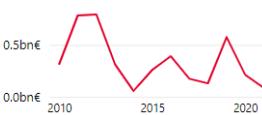
Retail investment volumes



Industrial investment volumes



Hotel investment volumes





MACROREVIEW

MACROREVIEW

The key rate increase, rapid inflation growth, Omicron threat – all these factors mean reset of the existing macro-economy forecasts.

On the coming in February-March rounds the forecast will be updated according to 2021 results. Business models and strategies will need to be reviewed accordingly.

We recommend to consider the current Central Bank forecast and position of the CB head.

The key rate increased in December 2021. The CB suggests additional increase and forecast review in 2022.

8.5 %

Key Rate, December 2021

8.4 %

Expected Inflation, 2021

4.3 %

GDP Growth, 2021 (preliminary data – IMF)

25 %

Preliminary Residential Mortgage Growth in 2021

2022 IN DETAIL

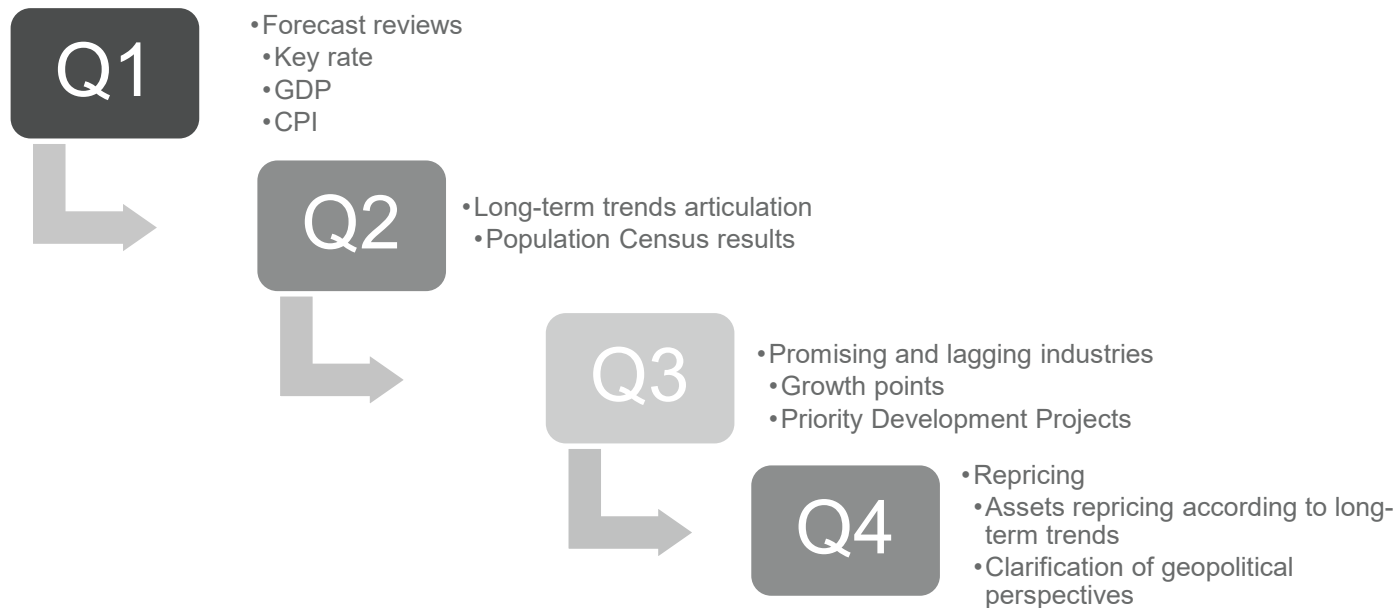
Key factors that will influence business activity – review of macro-economic forecast, results of population census – will define long-term trends.

The market enters 2022 on the wave of the inertial impulse. However, pent-up demand is almost exhausted.

The Ministry of Economic Development and The Central Bank will release their views in February 2022 and this will be an important marker for the market.

We expect to see downturn of the forecasts, but at some point, indicators correction is already included in business strategies. The market expects any of good news. And no bad news is good news.

We will still see geopolitical tension in 2022. Even in a positive scenario it will take time to mitigate political risks.



SLOW DOWN IN 2022

Offsetting economic growth in 2021 will be followed by a slow down and return to normal annual growth levels at about 2%.

4-4.3 %

Preliminary GDP Growth

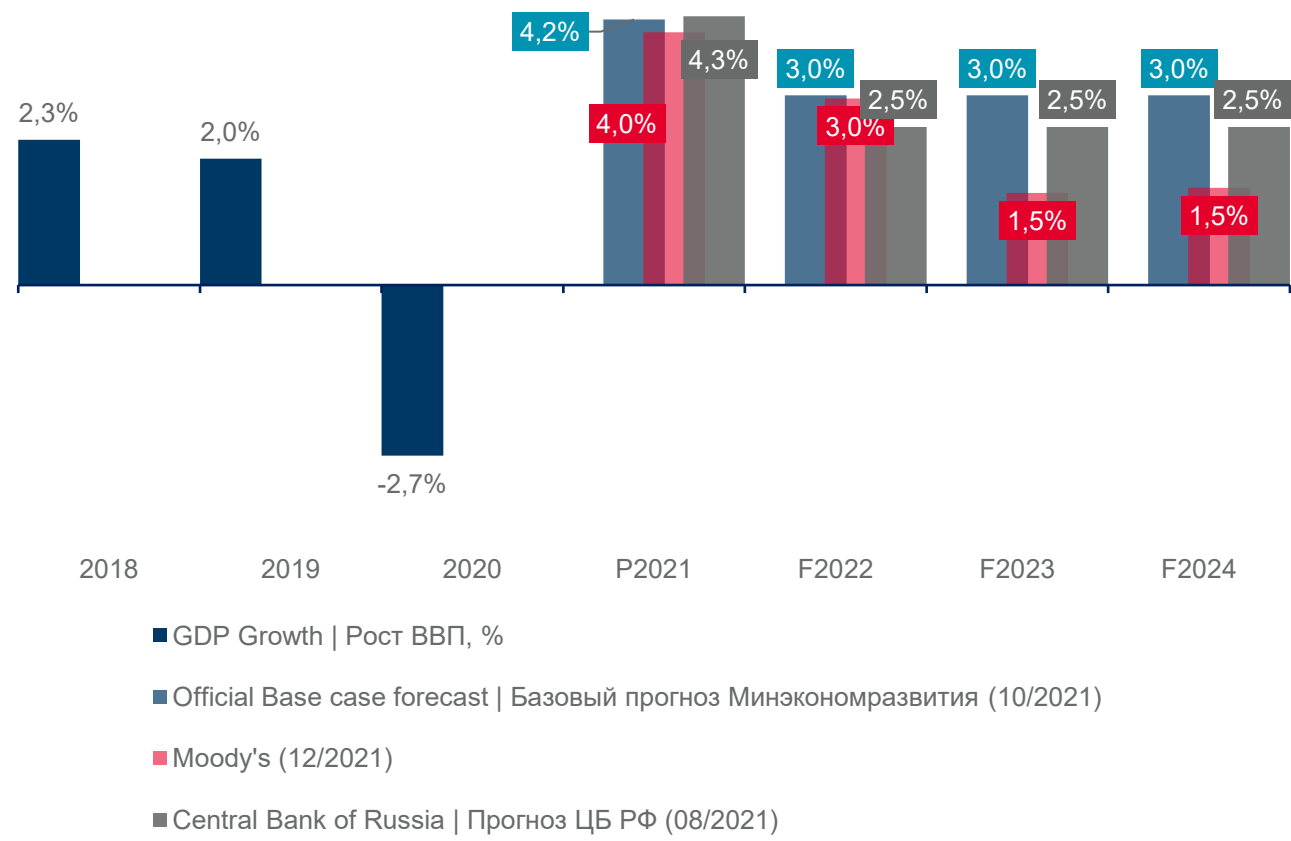
In 2021

1.8 %

Average Annual GDP Growth

In 2022-2026

GDP Forecast



INFLATION

Uneven price growth for goods, services and means of production brings not only risks, but opportunities for some sectors.

23%
Production Price Index in 2021

13%
GDP Deflator in 2021

Source: Moody's

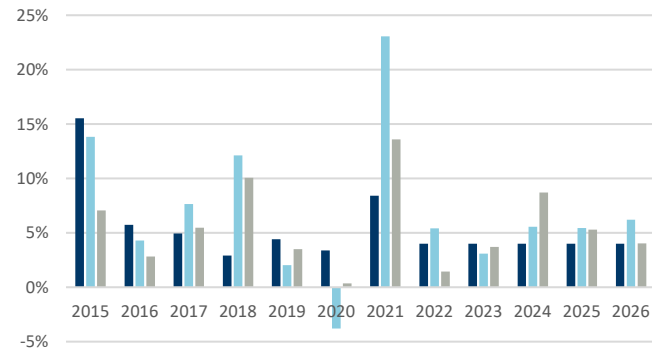
In 2020 producers cut costs in order to keep production volume, not only in Russia, but also in other countries. As a result, production costs decreased. However, in 2021 the gap was more than compensated. Production Price Index reached 23%, while GDP Deflator was 13%.

This means continuing pressure on consumer prices in the coming years despite noticeable growth of inflation in 2021.

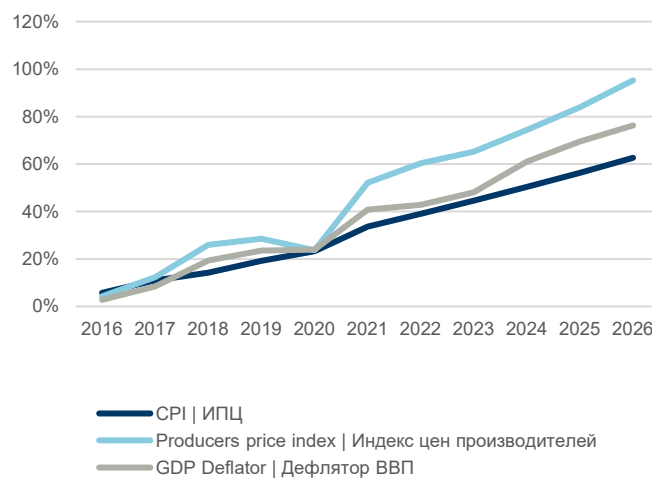
Those industries where producers can cascade increasing costs down through the chain will have an advantage. E.g., automotive industry that managed to increase selling prices at the background of shrinking production.

The real estate sector will most likely lag behind as supply is formed by existing buildings not newly constructed one.

Annual Inflation



Aggregated Inflation



CORPORATE CREDITING IS IMPROVING

Prolong crediting pause is finalized by corporate debt growth at the end of 2021.

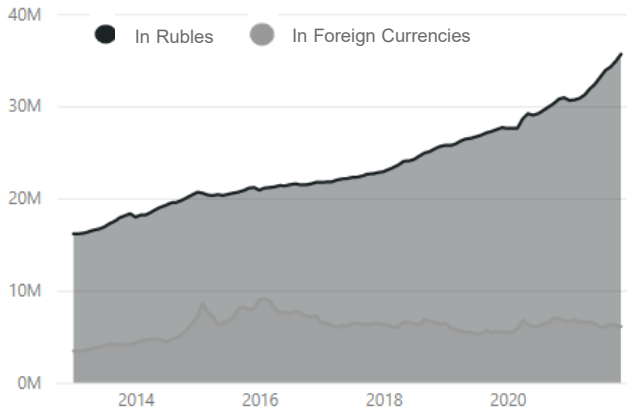
However, we should be cautious in our optimism. Total growth for 10 month in 2021 is 16% meaning that real annual increase will be under 5-6%.

The gain for the wholesale & retail trade might also reach only 4-6% in real terms. The crediting in the segment speeded up by the end of the year which means that November-December will show good results. For the trade segment corporate debt growth will be followed by enlarging assortment and supply. This is one of the most positive factors for retail real estate in 2022.

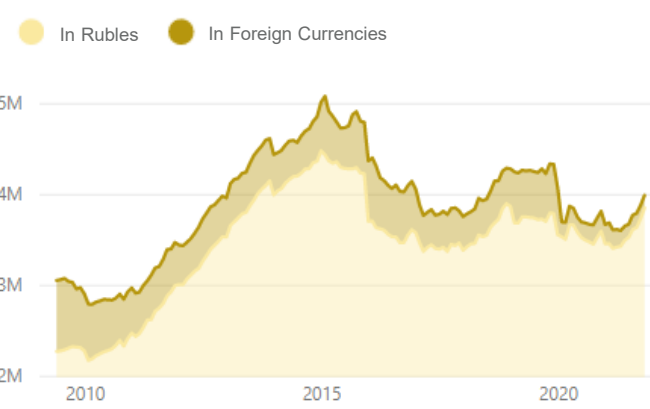
Credits in construction and real estate are expected to grow by 12% in real terms which shows outperformance of the segment.

Source: The Central Bank

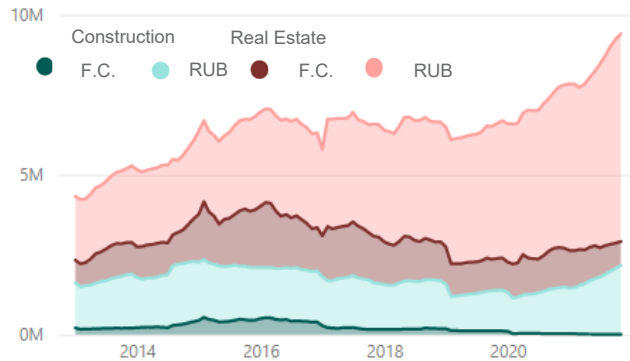
Total Corporate Debt in Russia, Mn RUB



Wholesale and Retail Trade Debt, Mn RUB



Construction and Real Estate Debt, Mn RUB



Assets repricing and industries competition shift

The global inflation brings uneven price growth of goods, services and labor force in all segments and industries. As a result, we will see new price levels for assets. Some may go up in value up to 50%, others might show devaluation.

In 2022 investors will search for industries and segments with maximum upside and growth potential. Market sectors that are squeezed between growing prices for inputs and stagnating consumer demand will be under pressure.





URBAN DEVELOPMENT

Big-City – effect of scale

Big-City is not just an extension of Moscow International Business Center (Moscow-City) – but it is a system of residential, office and mixed-use clusters, that reorients transport infrastructure on the city level. Similar to Moscow-City, the territory has high building density and high-rise building typology. However, in case of Big-City the lessons from the development of Moscow-City have been learnt, which has led to simultaneous construction of proper transport infrastructure and consider smart density concepts in master-planning.

Big-City has entered the active phase of development, however potential investors still can consider this territory as the city's major hotspot and **the future downtown outside conventional CBD.**



UNPRECEDENTED TRANSPORTATION

New lines of metro and Moscow Central Diameters (city rail) will provide Big-City with direct and interchange-free connections to major points of growth and key transport infrastructure hubs of the city. Direct connections play a crucial role in the development of the territory considering its noncentral location. The only zones that cannot be reached easily from Big-City are the developing territories in Greater Moscow.

Points of growth and transport infrastructure hubs with direct access to Big-City

CBD

The heart and soul of the city

ZIL – Yuzhny Port

Revitalized industrial zone, one of future city centers

Skolkovo Innovation Center

SBER City Rublyovo-Arkhangelskoye

Large real estate development project comprising Sber headquarters and housing

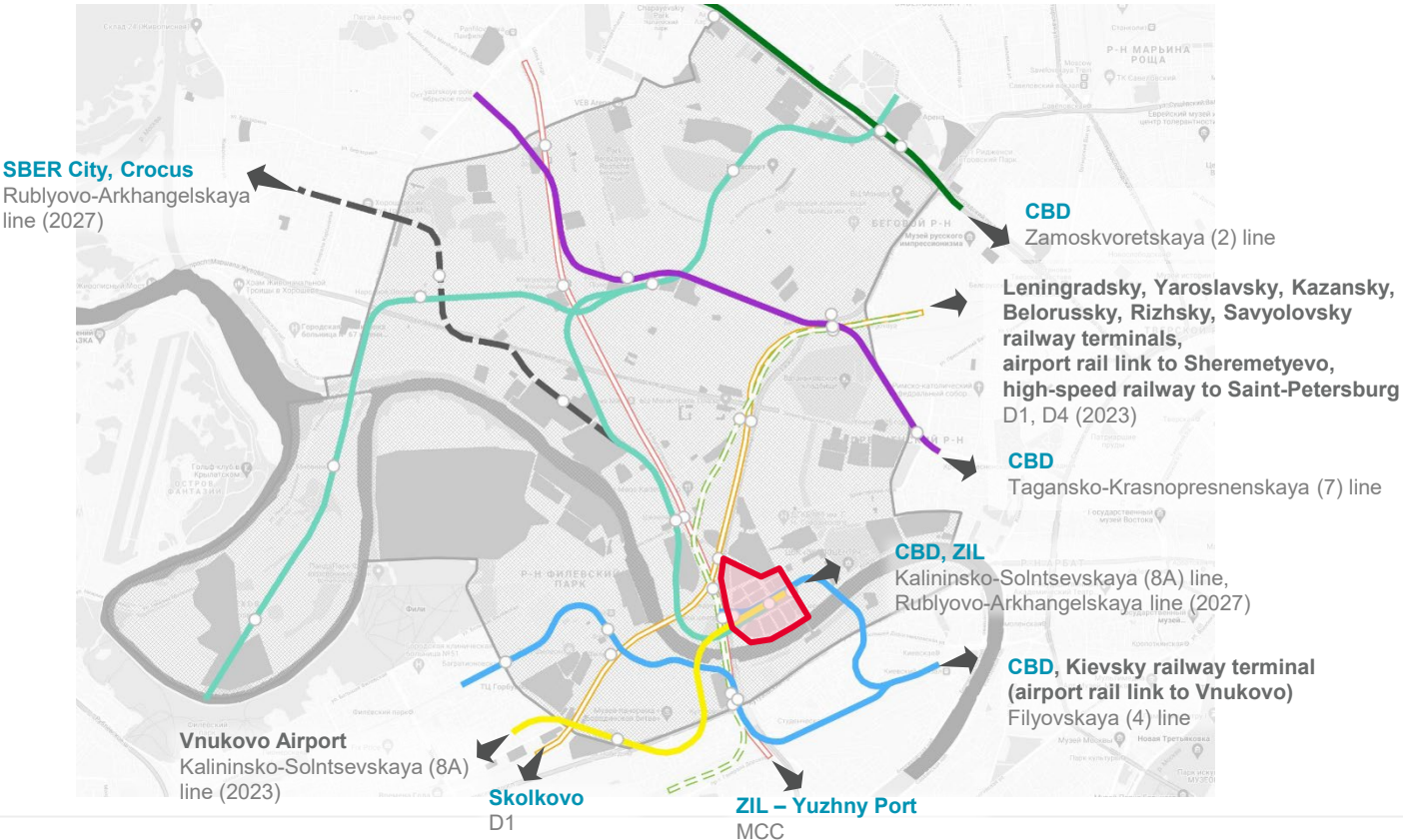
Crocus City

Multifunctional entertainment and exhibition cluster

Sheremetyevo Airport

Vnukovo Airport

Three Stations Square (3 railways),
High-speed railway to Saint-Petersburg



LAND OF DEVELOPMENT

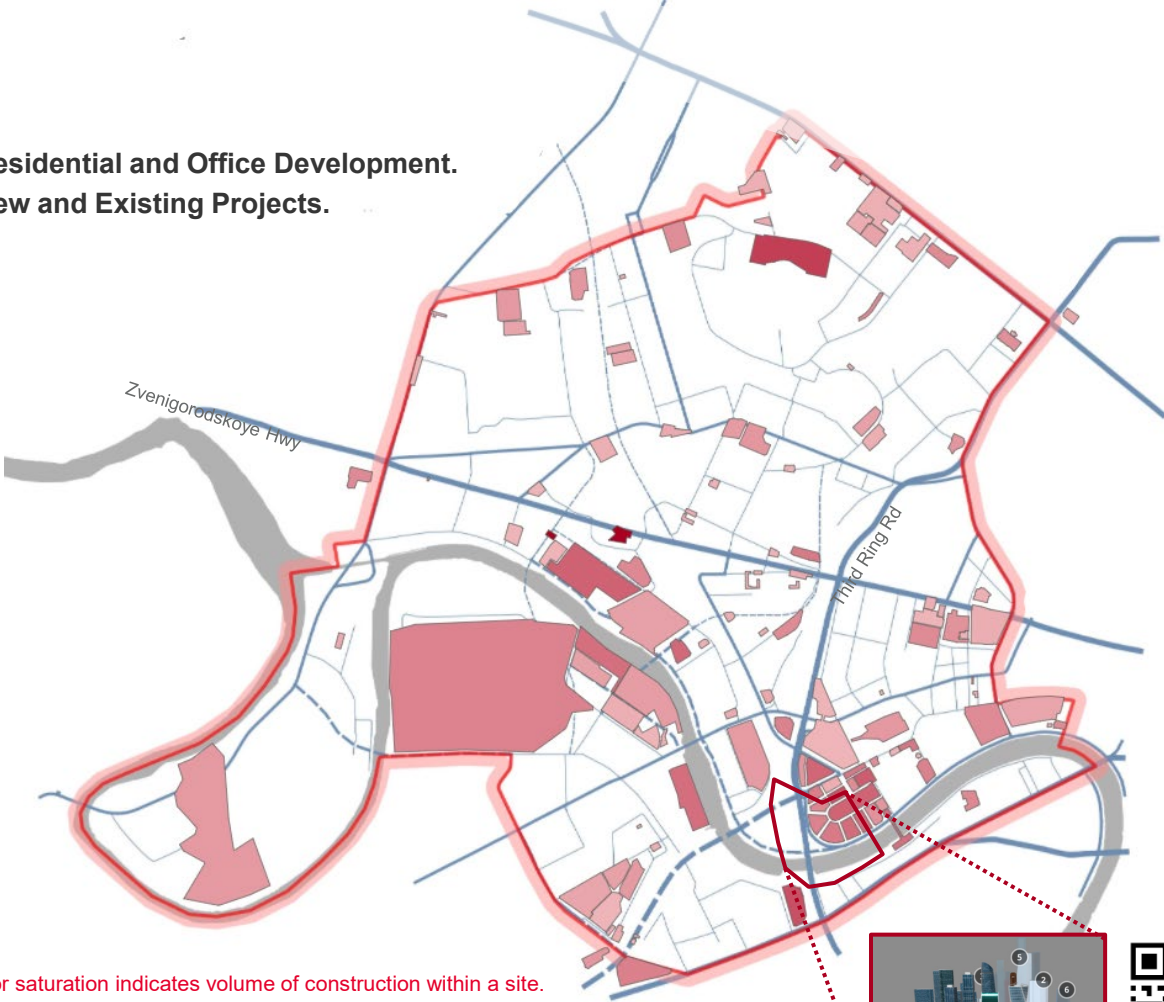
Big-City is experiencing a boom in residential and commercial construction. Even though the development is distributed unevenly across the land, Moscow-City remains the core structural and compositional unit of the project. Largest construction projects are located in former industrial zones along Zvenigorodskoye Hwy and Moskva River. Moskva River is an axis of development in the South of Big-City. Alongside the river the building density reaches its highest rates. The largest share of high-rise buildings is located here.

4.1 mn sq. m
Of Space Under Construction
43% - Office
57% - Residential

142 m
Average Maximum Height of a Project

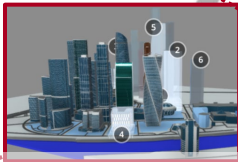
Calculation considers the highest building of each completed, under construction or planned project.

Residential and Office Development. New and Existing Projects.



Color saturation indicates volume of construction within a site.
Major streets of the district are marked in blue, including those planned and in construction (dotted lines).

* 3D model of MIBC Moscow-City is available on cwrussia.ru



MIBC «Moscow-City»*



THE SYSTEM SEEKS EQUILIBRIUM

Analysis of new projects planned for delivery in Big-City gives confidence that the balance of residential and office space is to be established on the territory in the future. The development of the residential sector leads to a growing dispersion of retail space as retail space concepts on the ground floors are becoming more common.

As a result, the territory is developing proportionally according to the principle of “a city within a city”.

60 / 40*

Proportion of Residential and Office Area Among Projects from 2007 to 2025

Calculation is based upon cumulative area of existing and in-construction projects.

Hereinafter an approximate estimate is given.
Calculations by Cushman & Wakefield based on own and opensource data.

New construction within Big-City (existing and under construction), sq. m



Big-City area has its own local and city-scale attraction points (Moscow-City, Aviapark mall). Major attractors accumulate jobs that create the demand for housing. Residential construction volumes meet this demand with a few years delay.

New residential projects also meet the needs of the future population in retail and services by adding retail space concepts on the ground floors of the buildings.

The processes in Big-City can be described by formula:
offices induce housing – housing induces retail.

As a result, small areas achieve benefits of the 15-minute city and Big-City becomes more functionally diverse and autonomous, which corresponds to the image of Big-City as a new central district outside CBD.

RETAIL REBOOT IN BIG-CITY

The growth in the share of street retail in the total retail space of the Big City is due to the changed attitude of developers to the commercial component of their projects. Retail space concepts in housing projects are entering the arena ready to compete with malls.

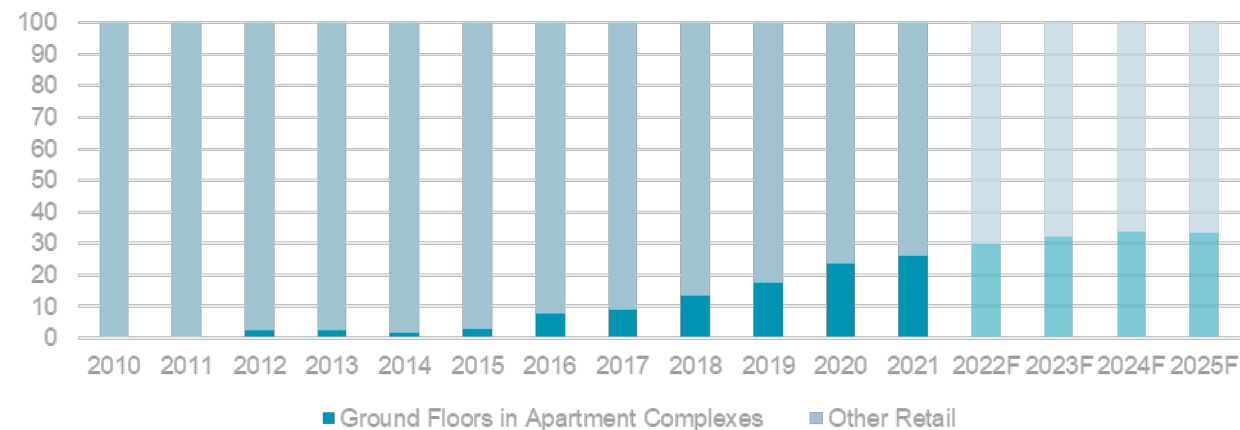
350 '000 sq. m
Of Retail Area on Ground Floors in Apartment
Complexes

Will be delivered in Big-City alone by 2025

33 %
Share of The “Ground Floors” in The Whole
Retail Sector

New residential development by 2025

Share of Street Retail in Retail Stock within Big-City, %



Big-City is marked by high quality of residential development. Developers have changed their attitude to commercial part of their projects - retail space concepts on the ground floors will cover the needs of future residents in retail and recreation, turning the territory of the apartment complex into a shopping center within walking distance.

By 2025 the cumulative retail area of this type in Big-City will exceed 350,000 sq. m. This is more than combined retail area of 2 major malls in the area attracting people from all over the city: Aviapark (the biggest mall in Europe) and Afimall.

Despite the presence of such large shopping centers in Big-City the future of fast-growing street retail in apartment complexes is not under threat, since the format is mostly neighborhood-oriented.

However, if the announced retail concepts are implemented, retail premises in the residential complex will be able to compete with the key shopping centers in both quantity and quality, and possibly attract more audience as the territory of Big-City becomes more interconnected, renovated and more sites will enter the competition.



OFFICES

The impetus received in H2 2020 was offset by the end of 2021. Rental rates and take-up increased by 4% and 27% YoY, respectively. Absorption remained in green zone, while vacancy rate decreased by 1.6 p.p. and amounted to 8.4%. We expect the market to follow inertial scenario. The segment stabilization will take place in 2022-23. Low level of new construction in 2024-25 will be an `echo of 2020-21`.

Moscow

2021 (Classes A & B)

18.96 ^{mn sq. m}

Total Stock of Office Buildings

1.6 ^{mn sq. m}

Vacancy

589 ^{' 000 sq. m}

New Construction

8.4 %

Vacancy Rate

1.92 ^{mn sq. m}

Take-up

9 %

Capitalization Rate, Prime Office Segment

21,910 <sup>RUB / sq. m
annum</sup>

Weighted Average Base Rental Rate

844 ^{' 000 sq. m}

Net Absorption

KEY MARKET INDICATORS. 2022 FORECAST CLASSES A&B

	2020	2021	2022F
Total Stock of Office Buildings, sq. m	18,370,021	18,958,576	19,484,734
New Construction, sq. m	250,928	588,555	500,000
Take-up, sq. m	1,519,506	1,921,638	1,700,000
Net Absorption, sq. m	-176,313	844,367	282,017
Vacancy, sq. m	1,844,188	1,588,376	1,882,950
Vacancy Rate, %	10%	8.4%	9.7%
Weighted Average Base Rental Rate, USD equivalent (USD/ sq. m annum)	295	297	316
Weighted Average Base Rental Rate, RUB equivalent (RUB/ sq. m annum)	21,072	21,910	22,765
Capitalization Rate, Prime Office Segment	9%	9%	10%

2022: inertia instead of decrease

Transformation of working processes didn't lead to a decline in the need for office space. By the end of 2021 we record an increase in rental rates, vacancy rate decrease, high new construction volume. In the mid-term we expect the segment to stabilize and the indicators' dynamics to slow down.



FORECAST: MARKET STABILIZATION

The accumulated potential of the segment led to pent-up demand realization, rental rate increase and large volume of new construction in 2021. We expect the market to develop according to inertial scenario in 2022-23.

8.4 %

Vacancy Rate

2021

21,910 RUB. / sq. m annum

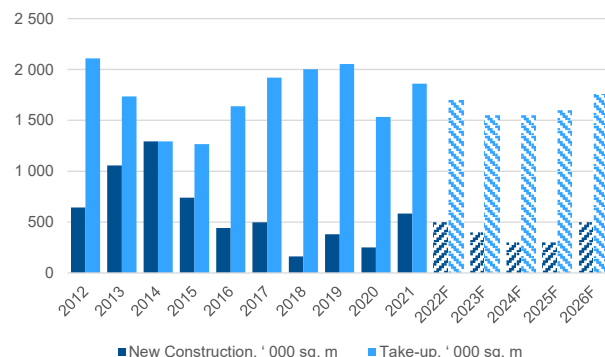
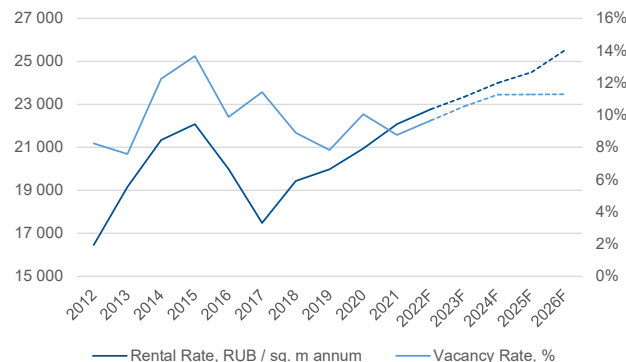
Weighted Average Rental Rate*

2021

*Rental rates are exclusive of VAT and operational expenses

Source: Cushman & Wakefield

Market Indicators – Moscow, Classes A & B



All the indicators showed positive dynamics in 2021. New construction exceeded 500,000 sq. m for the first time since 2016, rental rates increased by 4% YoY. Active demand and built-to-suit properties delivery shifted absorption to the green zone. Execution of major deals restrained vacancy growth. The indicator decreased by 1.6 p.p.

We expect vacancy rate annual growth to be approximately at the level of 1 p.p. in 2022-23 due to new properties' delivery and downward correction of demand.

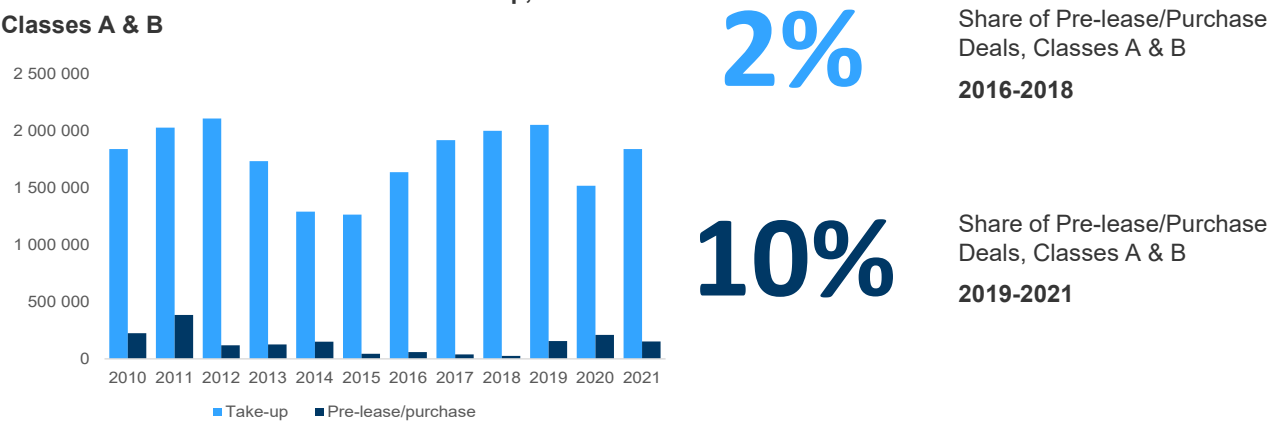
One of the main consequences of 2020-21 will be gradual decrease of construction activity – the start of new construction has been postponed to later periods during the last two years. In the mid-term projects started before the pandemic will be completed.

Rental rates growth will be at the level of 3-4% annually. The sharp increase in prices for construction materials is not fully supported by rental rates growth. It remains a pressure factor for market players that does not greatly affect buildings that are at the final stage of construction but puts serious pressure on properties in the active phase of construction or at the initial stage of development.

DEMAND CREATES SUPPLY

The increase of pre-lease/purchase deals is a result of the lack of large high-quality office vacant premises.

Share of Pre-lease/Purchase Deals in Take-Up, Classes A & B



The growth in the share of pre-lease/purchase deals in 2019-2021 and delivery of large built-to-suit properties led to record new construction and high take-up. The downward correction of market indicators expected in 2022 will be a result of the shortening planning horizon for market players' and the postponement of the new properties construction from 2020-21 to later periods. We will still see a lack of large high-quality office blocks as sharp increase in new construction is not expected in the mid-term. The market will be in balance due to gradual downward correction of demand.

“ Clients that are interested in lease of large office premises will have to find ***tailored solutions***. 50% of class A stock was delivered more than 10 years ago and is quite obsolete. Meanwhile, the share of pre-lease/purchase deals in new high-quality properties is increasing.

Prompt decision-making becomes an important factor in the fight for the best spaces in the market.



Natalia Nikitina
International Partner,
Head of department
Office Group

DEMAND

In 2021 take-up almost reached the pre-covid level. However, the reason is a pent-up demand from the previous year, not a start of a ‘growth phase’.

1.92 mn sq. m

Take-up
2021

1.7 mn sq. m

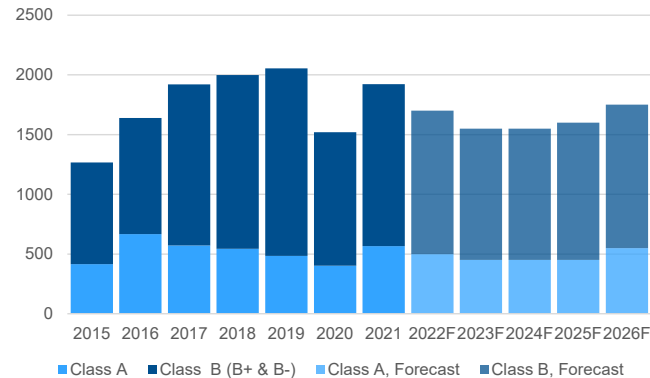
Take-up
2022F

Source: Cushman & Wakefield

The market was active in 2021 – there were several large deals; annual take-up was 3% higher than the forecast and 27% higher compared to 2020. However, pent-up demand is exhausted and liquid supply is limited which will lead to expected indicator’s downward correction next year. Geographical take-up distribution in 2021: 17% of deals were executed within the Garden Ring, 45% - between the Garden Ring and the Third Ring Road, 38% - outside the Third Ring Road. There were no significant changes compared to 2020.

IT-companies, banks and state (semi-state) companies are traditionally the most active market players. Two out of top-3 lease deals of 2021 were executed by flexible workspace operators. That is an additional proof of flexible offices/coworking active growth.

Take-up by Class, ‘ 000 sq. m



Major New Lease Deals (Classic Lease), 2021

Property	Tenant	Area, sq. m
Iskra-Park BC	Business Club	24,600
Neva Towers BC	Yandex	20,834
VTB Arena Park	INEX Group	10,888
Diapazon BC	Kronshtadt	10,335
Alcon BC	Gazprommedia	9,266

FLEXIBLE WORKSPACE

The largest deals in history of the segment was registered in 2021. IT companies, ecosystems and marketplaces are the most active players.

291 '000 sq. m

Flexible Workspace Stock

January 2022

1.5 %

Flexible Workspace as a Proportion of Moscow Office Stock

January 2022

Source: Cushman & Wakefield

Major New Lease Deals, 2021

OZON

More than 50,000 sq. m
several locations

sitronics
GROUP

5 959 sq. m
Smart Yard

СИГМА

3,100 sq. m
Work City

GeekBrains

2,500 sq. m
CODE

**кухня
на районе**

2,005 sq. m
Ключ

Яндекс

5,600 sq. m
Business Club

СБЕР

More than 12,000 sq. m
several locations

Hochland

1 142 sq. m
Space 1

nielsen

1,056 sq. m
CODE

In 2021, 25 flexible workspaces with total area of 66,000 sq. m were opened – the segment grew by 18% YoY. The pipeline is transforming, and a significant share of announced concepts is now represented by built-to-suit options.

In 2020-21 new flexible supply amounted to 65,000-70,000 sq. m annually. This year the indicator may double because 2 new locations with total area of about 50,000 sq. m are announced for opening after Ozon's major deals in 2021.

Along with new openings there are relocations of current tenants which supports demand. In 2021, take-up amounted to 132,000 sq. m that is 2.5 times higher than in 2020. 2 deals of Ozon (Flexity Ovchinnikovskaya and Business Club Iskra-Park) form 36% of annual indicator. We expect take-up to be at the level of 100,000-120,000 sq. m in 2022. The most active market players have executed record deals in 2021 and we do not expect new records in 2022. That is a main reason for slight decrease in take-up compared to 2021.

NEW CONSTRUCTION

New construction of 2021 was a record not only in terms of its volume, but also in terms of structure - almost 70% of new inventory were built-to-suit projects. In 2022-23 the indicator will be lower and represented mostly by speculative properties.

589 ' 000 sq. m

New Construction (Classes A & B)

2021

500 ' 000 sq. m

New Construction (Classes A & B)

2022F

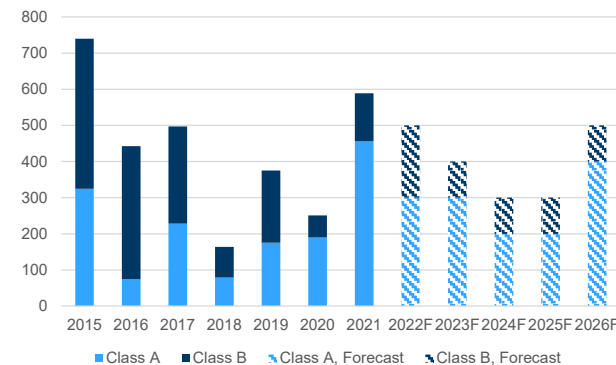
Источник: Cushman & Wakefield

In 2021, 16 properties with total area of 589,000 sq. m were completed. 77% of new construction is class A. However, it didn't lead to a significant increase of new supply offered on the market as 68% of new construction are built-to-suit properties. The latter fact was a reason of the rapid entry of absorption into the "green" zone after the negative values of 2020. In 2022-2023 the share of built-to-suit properties will be much lower.

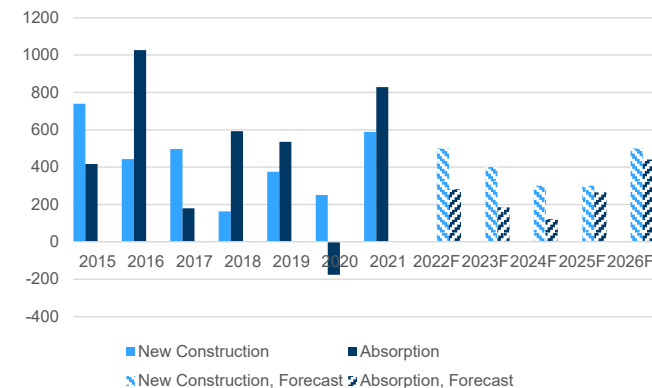
40% of new inventory is located within the Third Transport Ring, 60% - beyond that area (half of that volume is represented by a large BTS project aimed for consolidation of a state company). In 2022, several decentralized office buildings (mainly Western and South-Western direction) are expected to be completed.

After the record set in 2021 new construction will be lower in 2022-23 – at the level of 400,000-500,000 sq. m annually.

New Construction by Class, ' 000 sq. m



Absorption and New Construction, ' 000 sq. m



GREEN IS THE NEW BLACK

The ESG-trend was noticeable in the U.S. and Europe before the pandemic, and “green” buildings are already distinguished from other properties both by rental rates and their special status. In Russia, we do not yet register green premium in rental rates. However, we expect the importance of social and ecological standards to grow gradually due to increased attention to sanitation systems reliability and reduction of environmental pollution after 2020.

*Source: Cushman & Wakefield
Green Is Good: Sustainable Office Outperforms
in Class A Urban Markets (USA)*

USA

LEED-certified buildings have consistently achieved higher rents compared to their non-LEED counterparts. Since 2015, rents for LEED-certified buildings averaged 11.1% higher rent than non-LEED certified buildings.

The pandemic accelerated tenant demand for ESG assets. Since Q1 2020, non-LEED occupancy in the U.S. has fallen from 90% to 88%; yet the occupancy rate for LEED-certified assets has increased from 90% to 92% over the same period.

LEED-certified assets held a 21.4% higher average market sales price per square foot over non-LEED buildings during the past three years.

Attaining ESG commitment through LEED certification does come at a higher cost through construction or renovation. Research has shown that construction costs to attain LEED certification can increase between 7.4% to 9.4%.

Sustainable assets are still fairly niche, with LEED certification accounting for just 2.5% of the total urban office inventory in the United States. However, the inventory is growing rapidly with LEED-certified buildings making up 46% of urban deliveries in the last 10 years.

Russia

Currently green buildings are covering only 1% of Moscow office stock. The figure is lower across the country.

90% of “green” stock is class A.

There is no “green premium” in class A buildings in 2021 – rental levels for green-certified stock and total class A are equal. One of the reasons for that is the obsolescence of a significant share of class A properties with LEED / BREAM / DGNB certificates.

The announced pipeline for the coming 5-7 years will give 50% growth of stock (from 1.8 mn sq. m to 2.7 mn sq. m) which is not a noticeable addition to the total market. Due to the rising interest to ESG, especially from international market players, in the mid-term green buildings will remain a niche “product” or may become “new prime”.

RENTAL RATES

The growth of Class B rental rates determined the dynamics for the whole market.

21,910 RUB / sq. m annum
2021

Ruble Equivalent (All Deals in Classes A & B)

22,765 RUB / sq. m annum
2022F

Ruble Equivalent (All Deals in Classes A & B)

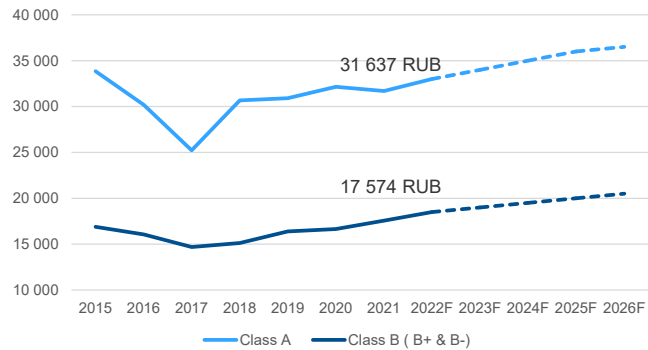
Source: Cushman & Wakefield

In 2021, the average rental rate increased by 4% YoY. However, such dynamics is a result of an increase in class B (+6% compared to 2020), while rental rates in class A decreased by 3%.

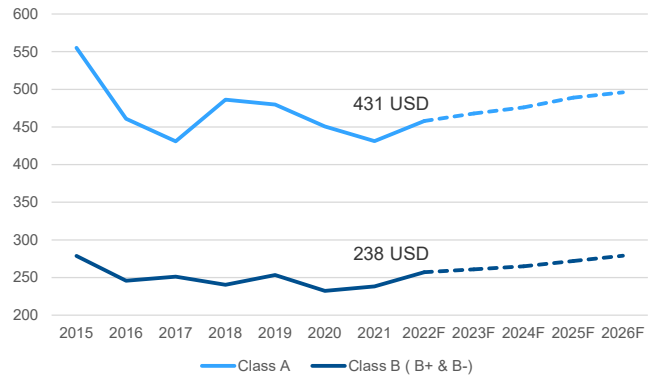
In 2020 there were deals in central prime properties where rental rates are above the average market level. In 2021 supply in prime properties was limited led to a slight decrease of class A rental rates.

One of the most important drivers of rental rates' growth in 2022 will be record growth of PPI (Producer Price Index) in 2021.

Rental Rates in Russian Rubles, RUB / sq. m annum



Rental Rates in US Dollars, USD / sq. m annum



VACANCY RATE

In 2021, the indicator decreased by 1.6 p.p. YoY due to active demand and significant share of built-to-suit properties in annual new construction.

8.4 %

Vacancy Rate

2021 (classes A & B)

9.7 %

Vacancy Rate

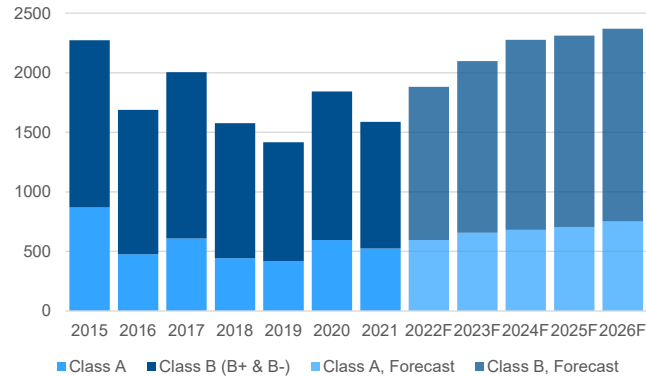
2020F (classes A & B)

Source: Cushman & Wakefield

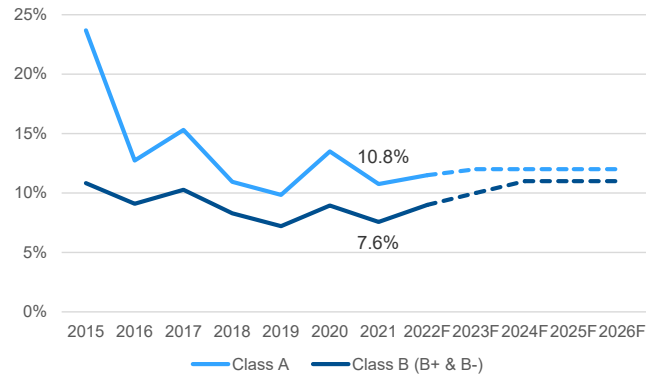
Vacancy rate amounted to 8.4% by the end of 2021. The indicator decreased both in class A and class B – by 2.7 p.p. and 1.3 p.p. compared to 2020, respectively. At the same time, total area of vacant premises with exposition period more than 1 year (less liquid supply) amounted to 481,000 sq. m (+48% YoY). Thus, 30% of current vacancy is represented by premises that do not meet tenants' need. The indicative vacancy rate (excluding such premises) is 5.8%, and the best premises are still being “washed out” from the market quite rapidly.

The expected indicator's growth will be a result of several large properties delivery and moderate tenants' activity (compared to 2021).

Vacant Premises, ‘ 000 sq. m



Vacancy Rate, %



ABSORPTION*

We expect positive absorption in 2022.

844 ' 000 sq. m

Net Absorption

2021

282 ' 000 sq. m

Net Absorption

2022F

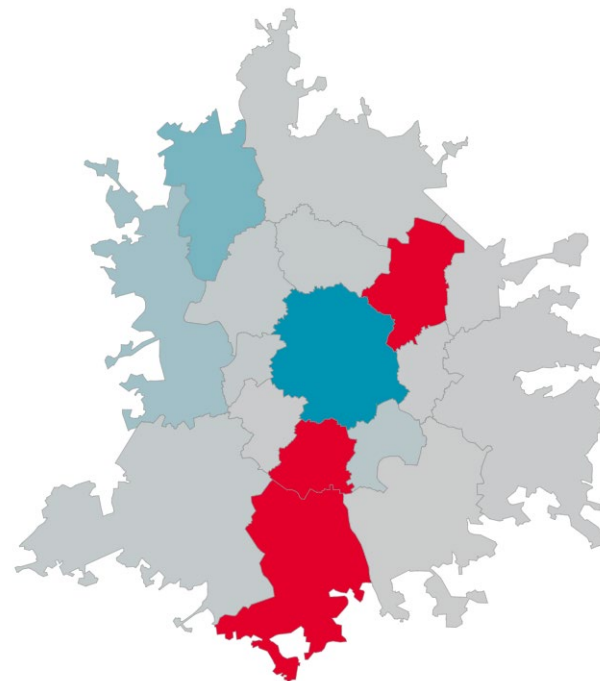
Источник: Cushman & Wakefield

The delivery of large built-to-suit and fully pre-leased properties in 2021 were key drivers of indicator's rapid shift from red to green zone.

In 2022, we do not expect such a significant volume of built-to-suit properties delivery. However, single BTS buildings and office properties with signed pre-lease agreements will be delivered. So, we expect positive absorption in the coming years.

***Absorption** is an indicator that reflects the difference between the area occupied at the beginning and at the end of the period. *Positive* absorption means that additional vacant office premises are "absorbed" from the market. *Negative* absorption reflects the opposite - release of additional office space, which together with new construction leads to vacancy.

Moscow Subagglomerations: Net Absorption, 2021



Red color indicates negative absorption, blue – positive absorption, grey – close to zero.



RETAIL

The retail turnover will grow by 6.9% in 2021 due to the pent-up demand and no strict limitations on the retail operations during the year. However, starting 2022, the growth rate of the consumer market will slow down to 2.8-2.9%.

We expect that in 2022-2023, the market will experience the effect of the pandemic - the activity of developers and tenants will decline. In the past two years, construction of new projects has hardly started, we will only see the openings of schemes that started construction before 2020.

Moscow

2021

5.91 mn sq. m

Total Quality Stock

258 '000 sq. m

New Construction (Retail Properties with GLA of more than 15,000 sq. m)

10 %

Vacancy Rate in Quality Shopping Centers

9.5 %

Capitalization Rate, Prime Shopping Centers

2022F

6.03 mn sq. m

Total Quality Stock

120 '000 sq. m

New Construction (Retail Properties with GLA of more than 15,000 sq. m)

10 %

Vacancy Rate in Quality Shopping Centers

10 %

Capitalization Rate, Prime Shopping Centers

Transformation of the segment

High competition and struggle for customer loyalty make shopping centers and retailers to match consumer preferences. Operators try new formats and collaborations, implement digital technologies, and develop online channels. Due to the maturity of the market, developers are shifting their focus from the construction of new shopping centers to updating the concepts of existing properties.



CONSUMER MARKET

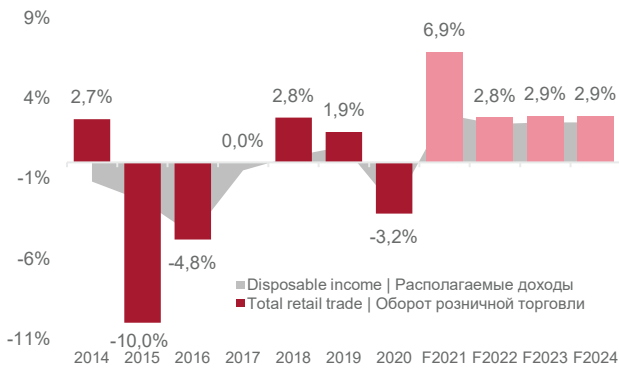
The purchasing power is declining - a significant share of the population is in a savings mode. The economy stores are in demand.

7.5 %
Retail Sales Growth
January-November 2021

2.8 %
Retail Sales Growth
Forecast for 2022

Source: Rosstat, the Ministry of Economic Development

Consumer Market in Russia



Consumer Confidence Index



In January-November 2021, the consumer market has recovered. According to Rosstat, the retail turnover in Russia increased by 7.5% compared to the same period of the last year. Service sector and catering turnover are also in the green zone – the indicators grew by 24.1% and 18.1%, respectively.

According to the forecast of the Ministry of Economic Development, the retail turnover is expected to increase by 6.9% in 2021. However, starting from 2022 the growth will be at the minimum level. The market will not be any more driven by a pent-up demand accumulated during 2020.

By the end of the year consumer confidence index reached its lowest level in 2021. In Q4 people evaluated their current and expected financial status more negatively. The index of favorable conditions for making large purchases and savings also showed decrease. However, the average for the year is higher than a year before.

FORECAST: CONSTRUCTION
DECLINE

After new construction record of 2021, decrease of retail space delivery is expected in 2022.

687 ‘000 sq. m
New Construction in Russia
2021

350 ‘000 sq. m
New Construction in Russia
Forecast for 2022

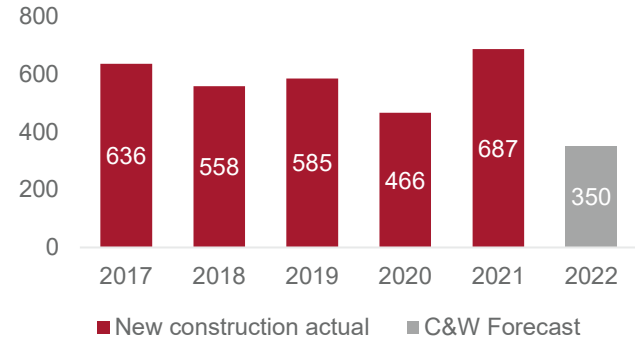
Source: Cushman & Wakefield

A significant part of retail properties that started construction several years ago, was launched in 2021. New construction reached its highest level over the past 5 years – 21 quality shopping centers with total GLA of 687,000 sq. m were opened in Russia. Such a significant volume was due to the opening of several large properties with GLA of more than 40,000 sq. m.

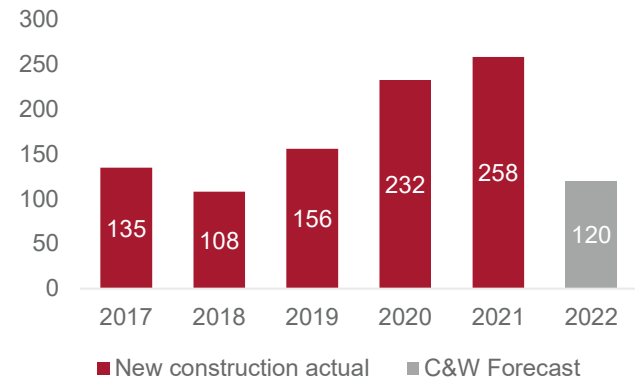
In 2022, the construction volume will decrease almost twice – only small retail schemes are planned for opening both in Moscow and in the regions. The average size of a shopping center under construction in Russia is 24,000 sq. m GLA, while the average size of an existing one is 36,000 sq. m.

In the next two years, we expect a decrease in construction activity as in 2020-2021 the construction of shopping centers almost did not start. New projects are announced, but their delivery dates are not clear yet.

New Construction in Russia (including Moscow), ‘000 sq. m



New Construction in Moscow, ‘000 sq. m



NEW CONSTRUCTION IN MOSCOW

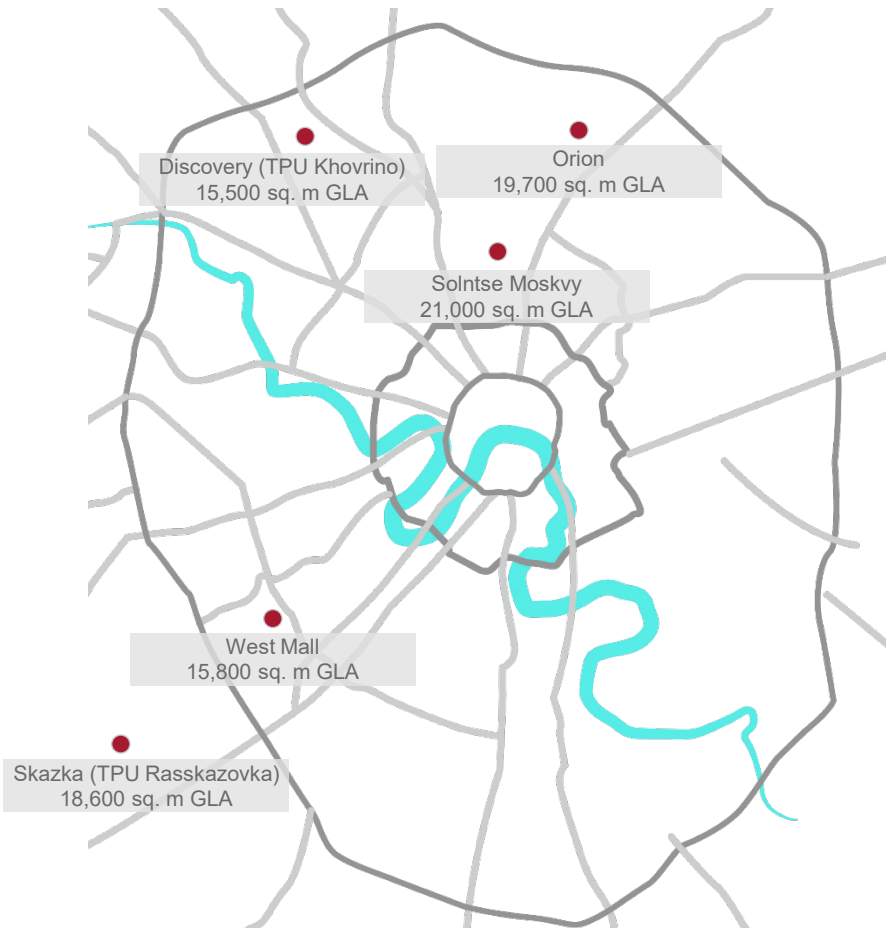
New construction in 2022 will reach one of the lowest levels over the past 5 years. The largest retail opening will be Solntse Moskvyy shopping center (GLA - 21,000 sq. m).

120 '000 sq. m
New Construction in Moscow
Forecast for 2022

17 '800 sq. m
Average Size of a Shopping Center Under Construction in Moscow

Source: Cushman & Wakefield

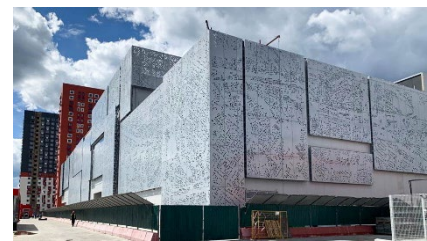
LARGEST SHOPPING CENTERS PLANNED FOR OPENING IN MOSCOW IN 2022



Solntse Moskvyy



Skazka



Orion



RENOVATION OF SHOPPING CENTERS

Not only the maturity of the market and retail space saturation transforms the retail segment, but also urban development. The city is in the process of change, the functions of city districts and real estate properties are changing.

Roll Hall



The shopping center will be reconstructed and become a part of neighboring business district.

Grand City



A new creative space P.A.N.G.A.E.A is planned on the site instead of the shopping center and on adjacent territories. The Flacon team will participate in the project.

Extreme



A residential complex by Pioneer developer is planned instead of the shopping center.

Podsolnukhi



Pioneer Group plans to build up the territory of the former shopping center with a residential complex. It is possible that the retail function will be partially preserved.

The lifecycle of a retail concept is about 5-7 years. Currently, more than a half of the retail schemes in large cities (1 mn+ people) require update of the concept.

In addition to concept update that have already become standard market practice, there are more and more news about planned demolition and redevelopment of shopping centers with a change in the main function - from retail to residential, office, etc. Most of these facilities were built at the initial stage of the market development (early 2000s) and structurally and conceptually do not fit current standards.

NEWCOMERS

International operators continue to expand to the Russian market.

14

International Brands

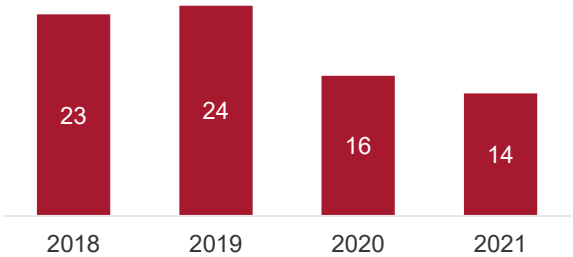
Entered the Russian Market in 2021

3

International Brands

Left the Russian Market in 2021

Number of New International Brands Entering the Russian Market in 2018-2021



The activity of new international brands is not as high as in the previous years, however new retailers continue to enter the Russian market. In 2021, 14 new brands came to the market, which close to the 2020 results, however 40% lower than in pre-pandemic period.

Most of the brands that entered the market are in fashion/footwear category – 40% of new operators.

In 2021, 3 international retailers left the Russian market: Lefties, Bath & Body Works and Topshop. Kiabi also announced the closure of the stores in Russia.

Newcomers to the Russian market in 2021

The Frankie Shop

ZARA
(ZARA Beauty)

SHIKKOSA

BERNADETTE

DIOR
(Dior Beauty)

BYREEDO

eleven
ty

NEBBIA

ARKET

 Little Caesars

ecco
KIDS

ACCESSORIZE

7745.RU
ВСЁ ДЛЯ СТРОЙКИ

acer

RETAIL MARKET CONSOLIDATION

37.5 %

Share of TOP10 Largest Grocery Chains in Total Grocery Retail Turnover

58 %

Share of TOP10 Largest Online Shops in Total Online Sales

Source: InfoLine, Data Insight

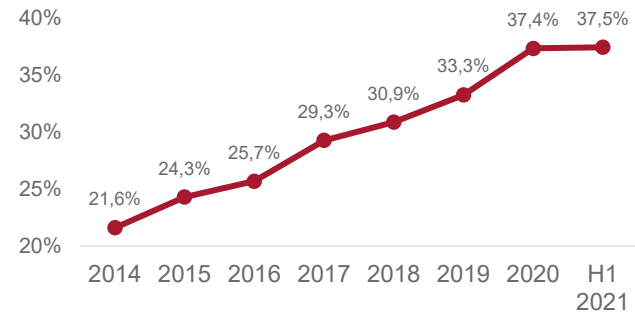
Retail market in Russia is consolidating. Over the past 7 years, the share of TOP10 grocery chains in the total turnover of grocery retail has almost doubled. With the current growth rate, the share of the largest grocery operators may reach 50% by 2025.

In 2021, there were several major acquisitions of large grocery chains: Magnit purchased 4,267 stores of the Dixy Group, and Lenta bought 161 Billa supermarkets. The grocery chains are also growing by opening of new stores and expansion in the regions of Russia.

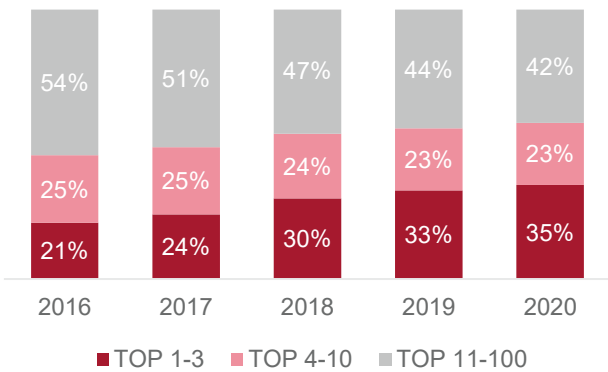
Online retail also shows high level of consolidation – the share of ten largest operators in the sales of TOP100 online retailers grew by 14 p.p. in the past 5 years and now reaches 58%.

Consolidation leads to monopolization of the market, which may result in increase of prices and assortment reduction.

Share of TOP10 Largest Grocery Chains in the Total Grocery Turnover



Structure of TOP100 Online Stores in Russia by Turnover



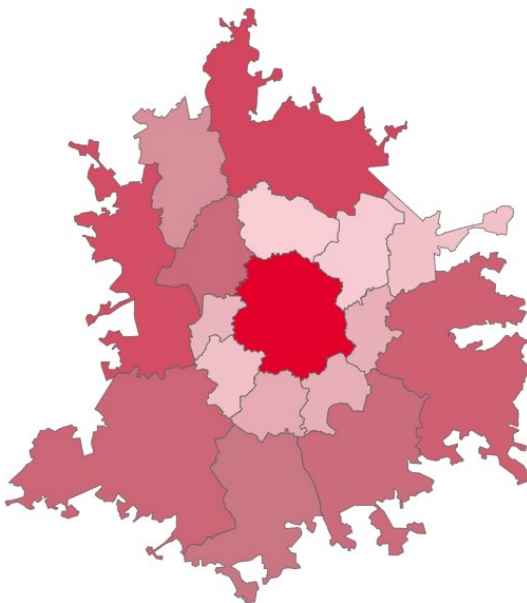
RETAIL SPACE BY SUBAGGLOMERATIONS IN MOSCOW

Subagglomerations is a tool for spatial analysis of the real estate market in Moscow and adjacent territories. The city is divided into non-overlapping zones, consisting of smaller areas (metrocommunes), where metro stations are the points of attraction.

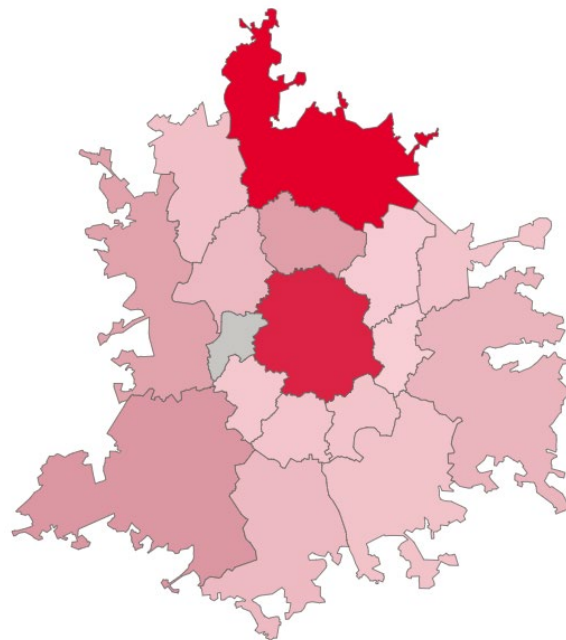
Using this tool, you can compare different district of Moscow by retail density and construction activity.

High construction activity is concentrated in two subagglomerations - N2* and CBD-II (a zone within the Third Transport Ring) - more than 50% of retail space under construction in Moscow is located here. Several large projects are planned for opening in these areas.

Subagglomerations: Existing Shopping Centers



Subagglomerations: Shopping Centers Under Construction



*How to read naming of subagglomerations: the letter means the direction (in this case – North), the number means distance from the Third Transport Ring (we identify two belts of distance).



WAREHOUSE & INDUSTRIAL

In 2021, all key market indicators performed a record values. Almost all vacant area was leased, the highest take-up on record was observed for the second year in a row. The new commissioning exceeded results of the last 7 years. Aggressive growth of rental rates became the top topic on the market.

In 2022, the market will continue to perform strongly. Construction costs growth is expected to slow down which may provide an opportunity for some new unique warehouse solutions and completion of current constructions on time.

** Average weighted asking rental rate in existing properties excluding OPEX, utility and VAT.*

The Moscow Region 2021

21.0 ^{mn sq. m}

Total Stock of Warehouses,
Classes A & B

5,500 ^{RUB / sq. m / year}

Rental Rate*, Class A

1.3 ^{mn sq. m}

New Construction, Classes A & B

1 %

Vacancy Rate, Class A

2.9 ^{mn sq. m}

Take-up, Classes A & B

10.5 %

Prime Capitalization Rate

KEY MARKET INDICATORS. THE MOSCOW REGION

2022 FORECAST

	2020	2021	2022F
Total Stock of Warehouses, Classes A & B (sq. m)	19,725,845	21,033,051	22,433,051
New Construction, Classes A & B (sq. m)	899,633	1,307,206	1,400,000
Take-up, Classes A & B (sq. m)	2,373,810	2,890,287	2,000,000
Rental Rate*, Class A (RUB / sq. m / year)	4,100	5,500	6,000
Vacancy Rate, Class A	3.5%	1%	1%
Prime Capitalization Rate	11%	10.5%	11%

* Average weighted asking rental rate in existing properties excluding OPEX, utility and VAT.

2021 is for records, 2022 is for opportunities

The spread in rental rates increased due to the washing out of almost all vacant blocks. The rental rates differ depending on status of a property and distance from Moscow. In 2022, we will still see the lack of speculative offer, despite high speculative construction (mostly pre-leased) and vacancy from the relocation of tenants who signed contracts for BTS projects in 2020-2021. Rental rates will continue to grow.



FORECAST: THE MARKET GROWTH IN 2022

The high demand and the lack of warehouse schemes resulted in fast market growth for the third consecutive year. Most likely, the market reaches the peak in 2020-2022 and will retreat later to average annual indicators of previous years.

5,500 RUB / sq. m / year

Average Weighted Asking Rental Rate in Existing Properties Excluding OPEX, Utility and VAT, Class A

Q4 2021

1.3 mn sq. m <1%

New Construction, Classes A & B

2021

Vacancy Rate, Class A

Q4 2021

Source: Cushman & Wakefield

In 2021, new completions reached 1.3 mn sq. m for the first time in 7 years. The 2022 indicator is projected to hit 1.4 mn sq. m (+8% to 2021). The driver for construction activity is high demand for built-to-suit projects in 2020-2021 due to the lack of existing speculative offer. The share of BTS-projects in 2022 commissioning is expected to be 62%.

We will still see high demand in 2022 despite some downgrade. Until 2020, the take-up has never reached 2 mn sq. m, the highest value was 1.8 mn sq. m in 2018. However, since 2020 the indicator strongly exceeds this level. In 2022, the take-up is expected at the level of 2 mn sq. m.

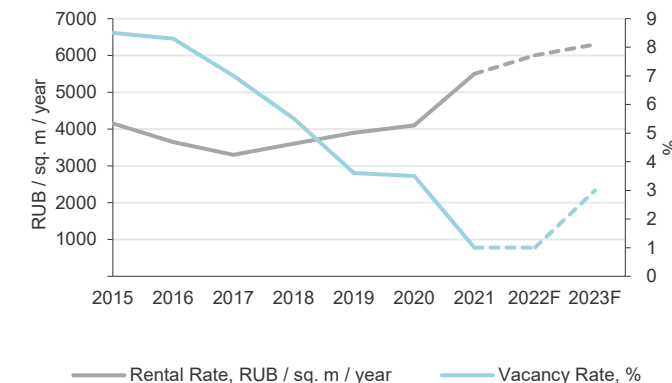
Supply deficit will persist. The vacancy rate will be below 1%.

The rental rates will continue to grow due to the market factors and high inflation.

Key Indicators – Classes A & B



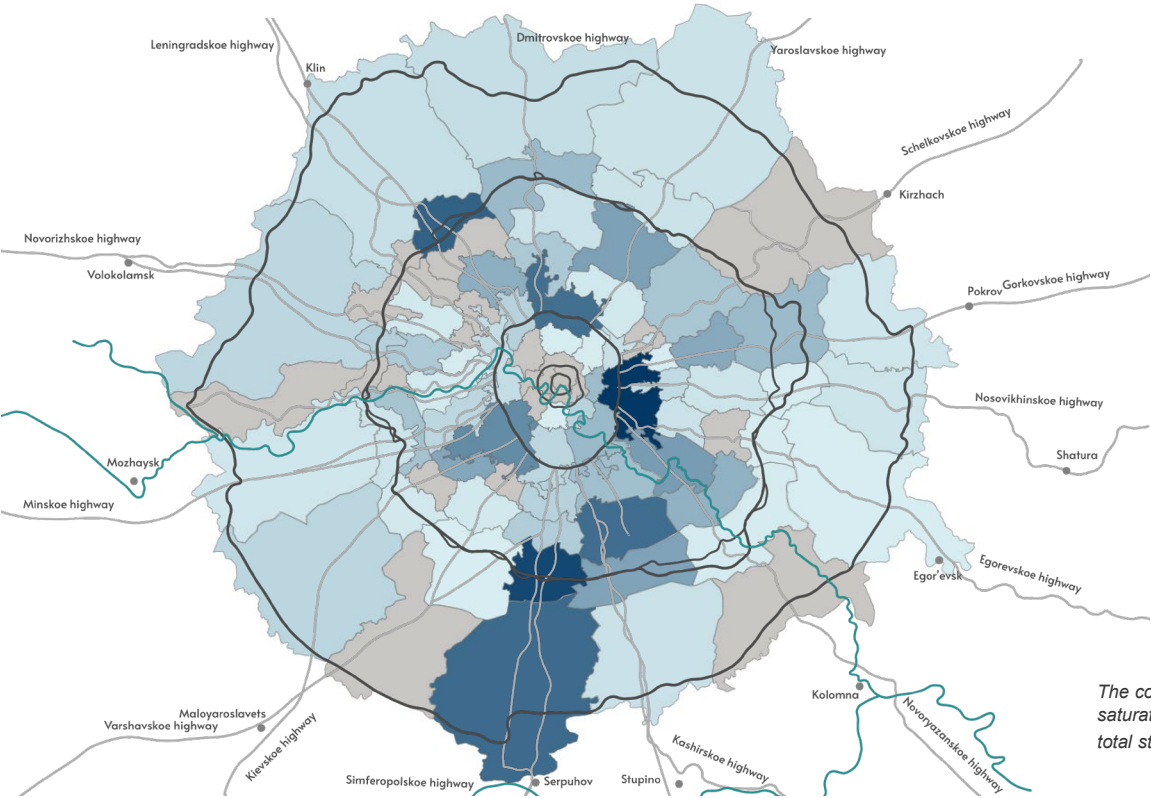
Key Indicators – Class A



THE MOSCOW REGION SUBAGGLOMERATIONS - A NEW MARKET APPROACH

The territory of the Moscow region is divided into non-overlapping zones, the size of which depends on the density of the road network. The highways pass through the center of each subagglomeration. This method supports approach of Moscow subagglomerations and addresses specifics of the warehouse segment.

Total Stock of Warehouses by Subagglomerations, Classes A & B



The color intensity reflects the saturation by the total stock of classes A and B.

“ The current market environment requires **new methodological approaches**.

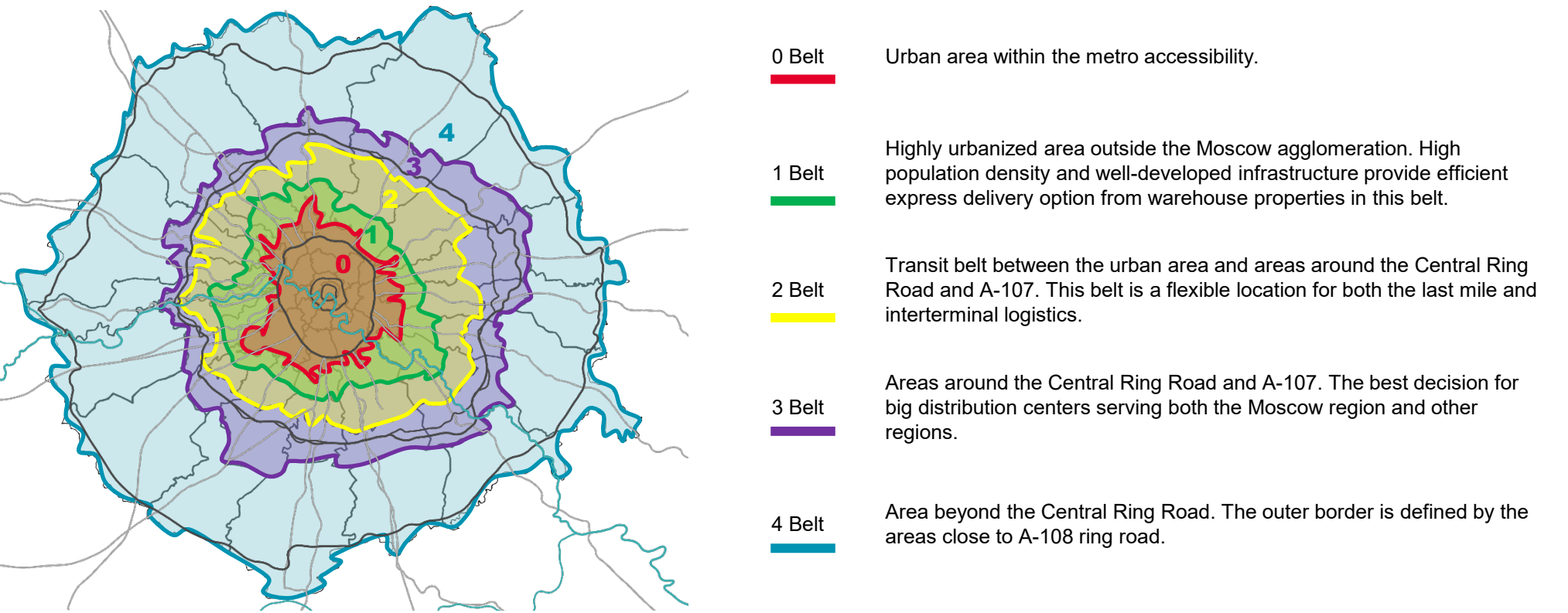
Subagglomerations model reflects the latest trends in **urban development** and provides deeper view to the **micro-location analysis**.



Egor Dorofeev
International Partner,
Head of Warehouse & Industrial
Department

WAREHOUSE BELTS

The key factor for the warehouse location analysis is a distance from the city, as a result we identify the belts by remoteness from Moscow. We use a combination of subagglomerations with similar in remoteness from Moscow and/or the proximity to the key ring roads.



Source: Cushman & Wakefield

DIFFERENCE IN RENTAL RATES

The spread in rental rates became higher due to the washing out of almost all vacant area. The rental rates differ in dependence of status of property and its remoteness from Moscow.

The classic approach to rental rates in the Moscow region market is no longer relevant due to the market specific. Depending on the remoteness from the city and status of the property, the difference in asking rental rates reaches 2.5 times.

The extension of the approach by taking into account the factors of distance and status reflects the real market situation. In 1-2 years, the trend will continue due to the lack of supply. We will see the growth of rental rates in all categories of properties.

Rental Rate, The Moscow Region, Class A, RUB / sq. m / year*

	0-1 Belt (Urban Logistics)	2-3 Belt	4 Belt
Existing Properties	9,150	5,550	5,300
Under Construction Properties	9,600	5,700	5,100
Planned For Built-to-suit**	8,000 – 12,000	5,000 – 6,500	4,500 – 5,500

* Average weighted asking rental rate excluding OPEX, utility and VAT.

** Cushman & Wakefield expert estimation.

Source: Cushman & Wakefield

RENTAL RATE AND PRODUCER PRICE INDEX

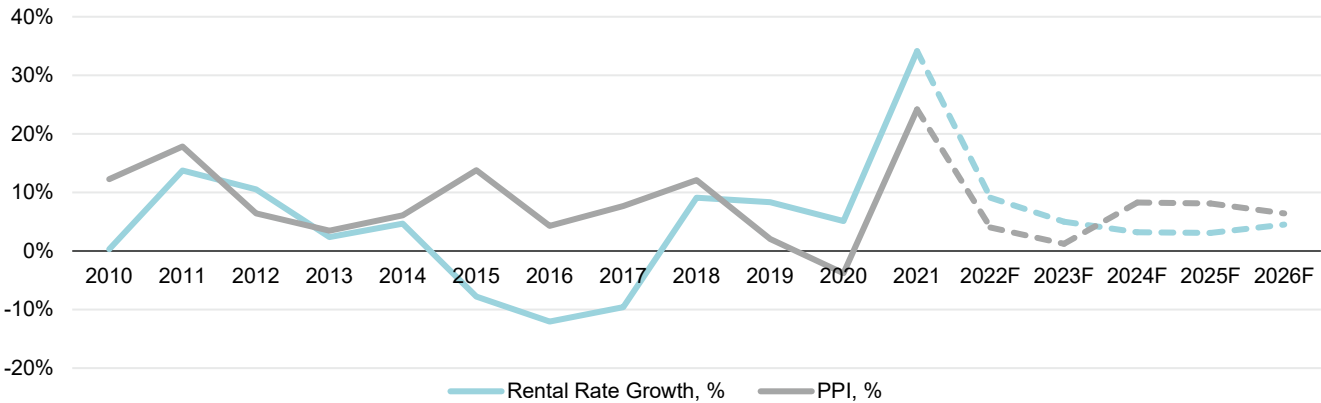
The increase in construction costs became one of the key drivers for the rental rate growth in 2021. This fact was the main destabilizing event on the market.

In H1 2021, the indicator was rapidly growing, a lot of properties of portfolio owners that were under construction were under the risk of delayed commissioning. However, high demand supported developers. The sharp increase in rental rates and a change in the structure of lease contracts made it possible to share the risks with tenants.

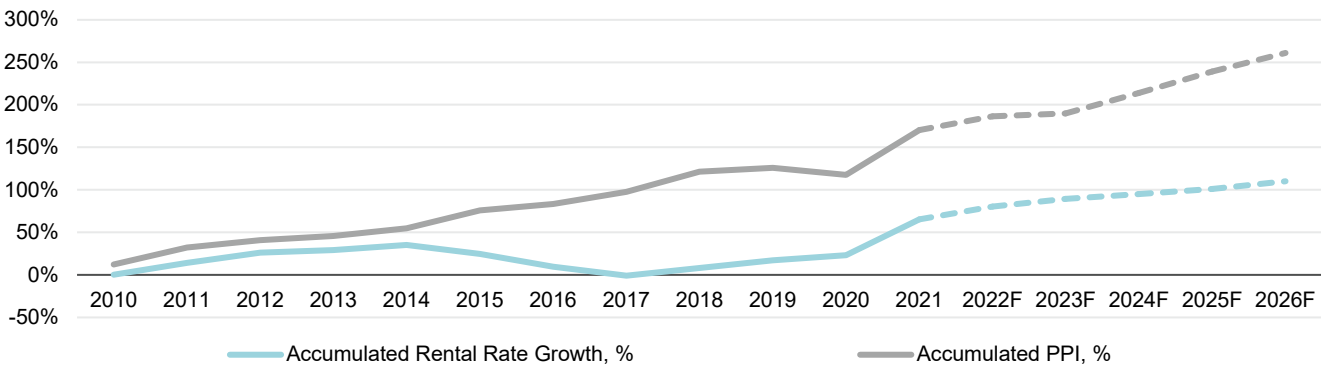
In H2 2021, non-portfolio owners also reacted to the market changes and significantly raised rental rates. In 2022, stabilization of the demand and decline in PPI to 4% will result in a slowdown of the rental rates growth.

Source: Cushman & Wakefield, Moody's

PPI and Rental Rate Growth



Accumulated PPI and Rental Rate Growth



NEW CONSTRUCTION

In 2021, new deliveries reached 1.3 mn sq. m for the first time since 2014. The indicator exceeded the level of 2020 by 45%. In 2022, the indicator is expected to reach 1.4 mn sq. m (+8% to 2021 value).

1.4 mn sq. m

New Construction in The Moscow Region, Classes A & B

2022F

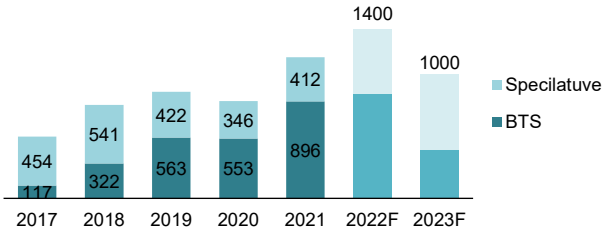
1 mn sq. m

New Construction in The Moscow Region, Classes A & B

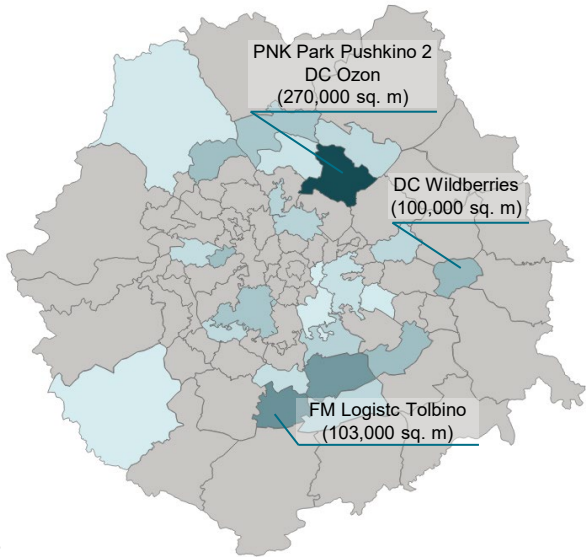
2023F

Source: Cushman & Wakefield

New Construction Structure in The Moscow Region, Classes A & B, '000 sq. m



2022: New Construction and Key Schemes Planned for Commissioning, Classes A & B, The Moscow Region



Construction activity increased due to the high demand. Both speculative and built-to-suit properties were commissioned in 2021. The share of BTS amounts to 69% of new construction.

The main problem developers faced in 2021 was the rising construction costs. As a result, delivery dates for many speculative properties were postponed. The developers also postponed the marketing of these projects due to the fast growth of rental rates expectations. Preleased properties were commissioned on time. In 2022-2023, we expect high level of speculative construction. In the long term, the demand for built-to-suit facilities will determine the volume of new construction.

* The color intensity reflects the saturation of the subagglomeration with the warehouses planned for delivery in 2022.

THE RECORD HIGH TAKE-UP FOR THE SECOND YEAR IN ROW

In 2021, the record high take-up was observed. The indicator exceeded the level of 2020 by 22%.

2.9 mn sq. m

Take-up in The Moscow Region, Classes A & B 2021

2 mn sq. m

Take-up in The Moscow Region, Classes A & B 2022F

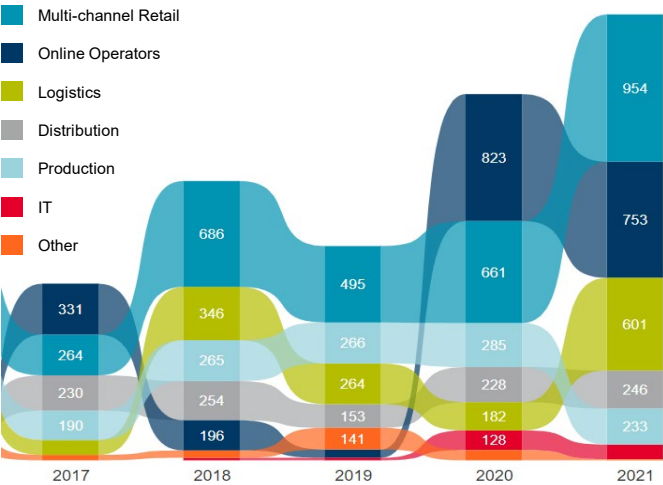
Source: Cushman & Wakefield

The consumer market recovery and the accelerated growth of e-commerce reinforced demand for warehouses in 2021.

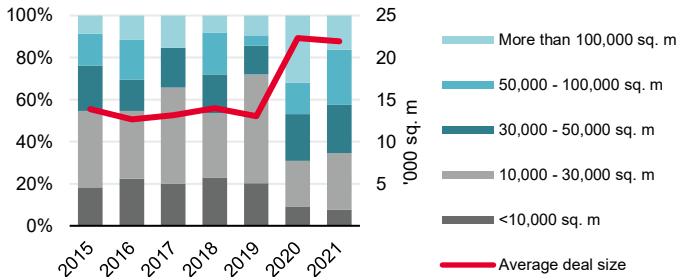
Thus, multi-channel retail companies leased 44% more space than in 2020. Online operators reduced their activity in the Moscow region by 8.5% due to the strong performance in the Russian regions. Logistics operators showed the fastest growth and leased 3 times more space than in 2020. This trend is associated with the growth of online sales as well.

An increase in the average deal size was observed on the market. Since 2020, the average deal size amounts to 22,000 sq. m annually, in 2015-2019 the indicator did not exceed 14,000 sq. m. Tenants enlarge stocks due to the persisting problem of supply chain disruptions.

Demand Structure in The Moscow Region, Classes A & B. '000 sq. m



Demand Structure in The Moscow Region, Classes A & B



FOCUS ON REGIONS

The key regional logistics markets are rapidly developing.

2.4 mn sq. m

**Take-up, Classes A & B
Russian Regions**

2021

1.3 mn sq. m

**Take-up of Online Retailers,
Classes A & B
Russian Regions**

2021

Source: Cushman & Wakefield

Demand Indicators in Russian Regions

Region	Take-up, Classes A and B 2021	Share in Regional Take-up	Key Deal in 2021
St. Petersburg	862	36%	Ozon / Bugry Promstroy / 135,000 sq. m (BTS)
Novosibirsk	212	9%	Askona / PFO Sever / 50,000 sq. m (BTS)
Samara	206	9%	Ozon / IP Chapaevsk / 135,000 sq. m (BTS)
Rostov-on-Don	164	7%	Ozon / A2 Rostov-on-Don / 80,000 sq. m (lease)
Ekaterinburg	149	6%	Yandex / Rolsi / 51,000 sq. m (lease)
Nizhniy Novgorod	135	6%	Sber Logistics / Nova Park / 51,000 sq. m (BTS)
Kazan'	106	4%	Ozon / IP Zelenodolsk / 35,000 sq. m (BTS)
Voronezh	105	4%	Sber Logistics / 21 vek / 55,000 sq. m (lease)
Krasnodar	100	4%	X5 Retail Group / Maryanskaya / 44,000 sq. m (BTS)

For the third year in a row, a record take-up is observed in the Russian regions - 2.4 mn sq. m of space in 2021 (+76% to 2020 value). The key driver for demand is online retail – the share of e-commerce operators in total take-up reached 53%. 16% of space was leased by multi-channel retail companies, 15% - by producers, 13% - by logistics operators.

Due to the high demand on the regional markets, an increase in rental rates and a decrease in the vacancy are recorded. New speculative construction is poor, the main driver of new construction activity is BTS projects.



HOSPITALITY

HOSPITALITY

Glimmers of hope expressed by various market players in Moscow that in 2021 the market would bottom out, signaling start of an active recovery phase, have materialized but only in part – the coronavirus is still very much on everyone's agenda, although over the last year we all have learned how to live with it.

Over 2021, Moscow's Wider hotel market recorded an average Occupancy level of 61.5%. Remarkably, even in the months affected by a sharp decline of demand for hotel services due to yet another COVID-19 'wave', Occupancy stayed above the 50% mark, demonstrating strength of the domestic market. The Average Daily Rate in 2021 averaged RUB 6 424, a year-on-year increase of 24.5% – and only 5.0% below the 2019 results.

On the supply side, the market saw opening of three new modern quality hotels – the Hampton by Hilton, Vertical Boutique BW, and Marriott Imperial Plaza jointly added a total of 497 units, increasing the market pie by 2.5% vs. 2020.

20.5 '000 keys

Modern quality hotel stock by the end of 2021

3 new hotel projects

Opened in 2021

497 hotel rooms

Total keys in 3 new projects opened in 2021

NEW HOTEL OPENINGS

2.5%

Net growth in modern quality room stock in 2021

Wider market

1 140

Expected new keys to be added in 2022

Wider market

5.6%

Expected market growth in 2022

Wider market

Источник: данные Cushman & Wakefield

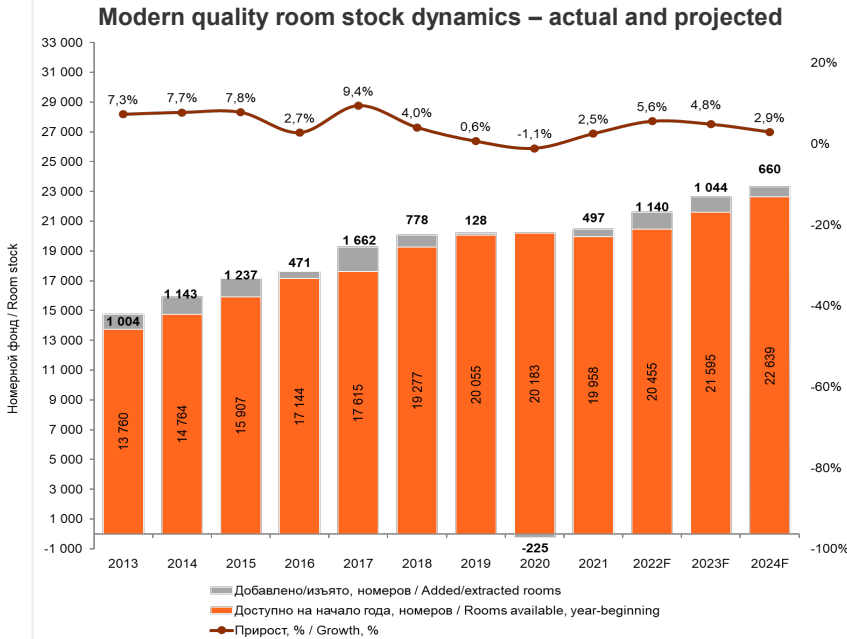
New modern quality hotels opened in 2021

PROJECT	ROOM COUNT	OPENING
Hampton by Hilton Moscow Rogozhskiy Val	147	Q3
Vertical Boutique (Best Western)	82	Q3
Marriott Imperial Plaza	268	Q4
TOTAL	497	

The unending economic crisis affecting the Russian economy along with the global coronavirus pandemic hold back the development activity in the Moscow hotel market.

The situation is unlikely to change over the foreseeable future, as out of the 3 069 hotel rooms in development projects in Moscow*, both announced or under construction, 37% of the rooms (1 140 keys) are expected to open already in 2022 and 34% more (1 044 keys) – in 2023. Considering long lead periods for hotel development projects, averaging 5 years, no substantial increase in development pipeline is expected.

* excluding the New Moscow territory



OCCUPANCIES REACHED
THEIR MAXIMUM LEVELS
– FOR CURRENT
VOLUMES OF DEMAND

61.5%

Full-year 2021 Occupancy

Wider market

69.0%

Full-year 2021 Occupancy

Midscale segment

45.2%

Full-year 2021 Occupancy

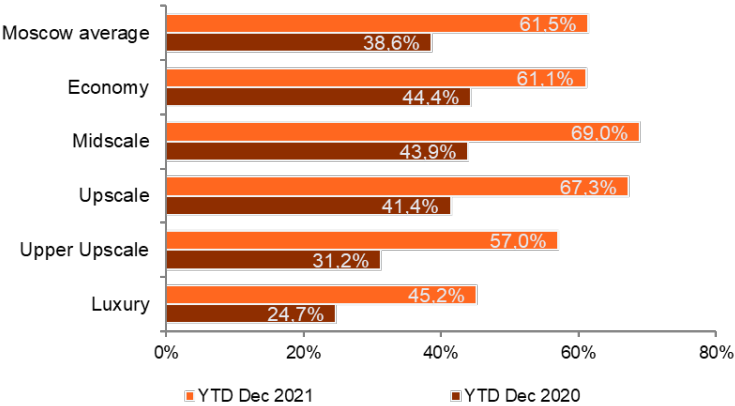
Luxury segment

Источник: данные Cushman & Wakefield

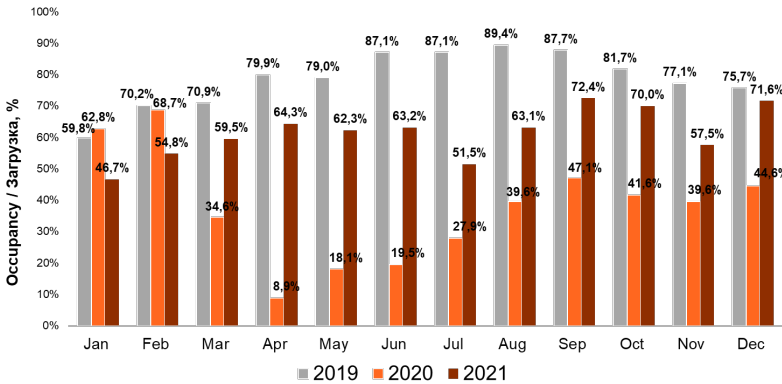
Despite periodic disruptions of demand due to recurring COVID-19 waves, the Moscow hotel market has seemingly found the point of equilibrium and reached the maximum levels of Occupancy levels – for the current volumes of demand.

It is remarkable that after each new corona outbreak hotel Occupancies recovered to what can be perceived as a ‘normal level’ quite quickly, signaling of clients’ coming to terms with the ‘new normal’. As a result, with the exception of January, no other month of 2021 recorded Occupancies below the 50% mark.

Wider market Occupancy by segment:
Full-year 2021 vs. Full-year 2020



Monthly Occupancies in 2019-2021



AVERAGE DAILY RATE – TRENDS IN RECOVERY

6,424 RUB

Full-year 2021 ADR

Wider market

24.5%

ADR year-on-year change

Wider market

25.4%

ADR year-on-year change

Luxury segment

-5.0%

ADR difference between 2021 and 2019

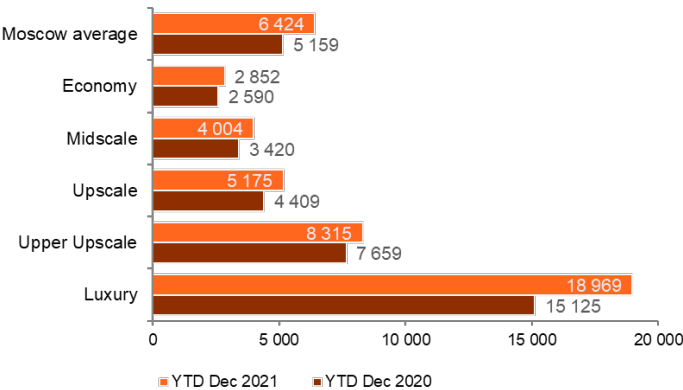
Wider market

Источник: данные Cushman & Wakefield

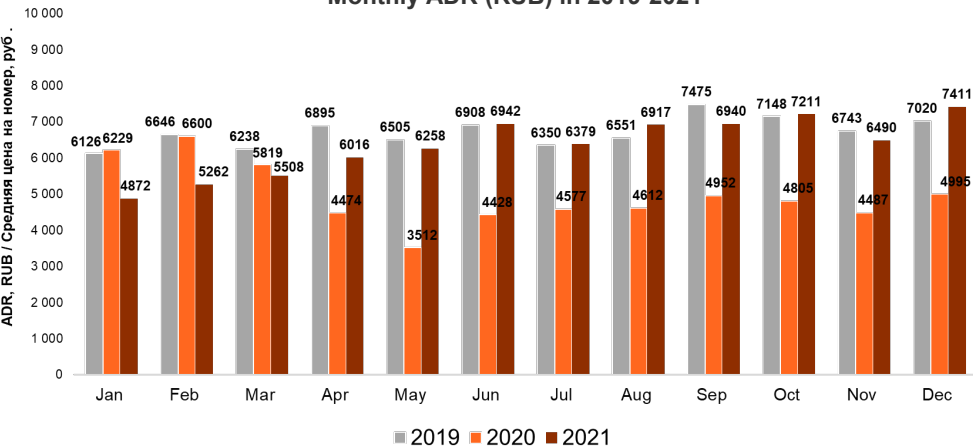
A 24.5% increase in the Wider market's ADR is quite a remarkable outcome of 2021. However, rates of recovery varied greatly between hotels of different price segments, ranging from 8.6% in the Upper-Upscale category to 25.4% in the Luxury segment, while the other segments recorded an average increase of 15%.

A comparison of the 2021 ADR results with those of 2019 shows that the only winners posting a 25.8% increase over the 2019 levels were the Luxury hotels, whereas all other hotel segments still drag behind, with the most significant lag reported by the Economy and Midscale properties (-14.7% and -16.5%, respectively).

Wider market ADR (RUB) by segment,
Full-year 2021 vs. Full-year 2020



Monthly ADR (RUB) in 2019-2021



ROOM YIELD AS A TRUE
HOTEL MARKET HEALTH
INDICATOR

3,948 RUB

Full-year RevPAR 2021
Wider market

98.4%

Year-on-year RevPAR change
Wider market

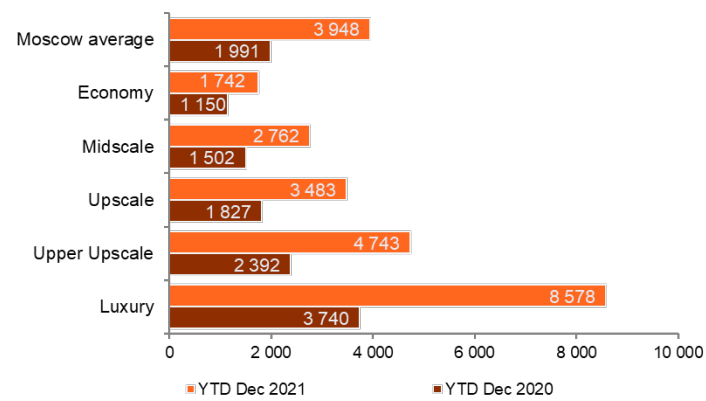
-25.1%

RevPAR difference between 2021 and 2019
Wider market

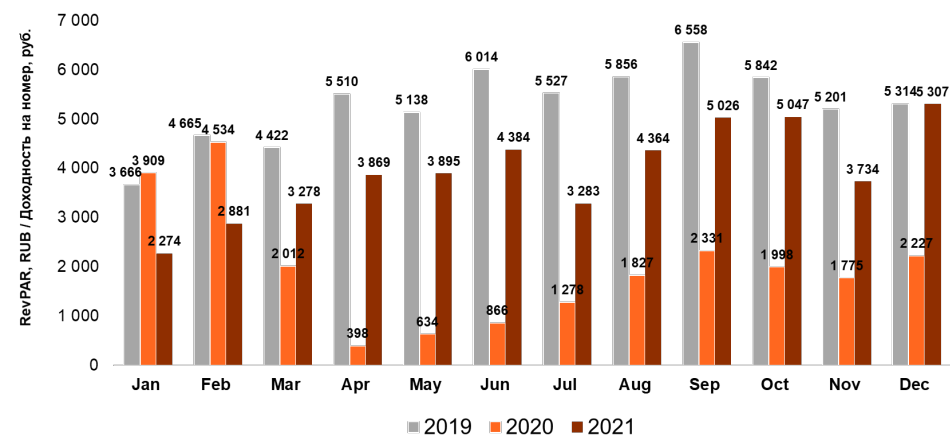
Источник: данные Cushman & Wakefield

Despite encouraging results of the RevPAR recovery recorded in 2021 by each price segment (from 51.5% in the Economy category to 129.4% in the Luxury category), the picture looks less rosy when comparing the 2021 results with those of the ‘base year’ of 2019. While hotel management teams may choose different sales strategies – either targeting the highest achievable rates (Luxury hotels) or maximizing the volume (more affordable hotel grades) - the average gap in RevPAR levels between 2021 and 2019 is quite similar and averages 25-26%.

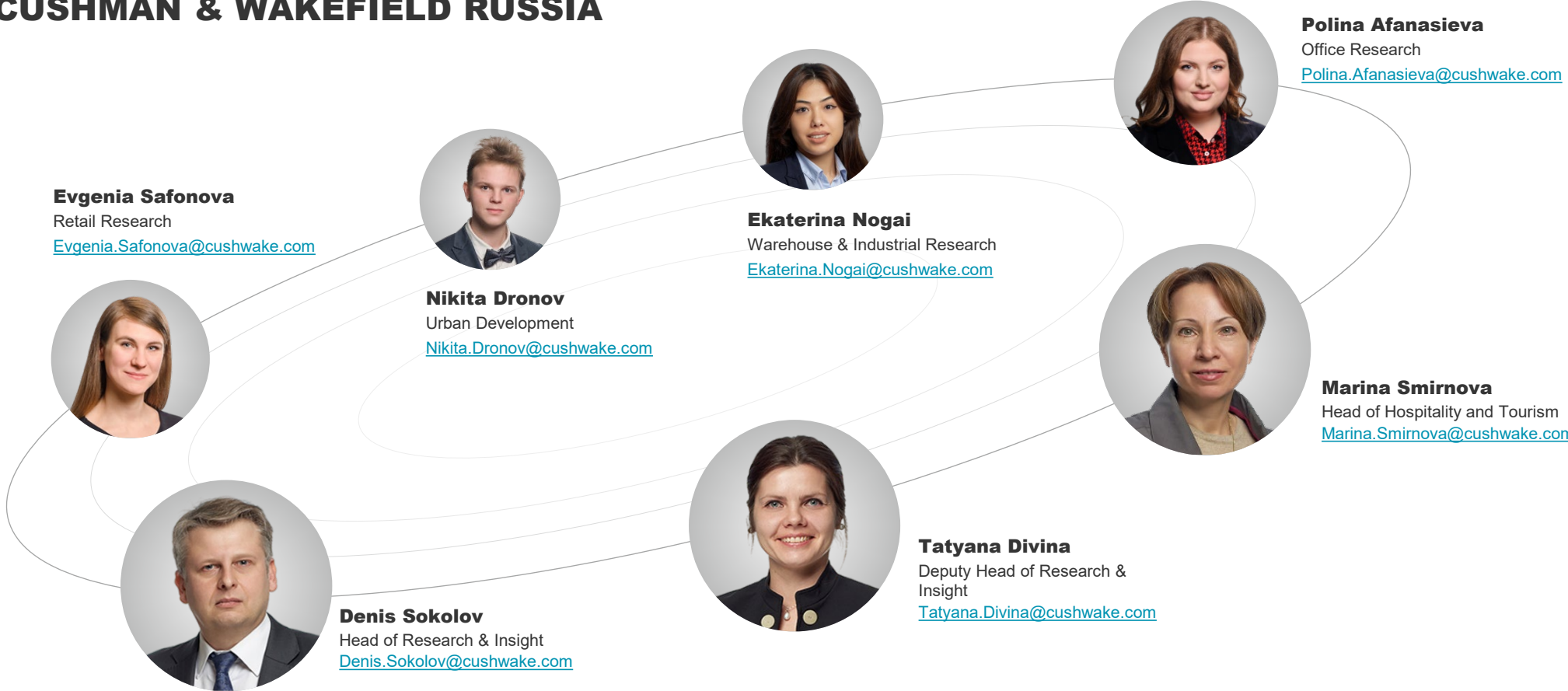
Wider market RevPAR (RUB) by segment,
Full-year 2021 vs. Full-year 2020



Monthly RevPAR (RUB) in 2019-2021



RESEARCH DEPARTMENT CUSHMAN & WAKEFIELD RUSSIA



KEY MARKET INDICATORS

			2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Office Market (Class A&B)	Moscow Agglomeration	New Construction, '000 sq. m	2 206	1 188	972	805	644	1 056	1 293	740	442	497	163	375	251	589	
		Total Stock, '000 sq. m	9 942	11 130	12 102	12 908	13 552	14 608	15 901	16 641	17 083	17 580	17 744	18 119	18 370	18 959	
		Rental Rate, RUB per sq. m p.a.	—	—	—	—	—	—	—	22 053	19 999	17 508	19 306	20 015	20 959	17 508	
		Vacancy Rate	8,9%	13,5%	11,0%	9,5%	8,2%	7,6%	12,3%	13,7%	9,9%	11,4%	8,9%	7,8%	10,0%	8,3%	
		Take Up, '000 sq. m	1 812	821	1 842	2 029	2 110	1 735	1 293	1 267	1 638	1 919	1 998	2 055	1 520	1 927	
Retail Market	Russia (including Moscow)	New construction, '000 sq. m	1 589	1 387	1 514	1 361	1 914	1 456	2 346	1 877	1 699	636	558	586	466	691	
		Total Stock, '000 sq. m	6 952	8 339	9 852	11 213	13 127	14 583	16 929	18 807	20 506	21 142	21 700	22 286	22 752	23 443	
	Moscow Agglomeration	New construction, '000 sq. m	431	497	362	202	155	173	627	418	444	135	108	156	232	258	
		Total Stock, '000 sq. m	2 143	2 640	3 002	3 204	3 359	3 532	4 159	4 578	5 022	5 157	5 265	5 420	5 653	5 915	
		Prime Rental Rate, RUB per sq. m p.a.	99 480	87 368	88 102	105 804	114 959	121 258	127 380	162 032	145 000	150 000	165 000	175 000	175 000	175 000	
Warehouse Market (Class A)	Russia (including Moscow)	New construction, '000 sq. m	1 781	1 557	706	535	1 288	1 658	2 456	2 125	1 803	940	1 233	1 550	1 545	1 645	
		Total Stock, '000 sq. m	5 722	7 279	7 985	8 520	9 807	11 465	13 921	16 046	17 849	18 788	20 022	21 572	23 117	24 762	
		Rental Rate, RUB per sq. m p.a.												3 500	3 750	3 950	5 200
		Vacancy Rate												4,9%	6,0%	5,7%	2,0%
	Moscow Agglomeration	New construction, '000 sq. m	762	758	404	281	651	1 034	1 419	1 129	1 191	415	738	985	868	1 280	
		Total Stock, '000 sq. m	3 466	4 223	4 627	4 909	5 559	6 593	8 012	9 141	10 332	10 747	11 485	12 470	13 338	14 618	
		Rental Rate, RUB per sq. m p.a.	3 480	3 330	3 340	3 800	4 200	4 300	4 500	4 150	3 650	3 300	3 600	3 900	4 100	5 500	
		Vacancy Rate	2,0%	5,0%	3,9%	1,0%	1,0%	1,5%	6,5%	8,5%	8,3%	7,0%	5,5%	3,6%	3,5%	1,0%	
More details in Excel format can be downloaded by the link			2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	

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