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REAL ESTATE MONITOR

CAPITAL · OFFICE · RETAIL · WAREHOUSE · HOSPITALITY · HOUSING

Winter 2021/2022

CONTENTS

TADZIO SCHILLING

AEB Chief Executive Officer

DEAR READERS,

Let me present the last in 2021 issue of the "Real Estate Monitor" to you. It provides analysis of the real estate markets of Moscow and St. Petersburg in the third quarter and summarizes data for nine months of the current year.

Russian real estate investment volumes amounted to over USD 3 billion, having reached a five-year maximum. It occurred mainly due to the warehouse market and record values of the acquisition of land for residential development.

The supply on the Moscow office market from January to September 2021 reached its peak in the last eight years. One third of all deals was concluded by companies that provide business services.

As for the St. Petersburg office market, there is a stable trend towards a recovery in demand. Likewise, positive dynamics was observed on the street retail market in 2021. The vacancy rate has declined since Q3 2020 and the asking rental rates are gradually returning to the pre-pandemic level.

In the warehouse segment, high volume of new construction is expected in 2022. Demand will remain strong due to the increasing load on logistics operators and online retailers. Since the start of the year, the regional share in the total take-up accounted for 44%, which is the highest level in history.

As for the hospitality sector, there is an increase in overall occupancy (by 20%) and average daily rates (by 12%) as compared to Q3 2020. These growth rates are mostly a consequence of the low base effect. Pre-pandemic indicators have not yet been achieved. Recovery rate of the Moscow hotels market will mainly depend on further development of the COVID-19 situation, including the speed of vaccination and recognition of vaccines among countries.

The number of transactions in the Moscow prime rental apartments segment grew by almost a quarter since the beginning of the year as compared to the same period in 2020.

I would like to express gratitude to everyone who contributed to the magazine. I very much appreciate efforts of the Real Estate Committee members invested into a productive implementation of their activities.

Enjoy your reading!

TATJANA KOVALENKO

Chairperson of the AEB Real Estate Committee,
Deputy General Director,
SENDLER & COMPANY

Investments decreased not only in Russia in the 3rd quarter of 2021. In Eastern Europe, the decline was equal to 24%. This decline, like an echo, resulted from suspension of business activities in 2020. At the same time, it reflected uncertainty of pricing in commercial real estate market.

Today, commercial real estate market is undergoing dynamic change: formats of facilities, shopping habits, consumption patterns and patterns of conduct in public places, hybrid format of work and the concept of a 15-minute city in the context of pedestrian accessibility of city services are transforming.

In general, the commercial development industry faces the challenge of finding new investment ideas and growth points. The last 5 years have seen shrinking business but commercial assets have surprisingly performed well during the pandemic. And as long as the industry has successfully adapted to external shocks, it has yet to find its place within the framework of today's economic strategy.

Sustainability, in a broad sense, starts to play an increasing role in the context of economic stagnation. Declining return on all assets, increasing global risks make us look at real estate in terms of sustainable development.

Interest in ESG topic is steadily growing and will obviously enhance attractiveness and liquidity of real estate assets. As for Russia, it will allow it to position such assets that best meet international standards.

Russian office market is developing in synergy with global trends. The segment also is also showing positive dynamics in the US and European markets: company employees are gradually returning to their offices, the number of views of new premises is growing.

Increased visits to shopping centers and active introduction of online shopping into buyers' lives, at the same time, have transformed their preferences when visiting shopping facilities. A "new" buyer needs high quality service and an individual approach, a seamless omnichannel experience, as well as opportunities to get emotions and impressions that cannot be experienced online.

Demand for industrial property investment products continues to increase. There are several reasons for this: clear and predictable profitability, convenient and simple buying process and increased liquidity, of course. Demand for this investment instrument is also due to dynamic development of the Russian industrial real estate market – the increased demand for warehouse premises, which is observed now, has not almost left free space for potential tenants.

2021 was a year of challenges and opportunities. Learning by doing and growing from this challenging year will better position us for what we will certainly encounter in 2022 and beyond.

Enjoy the reading and we are looking forward to welcoming you at our Committee meetings and events in 2022!

MOSCOW MARKET OVERVIEW

Capital market

In Q1-Q3 2021, Russian real estate investment volumes in the warehouse segment amounted to USD 550 million, that is 13% higher YoY (USD 486 million) and the highest value since 2013. According to JLL forecasts, by the end of 2021, the investment volumes in the warehouse segment will increase by another USD 450-500 million and exceed USD 1 billion, which will be the highest annual level since 2013.

Due to the warehouse segment and record values of the acquisition of land for residential development (it accounted for 58% of the total investments), Russian real estate investment volumes have updated a 5-year maximum. According to JLL, the investment volumes amounted to USD 3.1 billion, which is 27% higher YoY (USD 2.5 billion).

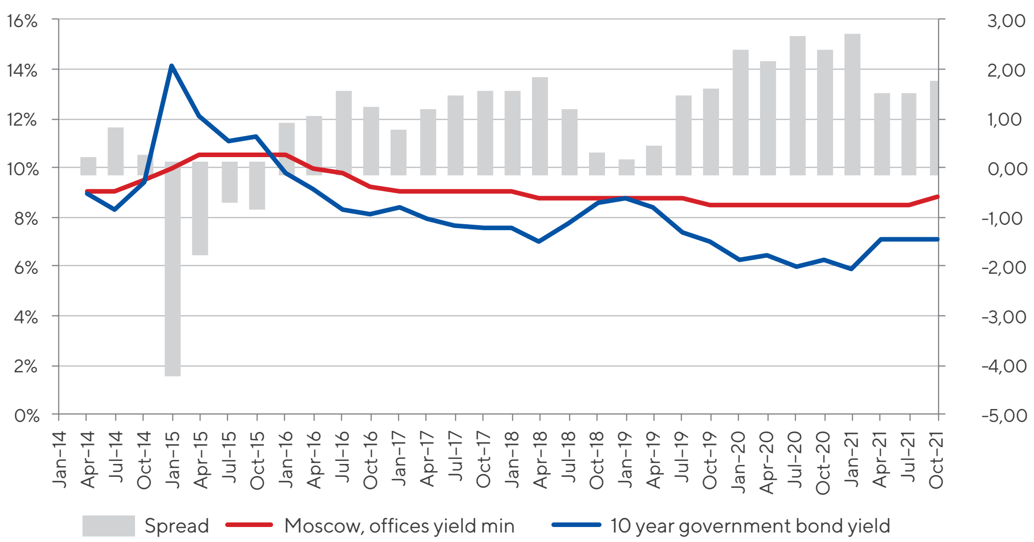
According to the Bank of Russia estimates, by mid-2021, the Russian economy has reached pre-pandemic levels and is returning to the trajectory of balanced growth. However, the risk of increased inflation in the long run remains. Against this background, the Bank of Russia raised the key rate twice during in Q3 2021, and as a result it reached 6.75%. At the same time, we expect a further growth of the key rate in Q4.

This situation directly affects the commercial real estate yields. Throughout the whole period of the pandemic, we observed a prime yield decrease in the warehouse segment, which was caused by high demand for warehouses and low cost of debt financing. However, for the first time since the end of 2014, in Q3 2021, we observed an increase in prime yields by 0.25 ppt in all segments. As benchmarks for the market now JLL analysts consider Moscow prime yields between 10-11.25% for warehouses, 8.75-10.25% for offices and 9.5-10.75% for shopping centers; St. Petersburg prime yields are assessed at 10.25-11.75% for warehouses, 9.25-11.25% for offices and 10-11.75% for shopping centers. (**1-9 >**)

1 > RUSSIA REAL GDP GROWTH

Source: Rosstat, Oxford Economics

2 > REAL ESTATE AND GOVERNMENT BOND YIELDS

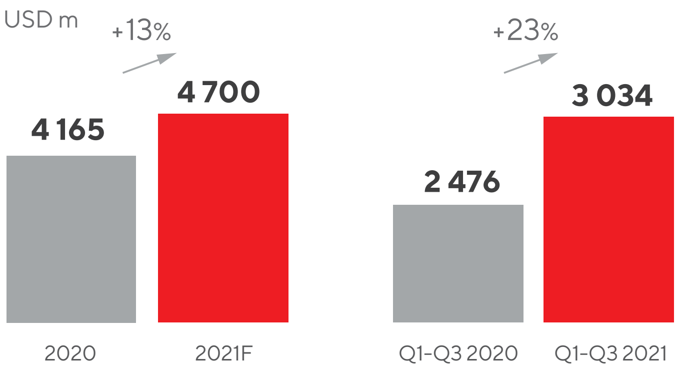


Source: JLL, Bloomberg

3 > EXCHANGE RATE DYNAMICS, USD/RUB

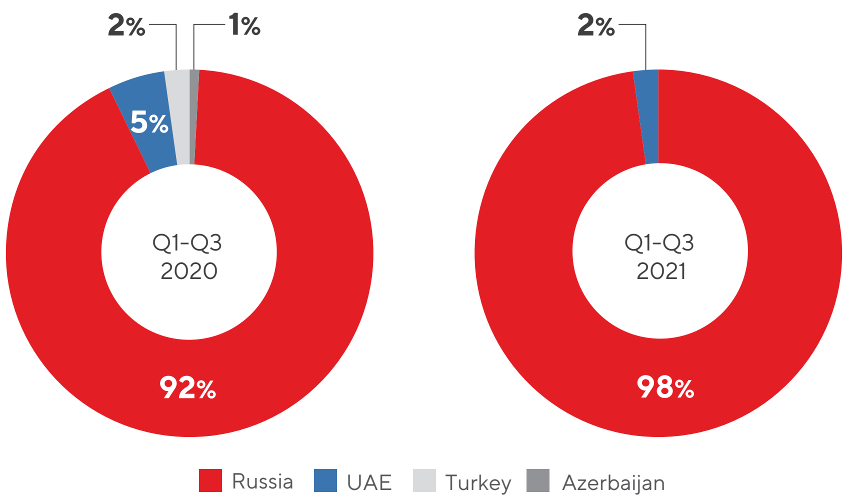
Source: Central Bank of Russia

4 > RUSSIA INVESTMENT VOLUME DYNAMICS



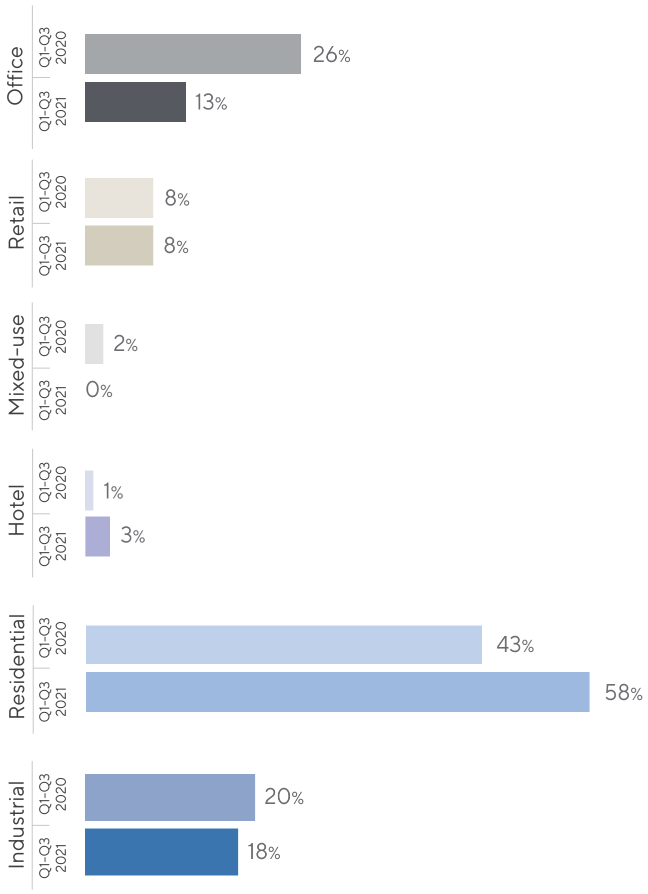
Source: JLL

5 > INVESTORS BY SOURCE OF CAPITAL



Source: JLL

6 > INVESTMENT VOLUME BREAKDOWN BY SECTOR



Source: JLL

7 > PRIME YIELDS IN MOSCOW

Moscow

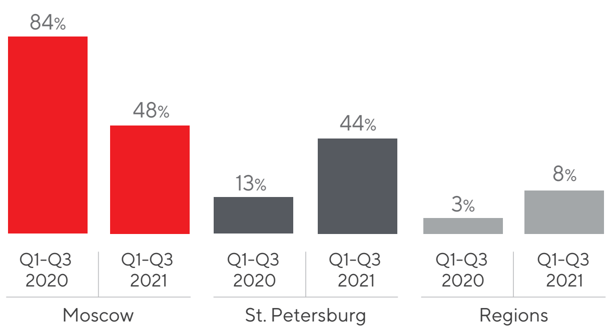
min		max
8.75%	Office	10.25%
9.50%	Shopping centre	10.75%
10.00%	Warehouse	11.25%

St. Petersburg

min		max
9.25%	Office	11.25%
10.00%	Shopping centre	11.75%
10.25%	Warehouse	11.75%

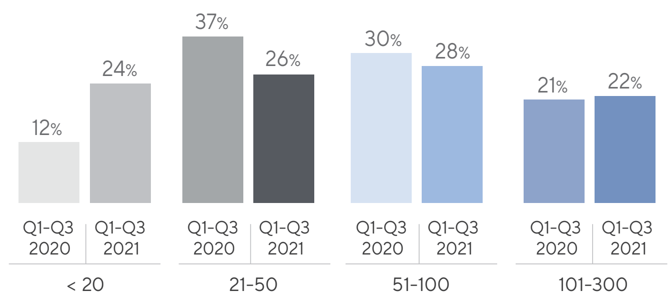
Source: JLL

8 > INVESTMENT VOLUME BREAKDOWN BY REGION



Source: JLL

9 > INVESTMENTS BY DEAL SIZE (VOLUME, USD M)



Source: JLL

Office market

In Q3 2021, the new supply in Moscow office market amounted to 51,000 sq m, which is comparable to the same indicator of the previous year (54,000 sq m). In Q1-Q3 2021, the new supply amounted to 498,000 sq m, which is the maximum value for the same period since 2014. By the end of 2021, it is planned to commission another 144,000 sq m of office space, and the aggregate annual figure will be 642,000 sq m.

The total take-up volume in Q3 2021 in the Moscow office market increased by 2.4 times YoY and amounted to 347,000 sq m. In January-September 2021, the total take-up reached 996,000 sq m, which is 61% higher YoY and is the maximum value among comparable periods since 2013. Despite the 4th wave of pandemic, at the end of the year the total take-up volume will reach 1.2-1.3m sq m.

Class A was the most popular in Q1-Q3 2021, accounting for almost a half of the demand (44%). 37% of all deals were closed outside the Third Transport Ring (TTR).

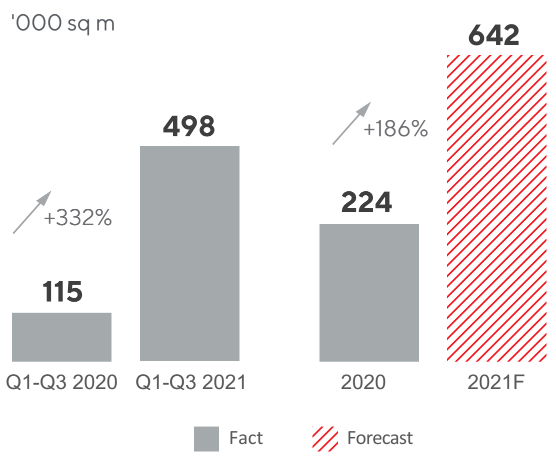
The leading sectors in Q1-Q3 2021 were companies that provide business services, 33% of all deals.

The vacancy rate growth, which started at the beginning of the year, in the last quarter became more noticeable. The overall vacancy rate increased by 0.8 ppt to 11.5% in Q3 2020.

Given the high demand and the low availability in the new business centers, we observed a vacancy rate decline in all classes for the first time since 2019. The largest change was recorded in Class A, the vacancy rate decreased by 1.9 ppt to 9.6%. The vacancy in Class B+ has reached 10% (-0.5 ppt), in Class B- 17.4% (-1 ppt). The total vacancy rate decreased by 1 ppt, to 11.8%. The vacancy rate will remain at the current level until the end of the year.

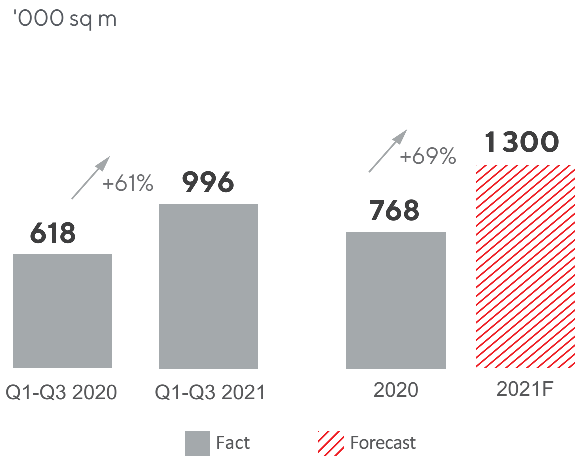
Asking prime rental rates in Q3 2021 were at RUB 35,000-55,000 sq m/year, Class A rental rates were at RUB 20,000-40,000/sq m/year, Class B+ rents were at RUB 10,000-25,000/sq m/year. (10–18 >)

10 > VOLUME OF NEW SUPPLY



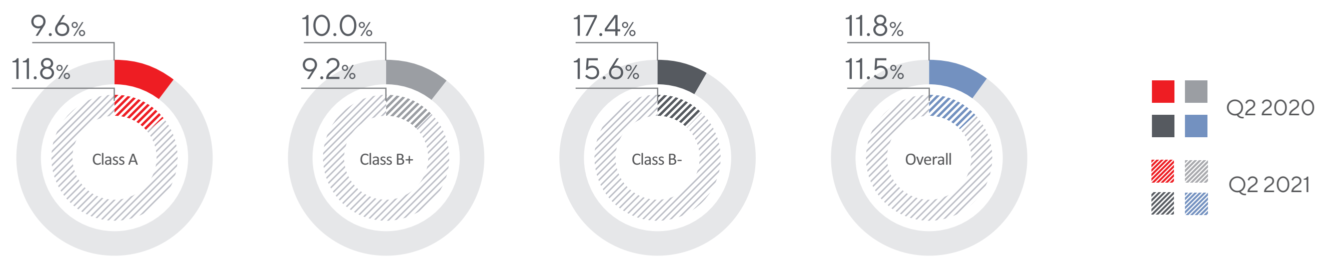
Source: JLL

11 > VOLUME OF TRANSACTED SPACE



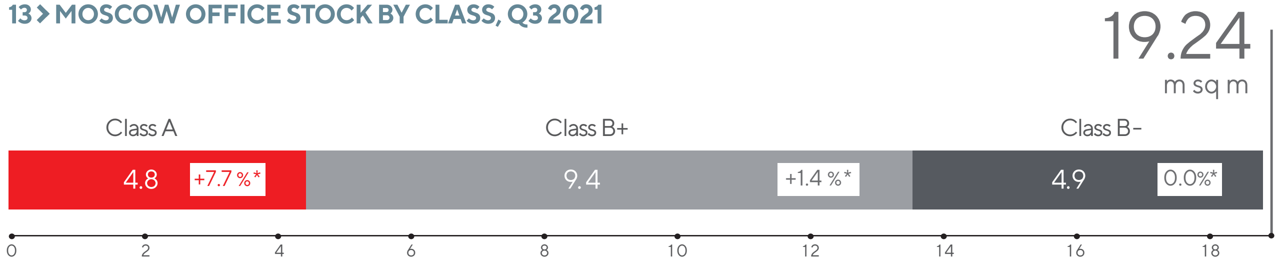
Source: JLL

12 > VACANCY RATES BY CLASS



Source: JLL

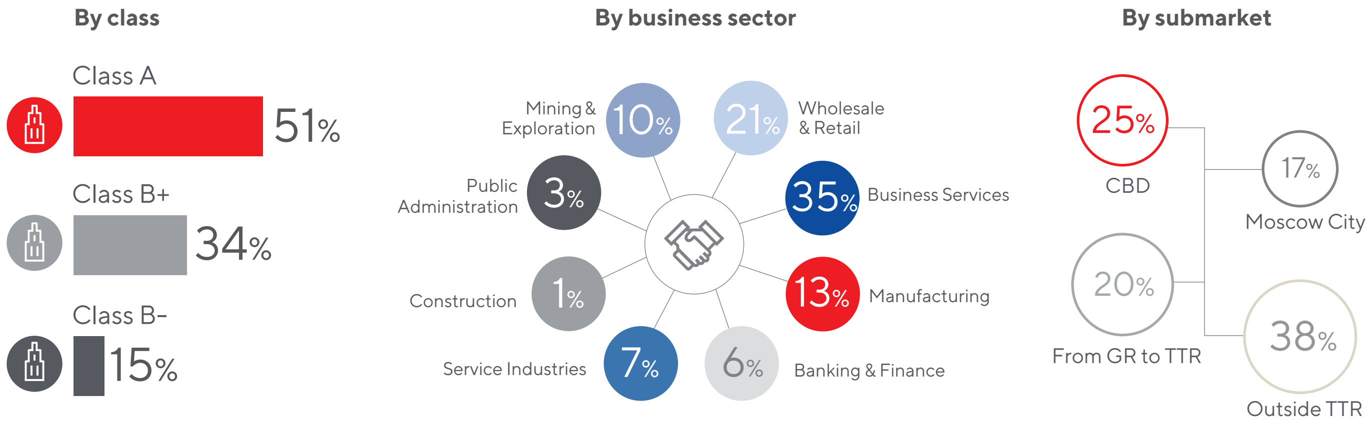
13 > MOSCOW OFFICE STOCK BY CLASS, Q3 2021



*Growth YoY

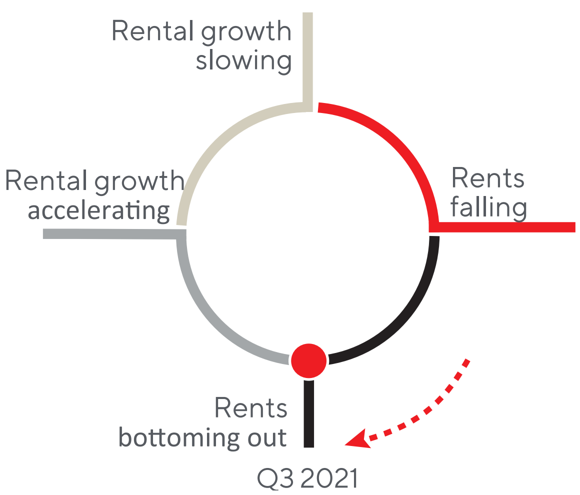
Source: JLL

14 > TRANSACTED SPACE BY CLASS, SECTOR AND LOCATION, H1 2021



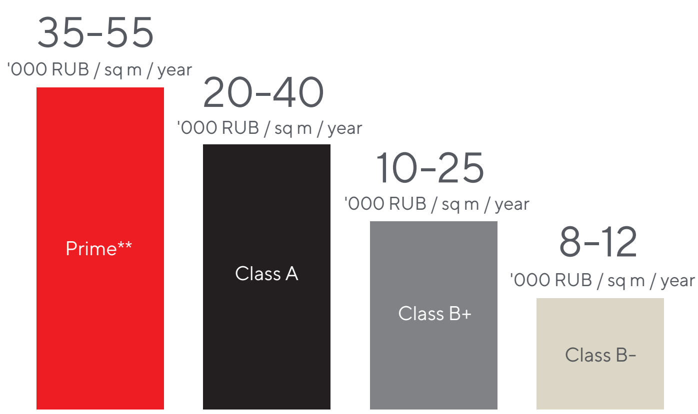
Source: JLL

15 > OFFICE PROPERTY CYCLE IN MOSCOW



Source: JLL

16 > ASKING RENTS*



*Asking rents (including pre-lets) exclude VAT.

**Prime rents refer to rents in high quality buildings in the Central Business District (CBD).

Source: JLL

17 > MOSCOW OFFICE SUBMARKETS, Q1-Q3 2021

	CBD*	Moscow City	GR to TTR **	Outside TTR ***
Stock, sq m	3,749,403	1,244,902	4,451,199	9,795,625
Availability, sq m	380,972	47,019	547,313	1,300,732
Vacancy rate, %	10,2	3,8	12,3	13,3
Transacted space, sq m	239,291	149,357	240,866	366,038

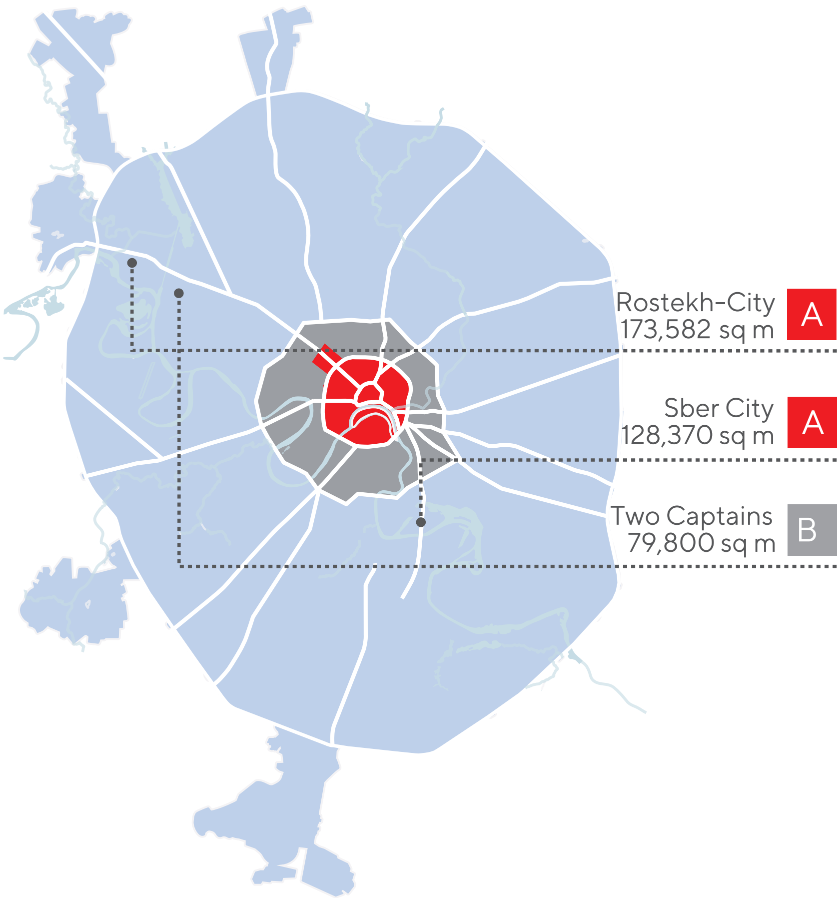
* The Central Business District submarket comprises the area within and in close proximity to the Garden Ring and Tverskaya-Yamskaya Street.

** Excludes Moscow City.

*** Including Outside MKAD projects.

Source: JLL

18 > KEY NEW SUPPLY IN Q1-Q3 2021



Source: JLL

Warehouse market

The market is starving for quality space. The vacancy fell from 3.5% in Q4 2020 to 1.8% by the end of Q3 2021. All large vacant blocks were leased. By the end of October, the indicator leaped lower 1%. In one-two years, the indicator will increase to 1.5-2%.

We expect high volume of new construction in 2022, both speculative and BTS, due to the peak demand in 2020-2021. In the long-term, demand for built-to-suit facilities will determinate the volume of new construction.

Demand will remain strong due to the increasing load on logistics operators and online retailers: the number of orders continues to grow, despite the decrease in the average check. Processing of smaller parcels and an increasing number of returns require additional warehouse area. This fact will support growth of the segment. (**19-20 ›**)

2022: WHAT'S LEFT?

The existing vacancy is at the lowest level. 80% of pipeline for 2022 is already preleased.

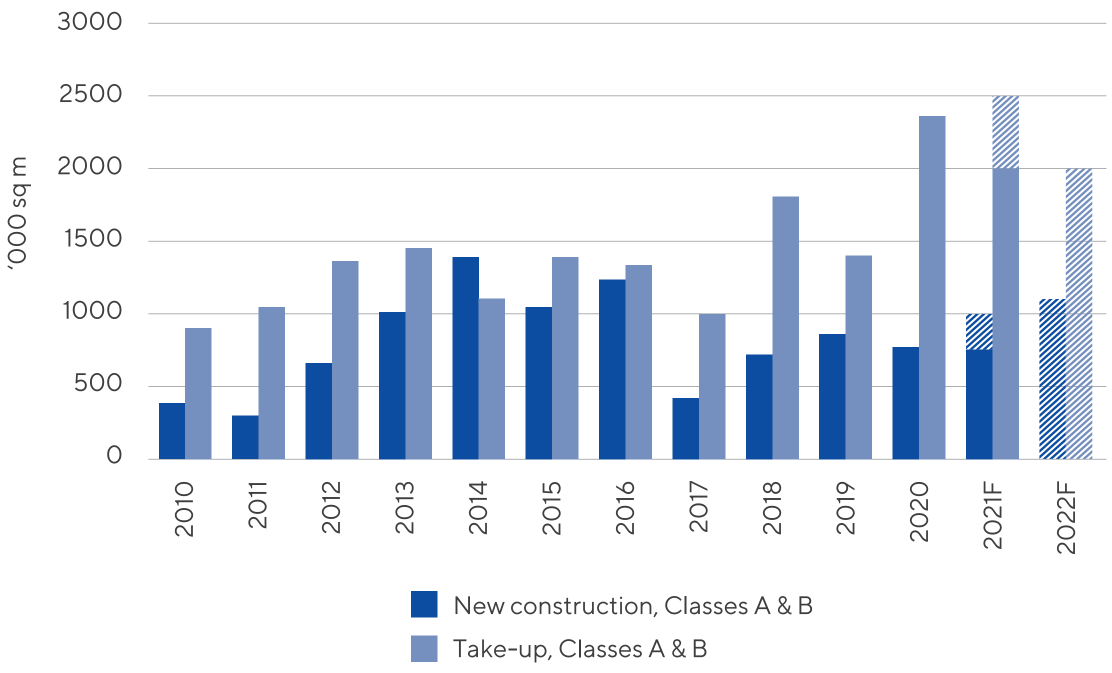
By the end of October 2021, vacancy in existing class A properties dropped to 0.9%, which is the lowest indicator in the market history. The 2022 speculative pipeline is 80% preleased. However, portfolio developers are reluctant to build speculative warehouse properties: high demand for BTS fully covers developers' construction capacity. In 2022, the situation will not change dramatically, while we expect stabilization of the vacancy at the level of 1,5-2% due to additional vacancy from the relocation of tenants who signed contracts for BTS projects in 2020-2021. (**21 ›**)

REGARDLESS OF GROWING SPECULATIVE NEW CONSTRUCTION, BUILT-TO-SUIT DOMINATES

Since 2019, built-to-suit properties have exceeded the share of speculative construction due to the lack of large vacant blocks on the market.

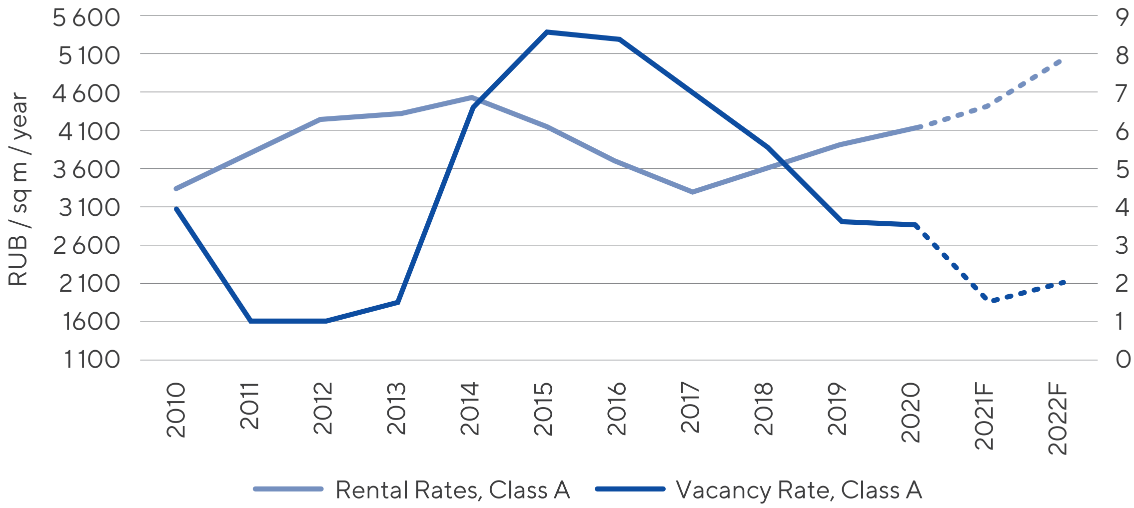
In 2020, due to record-high demand a lot of new speculative projects were announced to be delivered to the market in 1-2 years. However, the market continues to experience a shortage of supply and often BTS is the only available option.

19 › NEW CONSTRUCTION AND TAKE-UP, CLASSES A & B



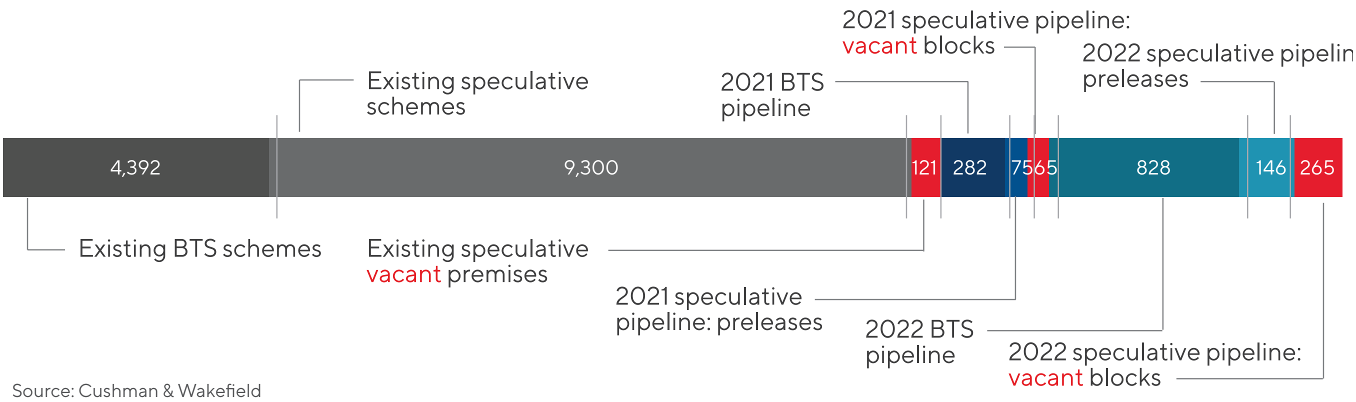
Source: Cushman & Wakefield

20 > RENTAL RATES AND VACANCY RATE, CLASS A



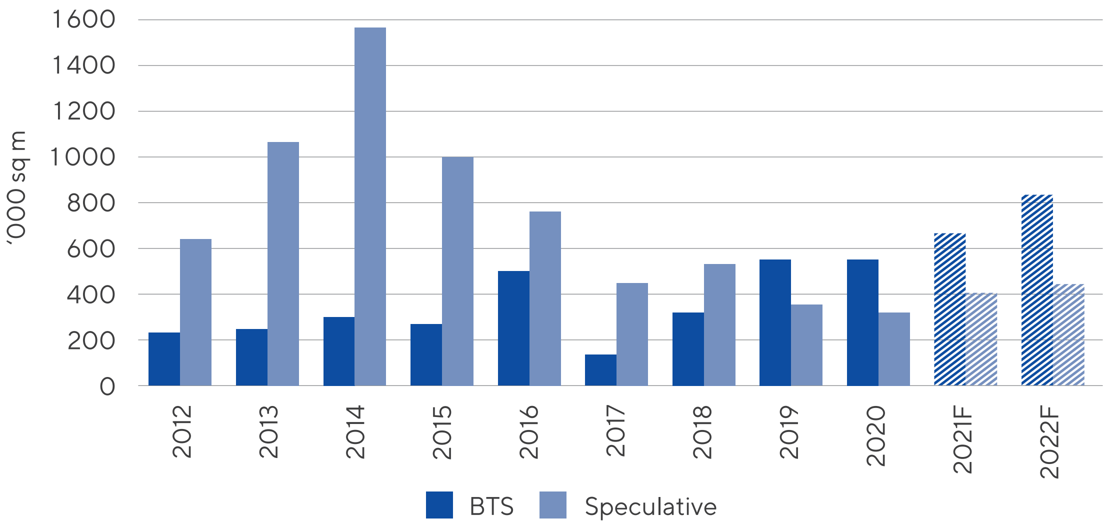
Source: Cushman & Wakefield

21 > COMPOSITION OF SUPPLY, '000 SQ M, CLASS A



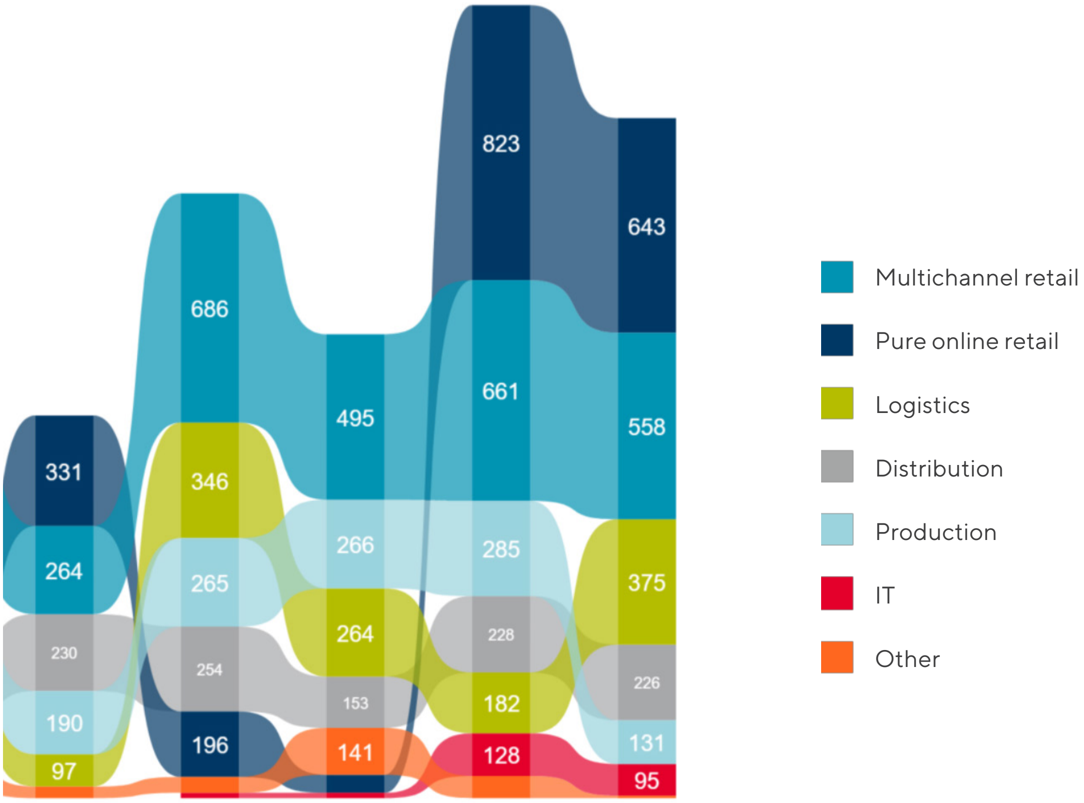
Source: Cushman & Wakefield

22 > NEW CONSTRUCTION, CLASSES A & B



Source: Cushman & Wakefield

23 > DEMAND STRUCTURE, THE MOSCOW REGION, CLASSES A & B, '000 SQ M



Source: Cushman & Wakefield

In the long-term, we expect BTS projects to become the main driver of new construction.

The largest speculative schemes, which are expected to be commissioned in 2021-2022, are PNK Park MKAD M-4 (120,000 sq m), PNK Park Medvedkovo (60,000 sq m) and Building 34 in Atlant-Park (50,000 sq m). (22 >)

IS HIGH DEMAND A NEW REALITY?

In Q1-3 2021, take-up in the Moscow region is 45% higher than YoY indicator.

The demand structure corresponds the previous year structure. Online retailers cover a third of take-up, multichannel retail leased a little less than a third (27%). The only type of tenants that showed significant growth in 2021 is logistics operators: their share grew by 10 p.p. YoY. This is a consequence of the growth in the number of online orders: e-commerce companies are the main clients of logistics operators.

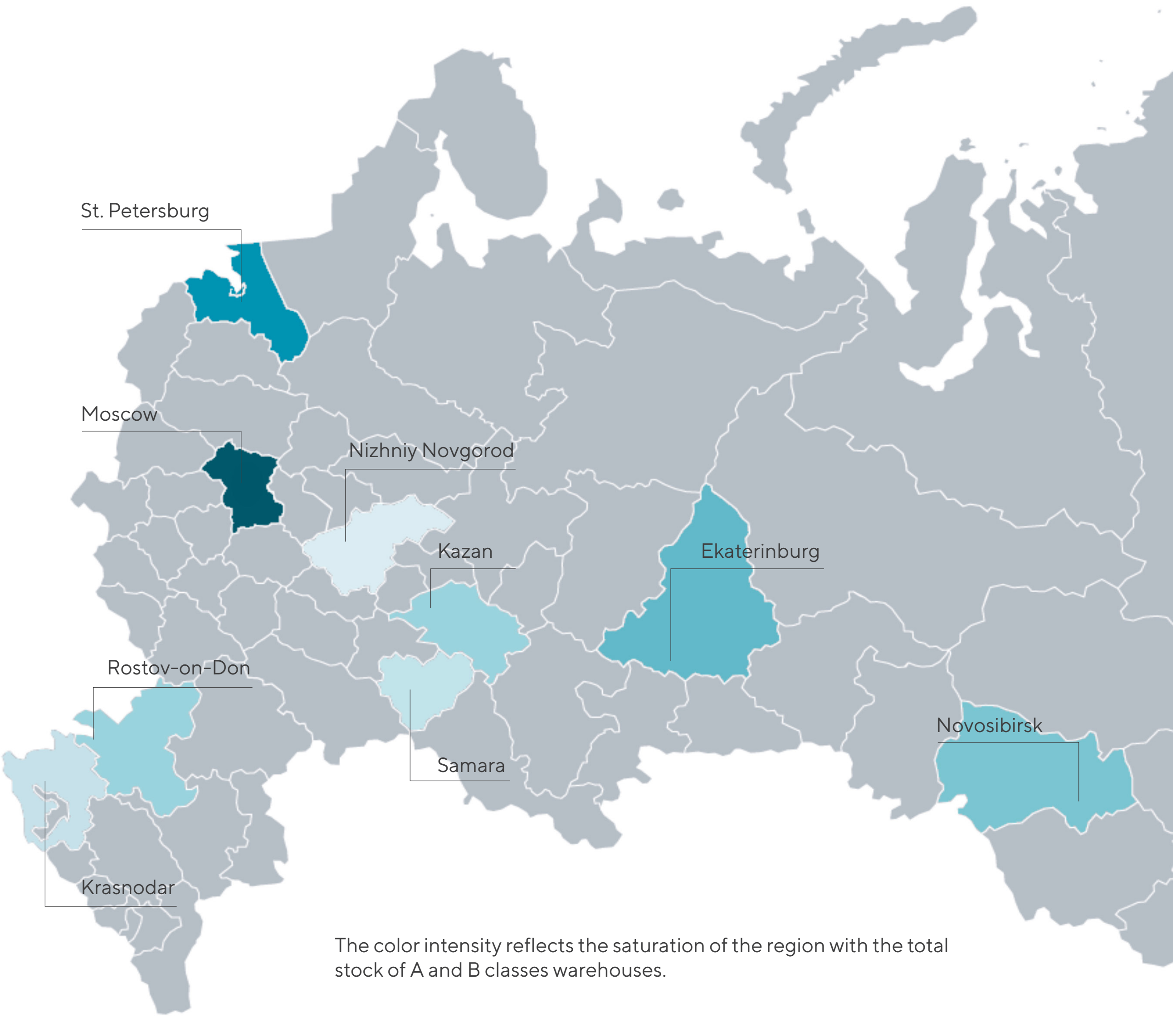
The largest deals of logistic operators in 2021: expansion of Cainiao in South Gate (44,000 sq m), leases of PEK in Adidas Chekhov (41,000 sq m), SDEK in PNK Park Medvedkovo (33,000 sq m) and BTS for DPD in South Gate (28,000 sq m). (23 >)

HIGH DEMAND IN THE RUSSIAN REGIONS

In Q1-3 2021, regional take-up formed 44% of the total Russian indicator. This is the highest level in history. For the last 3 years we observe the growth of regional share in the total take-up. The share of key regional markets in take-up is proportional to their share in the total warehouse stock. Deviation is coming from large BTS deals. (24 >)

24 > SUPPLY AND DEMAND INDICATORS: KEY LOGISTICS MARKETS IN RUSSIA

Region	Total stock of warehouses '000 sq m Classes A & B	Share of the region in the total warehouses stock	Take-up, Q1-3 2021 '000 sq m Classes A & B	Share of the region in the total take-up %
Moscow	19,993	60	2,036	56
St. Petersburg	4,059	12	622	17
Ekaterinburg	1,551	5	136	4
Novosibirsk	1,228	4	138	4
Kazan'	845	3	43	1
Rostov-on-Don	810	2	164	5
Samara	751	2	206	6
Krasnodar	641	2	43	1
Nizhniy Novgorod	520	2	33	1



The color intensity reflects the saturation of the region with the total stock of A and B classes warehouses.

Source: Cushman & Wakefield

Hospitality market

The upscale segment demonstrated a positive trend in rouble ADR (average daily rate) compared to Q3 2020 and showed a 12% increase (RUB 16,485). Rouble RevPAR (revenue per available room) also showed a significant growth – 115% and comprised RUB 7,283. US dollar figures of ADR slightly increased by 9% and comprised USD 223, Dollar RevPar increased by 103% (USD 99). The overall occupancy increased by 20% in Q3 2021 (46%).

Business hotels showed the following results in January-September 2021: US dollar RevPAR increased by 71% (USD 42) which was composed of a 27% occupancy growth (65%) and a 10% growth of ADR nominated in US dollars (USD 64). The rouble RevPAR increased by 80% (RUB 3,138) while ADR slightly increased by 13% (RUB 4,767).

An increase of several indicators was observed in the midscale segment. RevPAR nominated in US dollar and roubles increased by 37% and 44% respectively amounting to USD 25 and RUB 1,839. Overall occupancy comprised 61% demonstrating a 19% increase if compared with the corresponding period of 2020 (43%). The US dollar ADR remained at the same level (USD 40), however the rouble ADR increased by 3% (RUB 2,958).

Economy segment of Moscow hotels which is mostly represented by Soviet-era objects. Rouble ADR of economy segment hotels comprised RUB 1,666 in Q3 2021 (6% decrease as compared with 3Q of 2020). Occupancy demonstrated 7% growth (30%) resulting in 52% increase of RevPAR – RUB 760. ADR in US dollar equivalent decreased by 19% and comprised USD 22. RevPAR amounted to USD 10 which is 43% higher comparing to corresponding period of 2020. Since economy segment hotels didn't provide the information about their key parameters for July and August 2021, below we also provide a snapshot on their performance results in September 2021. Economy segment showed ADR in the amount of RUB 2,366 in September 2021 (3% increase as compared with September 2020). Occupancy demonstrated 19% growth (50%) resulting in 68% increase of RevPAR – RUB 1,177. ADR in US dollar equivalent increased by 12% and comprised USD 32. RevPAR amounted to USD 16 which is 82% higher comparing to the corresponding period of 2020.

Average[1] occupancy across all market segments of Moscow hotels showed a growth – 18% and comprised 51%. During Q3 2021 US dollar ADR increased by 7% with the corresponding period of 2020 (USD 87). At the same time, ADR nominated in roubles increased by 10%, and amounted to RUB 6,469. US dollar RevPAR and RevPAR nominated in roubles increased by 79% and 88% respectively amounting to USD 44 and RUB 3,255.

Comparing the results of Q3 2021 to the same period of the previous year we can observe an increase in occupancy and average daily rates. However, continued significant growth rates are first of all a consequence of the low base of 2020 results, and pre-COVID-19 indicators have not yet been achieved. Recovery rate of the Moscow hotel market will mainly depend on further development of the COVID-19 situation in Russia and around the world, including the speed of vaccination and recognition of different vaccines among countries.

An absolute gap in RevPAR between market segments demonstrated the following results:

- The gap between the upscale and midscale segments comprised USD 74/RUB 5,444 compared to USD 30/RUB 2,121 in the same period of 2020.
- The difference in RevPAR between upscale and business hotels changed to USD 56/RUB 4,145 vs Q3 2021 results (USD 24/RUB 1,654). (**25-31›**)

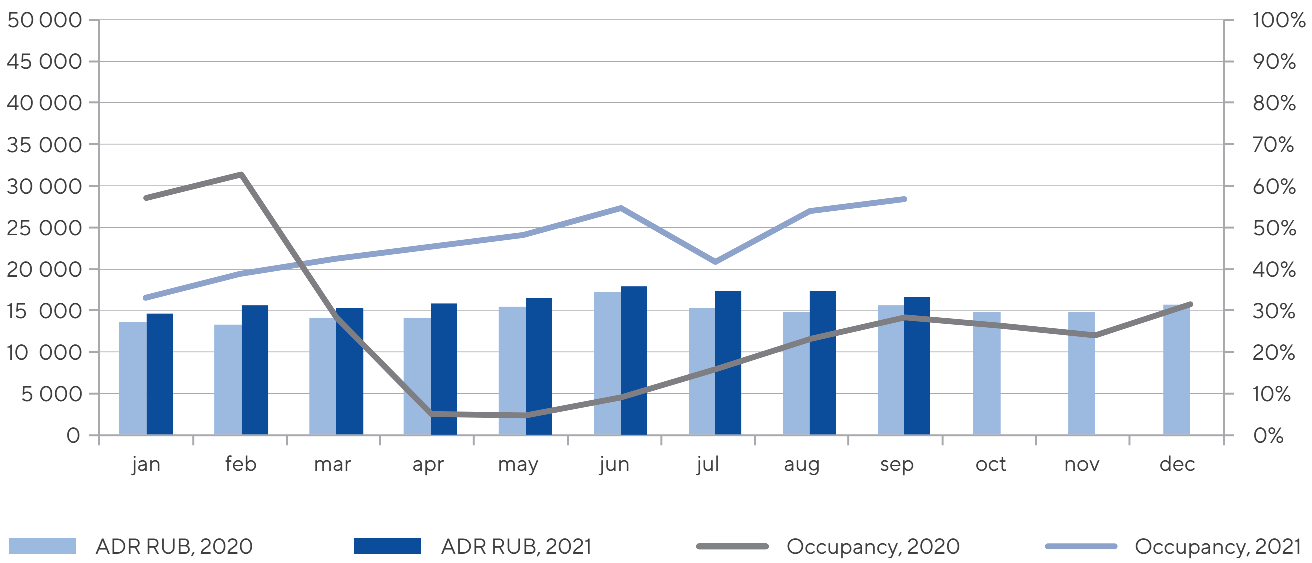
[1] Excluding the information about key parameters as of July-August 2021 related to economy segment

25 > FUTURE BRANDED HOTELS ANNOUNCED FOR OPENING IN MOSCOW IN 2021

Name	Number of rooms	Address
Crowne Plaza Moscow – Park Huaming	340	Vilgelma Pika Street, 14
DoubleTree by Hilton Moscow	99	Nikitsky Boulevard
Fairmont Moscow Mayakovskaya	159	Tverskaya-Yamskaya 1st Street, 2
Four Points by Sheraton Moscow Vnukovo Airport	250	Bolshaya Vnukovskaya Street, 8
Hilton Garden Inn Moscow Paveletsky	245	Kozhevnicheskaya Street, 2-4
Ibis Moscow Semenovsky	120	Velyaminovskaya Street
Marriott Imperial Plaza Hotel	268	Krasnoprudnaya Street, 12, bldg. 1
Total: 7 hotels	**1481 rooms**	

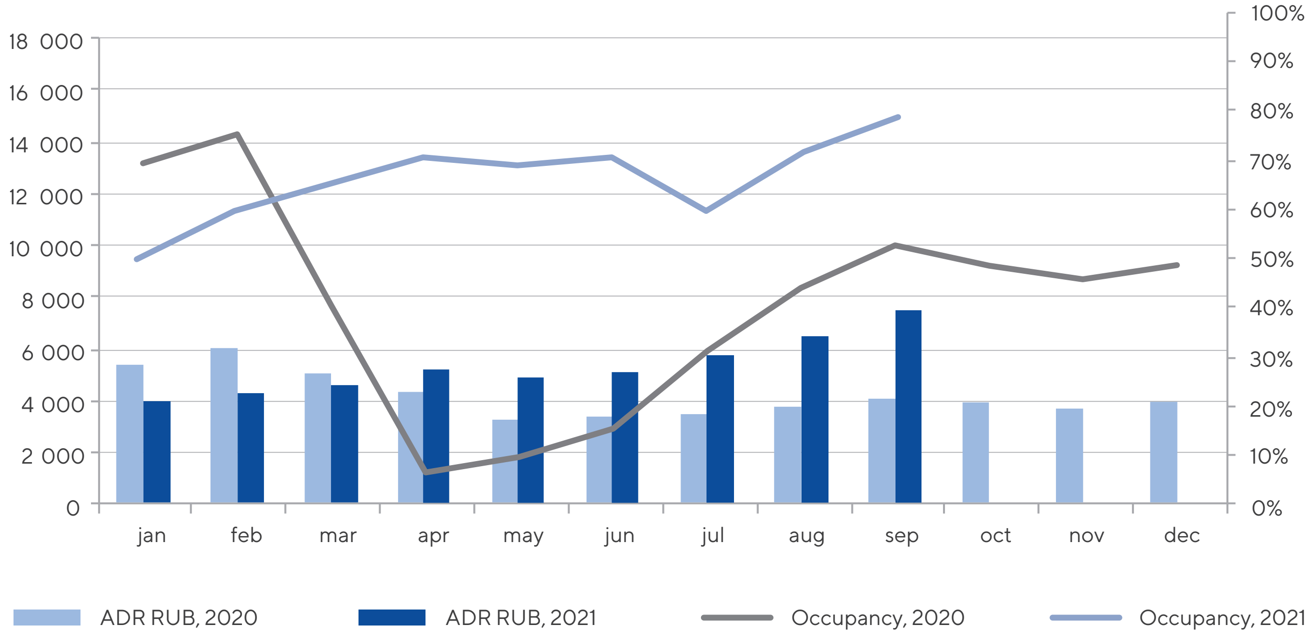
Sources: EY database, open sources, operators' data

26 > 5-STAR HOTELS: ADR (RUB) AND OCCUPANCY DYNAMICS, 2021 VS 2020



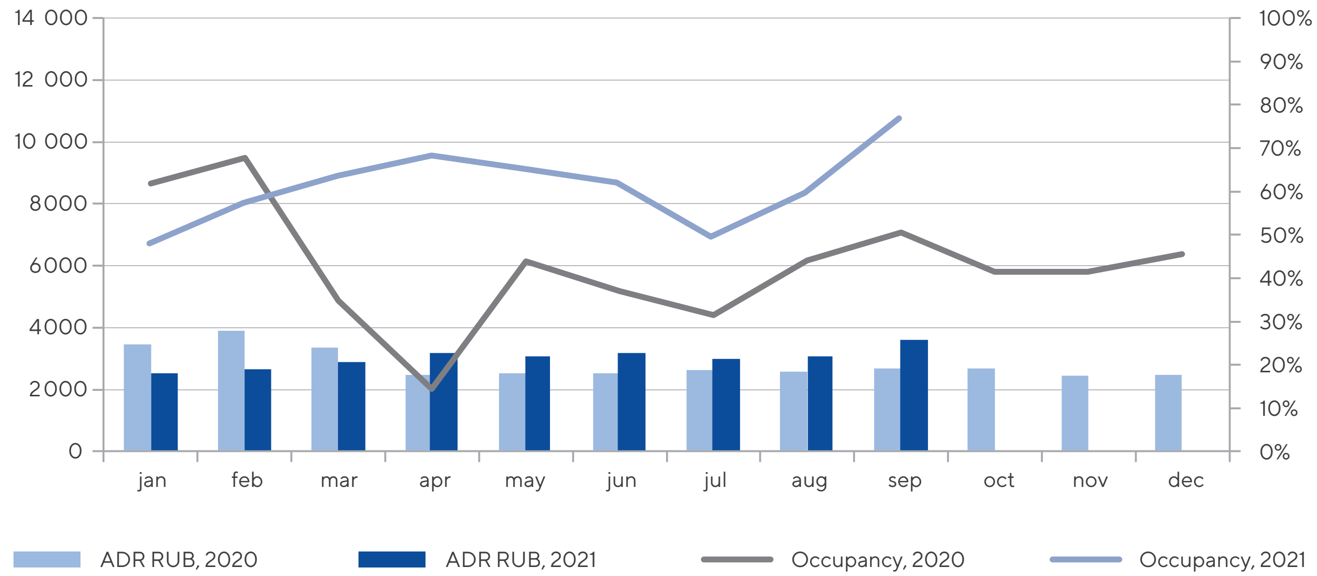
Source: EY analysis

27 > 4-STAR HOTELS: ADR (RUB) AND OCCUPANCY DYNAMICS, 2021 VS 2020



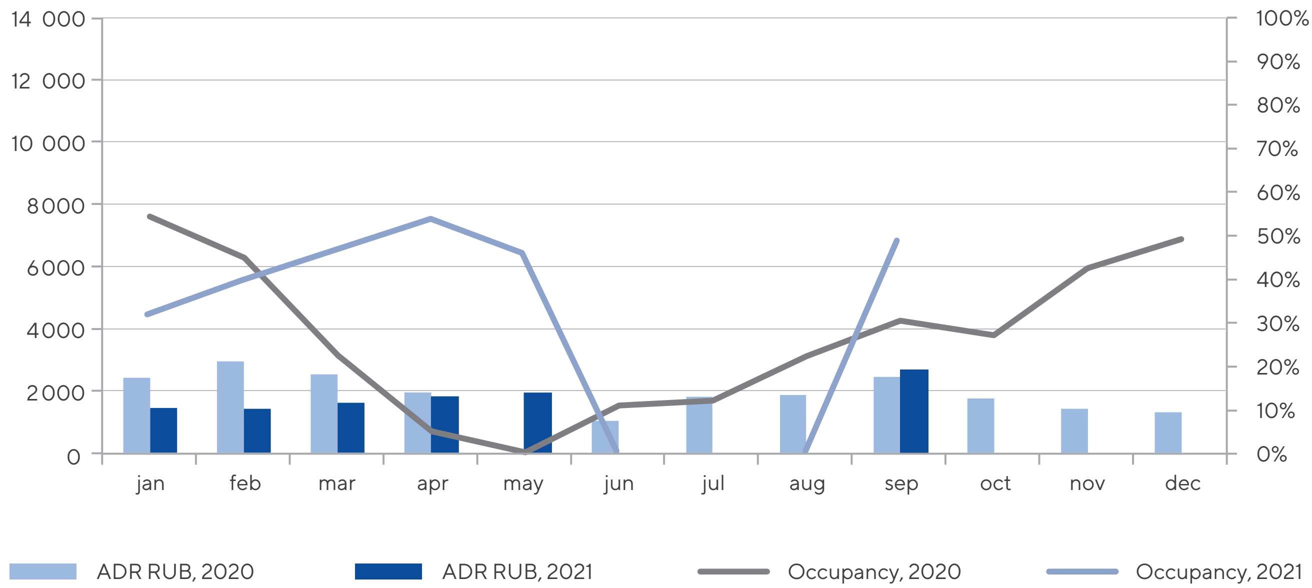
Source: EY analysis

28 > 3-STAR HOTELS: ADR (RUB) AND OCCUPANCY DYNAMICS, 2021 VS 2020



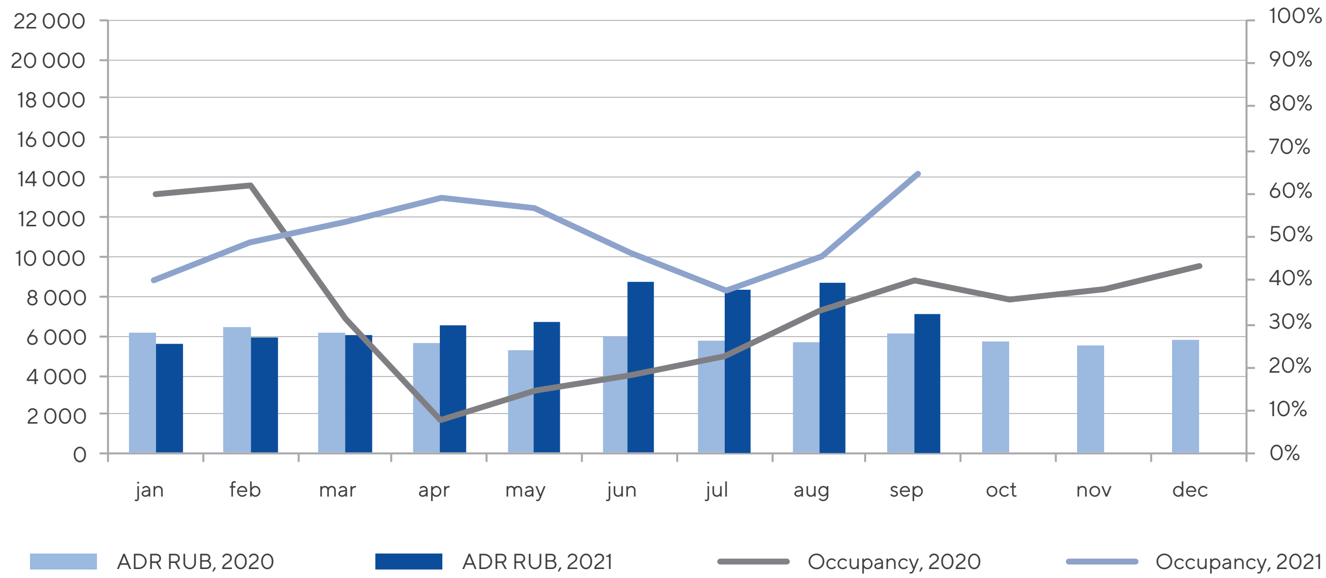
Source: EY analysis

29 > 2-STAR HOTELS: ADR (RUB) AND OCCUPANCY DYNAMICS, 2021 VS 2020



Source: EY analysis

30 > AVERAGE MARKET ADR (RUB) AND OCCUPANCY DYNAMICS, 2021 VS 2020



Source: EY analysis

31 > OPERATIONAL INDICES DYNAMICS

	January – June 2021 (USD/RUB)	January – June 2020 (USD/RUB)	January – June 2021/ January – June 2020, %	2020 (USD/RUB)
5 stars				
Occupancy	46%	26%	20%	26%
Average daily rate (ADR)	223/16,485	204/14,703	9/12	202/14,772
Revenue per available room (RevPAR)	99/7,283	49/3,395	103/115	48/3,453
4 stars				
Occupancy	65%	38%	27%	40%
ADR	64/4,767	59/4,201	10/13	56/4,089
RevPAR	42/3,138	25/1,741	71/80	24/1,747
3 stars				
Occupancy	61%	43%	19%	43%
ADR	40/2,958	40/2,868	0/3	38/2,773
RevPAR	25/1,839	18/1,274	37/44	17/1,220
2 stars				
Occupancy	30%	23%	7%	27%
ADR	22/1,666	28/1,770	-19/-6	23/1,676
RevPAR	10/760	7/501	43/52	7/510
Average*				
Occupancy	51%	32%	18%	34%
ADR	87/6,469	82/5,885	7/10	80/5,828
RevPAR	44/3,255	25/1,728	79/88	24/1,732

Source: Smith Travel Research, EY analysis and forecast

[1] Excluding the information about key parameters as of July-August 2021 related to economy segment

Housing market

In addition to the start of the academic year, the growth drivers were the intensification of the business season, the stabilization of the situation with the spread of coronavirus, and the seasonal change in diplomatic missions. Tenants are gradually losing the instability associated with lockdowns, so clients are more actively renting apartments within the city with the understanding that they can use this property for a long period of time.

DYNAMICS OF SUPPLY AND DEMAND

This summer, high customer activity started in the second half of July and continued in August. In August, there was peak demand for high-budget real estate rentals, reaching a record level of transactions since October 2019.

The high demand in this period is largely due to seasonality. By the end of summer we traditionally see an increase in the number of requests for renting apartments, especially in locations where the most prestigious schools are located. In this regard, multi-room apartments in areas where the best schools in Moscow are located — Lubyanka-Kitay-Gorod-Chistye Prudy, Leningradsky Prospekt, Krylatskoye, etc. — are becoming especially popular.

In addition to the start of the school year, growth was stimulated by the intensification of the business season and the stabilization of the situation with the spread of the coronavirus.

Today, tenants are gradually losing the instability associated with lockdowns, so clients are more actively renting apartments within the city with the understanding that they can use this property for a long period of time. Such an apartment will be comfortable to spend time in without leaving the countryside.

During the period from June to August, demand increased 1.7 times compared to the summer season last year.

If we compare the change in the number of transactions since the beginning of the year, then the indicator shows an increase by almost a quarter (24% more transactions since January 2021).

If we analyze the changes in the market for offers from owners, we can conclude that since the beginning of 2021, the number of listed apartments has decreased by a quarter.

GEOGRAPHY OF SUPPLY AND DEMAND

At the beginning of September 2021, the most popular areas in the high-budget rental market were: Arbat-Kropotkinskaya (21% of demand), Lubyanka-Kitay-Gorod-Chistye Prudy (12% of demand), Tverskaya-Kremlin (10% of demand), Leningradsky Prospekt and Leninsky Prospekt (9% of demand).

In terms of the number of lots offered from owners, the districts of Tverskaya-Kremlin and Arbat-Kropotkinskaya hold the highest positions.

RENTAL RATES

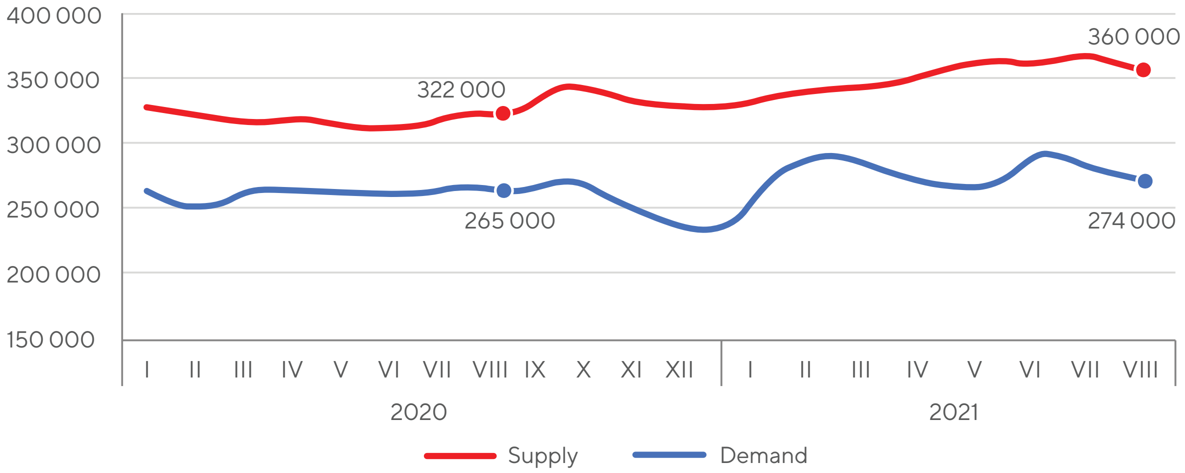
The average demand budget decreased from the beginning of the year by 3% and amounted to 274,000 roubles per apartment per month.

At the same time, 21% of the demand since the start of the year is attributed to transactions in the budget of 200-300,000 roubles/apartment per month and over 10% from 500,000 roubles/apartment per month.

RUB 360,000 per apartment per month is the weighted average budget of the supply in Moscow's high-budget rental market in July 2021, which is 8% higher than the rate at the beginning of the year. However, over the past month, the rate has shown a 3% decline. Reducing the rental rate on the part of owners is the right business decision of professional landlords, since August is an active month in which you can successfully rent out apartments to reliable clients. This is all the more relevant in conditions when in the future there is a risk of downtime and a potentially shorter lease term on the part of clients.

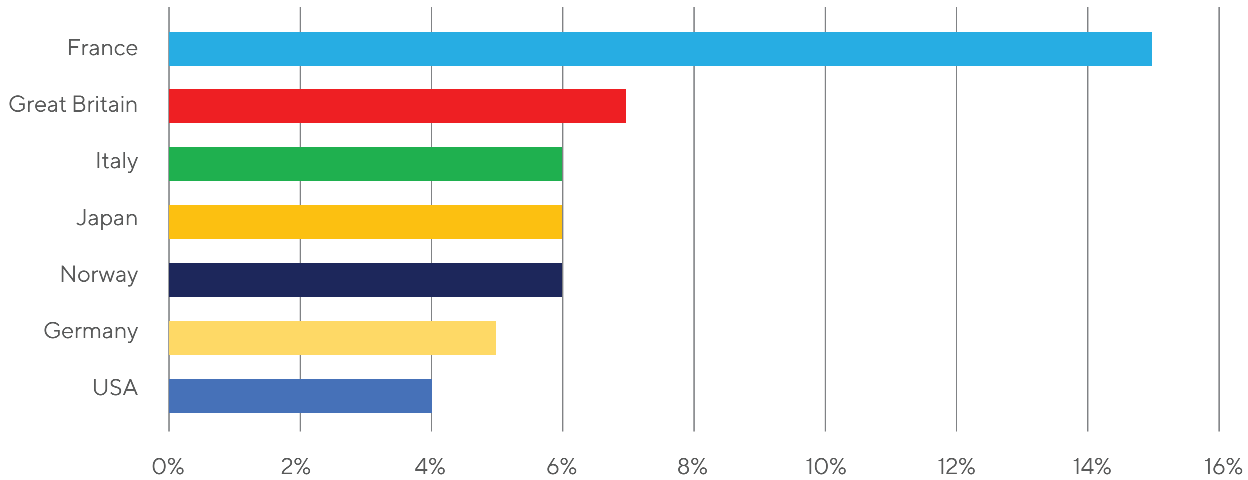
At the beginning of the business season, the most expensive apartments for rent are offered in 3 districts: Arbat-Kropotkinskaya (424,000 roubles per apartment/month), Tverskaya-Kremlin and Zamoskvorechye — 385,000 and 363,000 roubles per apartment/month, respectively. (**32-33 >**)

32 > RENTAL RATES DYNAMICS, ROUBLES



Source: Intermark Relocation

33 > TENANT'S PROFILE



Source: Intermark Relocation

ST. PETERSBURG MARKET OVERVIEW

Office market

Sixteen business centres with leasable area of 130,000 sq m were completed in Q1-Q3 2021. Most of the new business centers refer to Class A and are located in the central part of the city. More than 70,000 sq m are currently at the final stage of construction, which are announced to be complete by the end of the year.

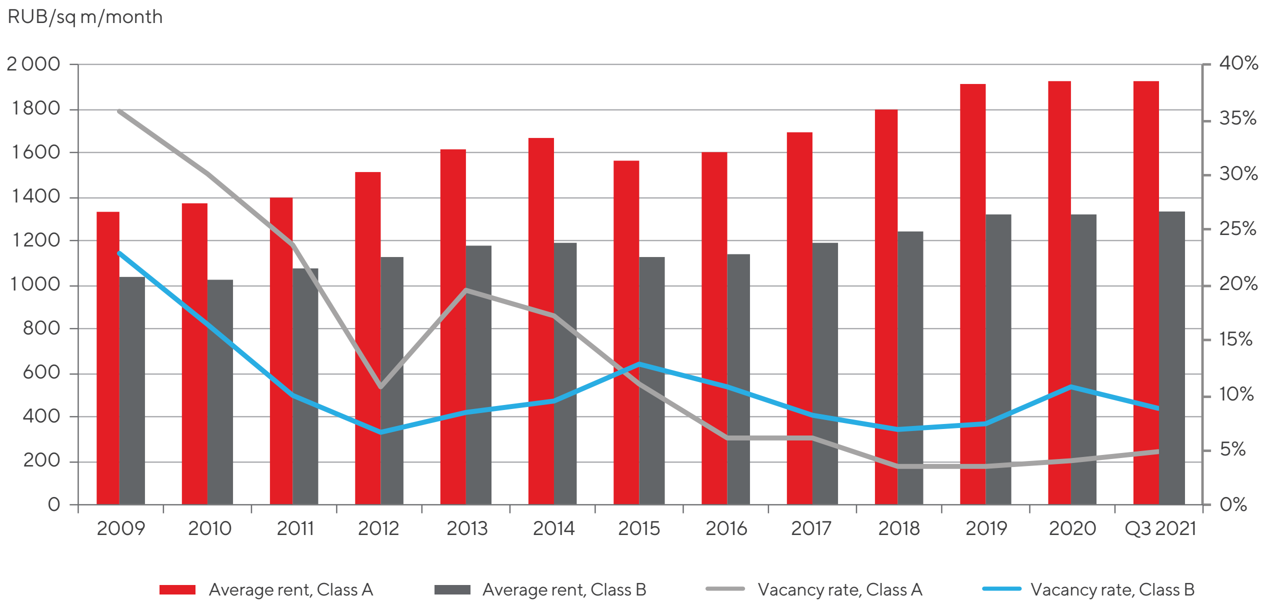
In the St. Petersburg office market, there is a stable trend towards a recovery in demand: the take-up is 69% more compared to the same period of the pre-pandemic 2019.

Since the end of Q3 2020, the vacancy rate in St. Petersburg business centers has declined by 0.8 ppt to 7.6%.

The completion of Class A business centers and optimization of office spaces by big companies led to an increase of vacancy rate in Class A up to 5.6% (+1.6 ppt YoY). Due to lower rental rates and a high amount of supply, demand shifted to Class B, which led to a vacancy rate decrease in this segment to 8.7% (-2 ppt YoY).

Average asking rental rate in Class A office centers increased by 0.7% YoY at 1,925 roubles per sq m including VAT and OPEX. In Class B office centers, the average asking rental rates increased by 1.4% YoY to RUB 1,345 per sq m. (**34**)

34 RENTAL RATES AND VACANCY RATE IN THE ST. PETERSBURG OFFICE MARKET



Source: JLL

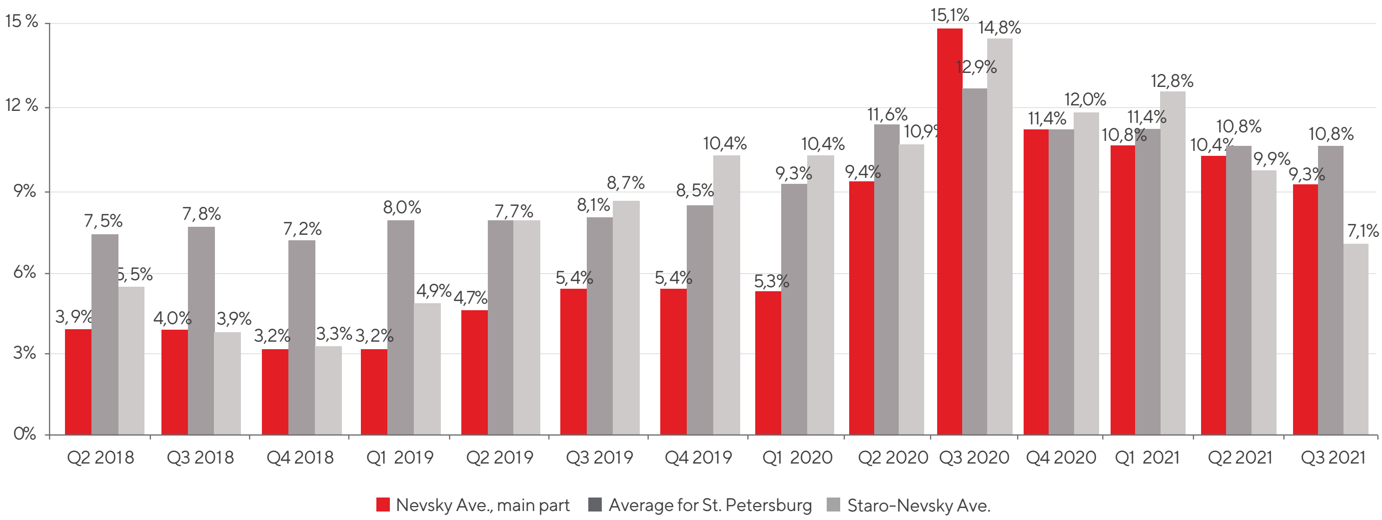
Street retail market

In 2021, positive dynamics was observed on the St. Petersburg street retail market. The vacancy rate has declined since Q3 2020 and the asking rental rates are gradually returning to the pre-crisis level.

By the end of Q3 2021, the vacancy rate amounted to 10.8%, 2.1 ppt lower than the peak value of 2020. The choice of the high-quality premises with an area of 100 sq m with showcases and a separate entrance is reduced, as well as the terms of their exposition.

The dynamics of rental rates is different. Recovery in demand has led to the fact that rates in popular locations of Petrogradskaya side – Bolshoy Avenue and Kamennoostrovskiy Avenue have returned to the pre-crisis level. There are no changes on Nevsky Avenue yet, and the maximum rates reach RUB 10,000 /sq m/ month, which is still significantly lower than one year ago. (**35 >**)

35 > VACANCY RATE DYNAMICS ON NEVSKY AVE. COMPARED TO THE AVERAGE



Source: JLL

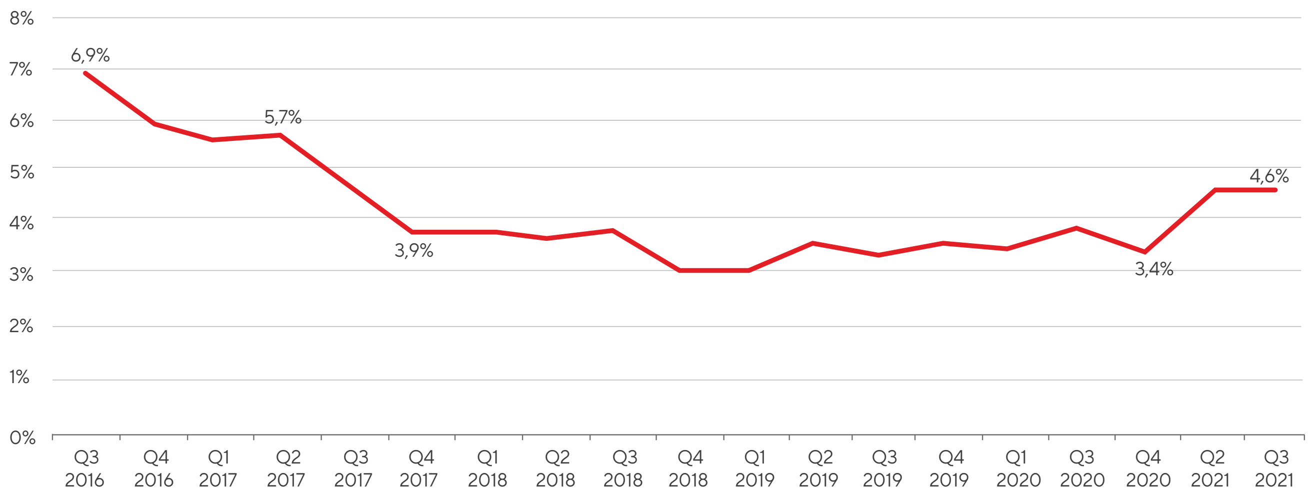
Retail market

In the last 9 months, no new quality shopping centres have been opened in St. Petersburg. Two shopping centers have been completed but have not yet been opened.

The vacancy rate reached 4.6%, 1.2 ppt more than at the end of December 2020. The main reason of the growth of vacancy in shopping centers was the optimization by retailers of their offline chain stores.

In 2021 rental rates have not changed, and the prime rents were RUB 60,000/sq m/year, excluding VAT and OPEX. There is a minimum discount for both current and new tenants in the key shopping centers. (36 >)

36 > VACANCY RATE IN ST. PETERSBURG SHOPPING CENTRES



Source: JLL

Warehouse market

In Q1-Q3 2021 seven warehouses with leasable area of 128,000 sq m were completed. At the same time, one modern warehouse complex, built less than 10 years ago, was demolished, as the residential construction is planned on the site.

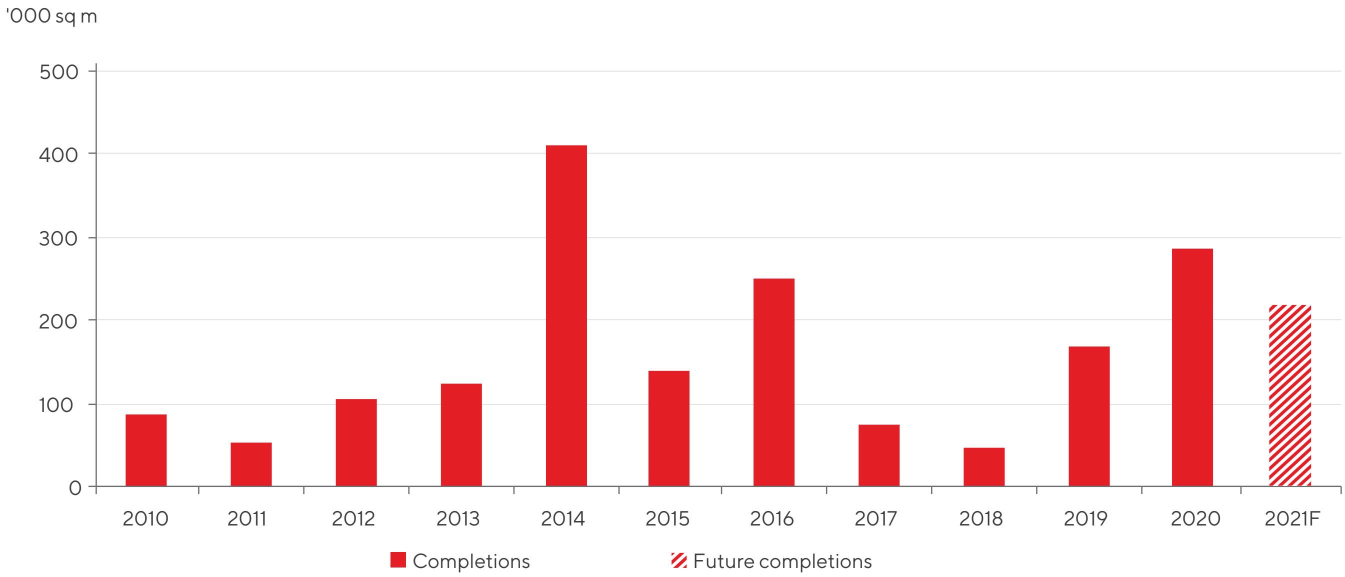
In St. Petersburg there is a trend of increasing the construction time of warehouses and the postponement of commissioning date. The main reasons are the unpredictable further growth of construction costs and a lack of labor resources.

By the end of the Q3 2021, the vacancy rate declined to 1.2% (41,000 sq m), reaching the lowest level for the last eight years. Only eight warehouses have any vacant premises.

The main demand is represented by companies in the e-commerce segment. By the end of Q3 2021, these companies increased their share in the take-up to a record 54%.

The growth of construction costs and growth of demand lead to a gradual increase in rental rates. Since December, the average rates have increased by 22% in Class A and reached RUB 5,000/sq m/year (triple net), which is the maximum value on record. We forecast that rental rates in Class A will reach RUB 5,200/sq m/year by the end of this year. (**37 ›**)

37 › COMPLETIONS IN THE ST. PETERSBURG WAREHOUSE MARKET



Source: JLL