

Review 2021 & Outlook 2022

Commercial
real estate market

Introduction

The volume of capital invested in the Polish property market in 2021 increased compared to 2020. Over the course of 12 months, approximately EUR 5.75bn was invested in Poland - over 7% more than in the previous year. This was also the third highest result (after 2018 and 2019) in the near 25-year history of the Polish investment market. Moreover, a shortage of available assets in certain sectors (primarily PRS) resulted in an increase in the scale of forward funding purchases - 2021 saw the amount reach a further EUR 600m.

Capital from European countries was dominant in 2021. Investors from Germany, France and the CEE region (e.g. the Czech Republic, Slovakia, Hungary) accounted for over 50% of the annual transaction volume, with a further 26% coming from North America and 10% from Asia.

In 2022, the industrial and office sectors should witness further significant growth in interest. Logistics assets will be sought in all locations and formats, while the office sector will see investors looking more deeply into core plus assets and regional opportunities, although still with an eye on prime assets. Demand for convenience retail projects and retail parks will continue and we can also expect PRS forward purchases.

Research & Capital Markets Teams



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Office sector

In 2021, developers in both Warsaw and regional cities limited their activity by holding off on new investments. In all cities, this was due to the large amount of space available for lease, and in regional centres it was further influenced by the large scale of investments already under construction, resulting in numerous delays in project completions.

The high volume of renewals and the relatively low share of pre-lets and expansions in the take-up structure in 2021 meant that vacancy rates increased in most major business centres. There is, furthermore, still a large amount of space available for sublease on the market.

Despite limited tenant activity and a high availability of office space, asking rents in all major office markets remained stable.



Office market in Poland

At the end of 2021, the total existing office stock in Poland stood at approximately 12.2m sq m, with just over half of it located in Warsaw, and the rest in the eight largest regional cities, with Kraków and Wrocław foremost among them.

The Polish office market in 2021 saw a continuation of 2020's COVID-19 pandemic induced slowdown. Over the course of the year nearly 550,000 sq m of office space was delivered in Poland, 60% of which was in Warsaw. Moreover, almost 340,000 sq m is currently under construction in the capital. This is, however, the lowest volume for a decade, with developers holding off on the start of new investments due to the current high availability of office space. Outside the capital, the cities in which developers are currently most active are Katowice, where 210,000 sq m of office space is under construction, and Kraków, where over 190,000 sq m is in the pipeline. In total, the 8 largest regional cities have approximately 900,000 sq m of space under construction. Much of these projects were due to be delivered by the end of 2021 but, owing to

the uncertainty on the office market, some developers have postponed delivery dates until positive changes appear in the demand side.

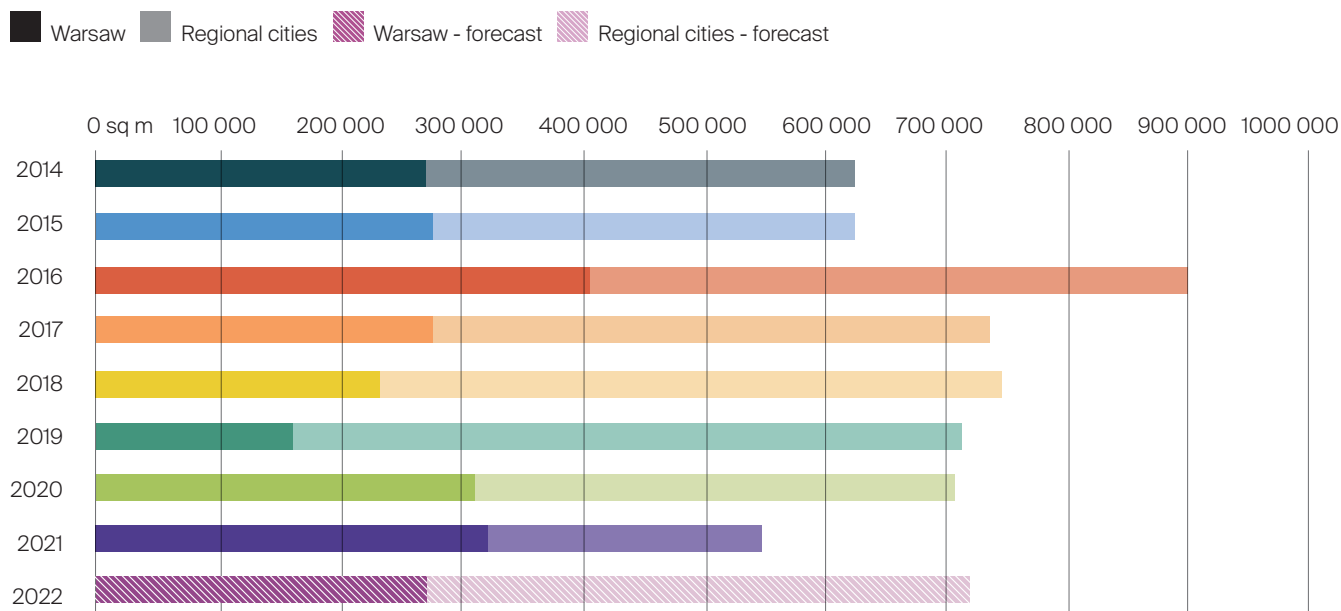
There was limited tenant activity in the office sector at the beginning of 2021, however, each subsequent quarter saw most cities experiencing an improvement in results, and in Q4 2021 there was a noticeable revival in take-up. From October to December 2021, the volume of lease transactions in the major agglomerations exceeded 465,000 sq m (compared to an average of 258,000 sq m in the first three quarters of the year). As a result, over 1.24m sq m were leased in 2021. This was 4% higher than in 2020, but still below the values recorded in 2015-2019, when the annual average was 1.46m sq m. Just over half the 2021 annual take-up was registered in Warsaw (646,000 sq m), with the rest in regional cities, with Kraków (156,000 sq m), Wrocław (135,000 sq m), and Tricity (108,000 sq m) leading the way.

A common feature of all the analysed agglomerations was the significant share

of renewals in the volume of lease transactions. In Warsaw, it amounted to 45%, and in the remaining cities it ranged from 34% (Kraków) to as much as 68% (Łódź), continuing the upward trend in this category started in 2020. The increase in the share of renewals took place at the expense of agreements in buildings under construction. In 2021, tenant interest in projects under construction was still modest. The share of pre-leases in the total take-up in Warsaw failed to exceed 11%, while in the three regional cities with the largest under-construction supply it ranged from 11% to 16%.

The low share of pre-let agreements in the transaction volume meant that buildings completed in recent quarters were relatively under-leased. Also significant was the relatively low share of expansions in the structure of leases. Such factors had a direct impact on vacancy rates, which have shown systematic growth in Poland's office markets since 2019. At the end of December 2021, the average vacancy rate for the nine largest business centres in Poland was estimated at 13.4%

Chart 1 / Annual supply in major office market in Poland

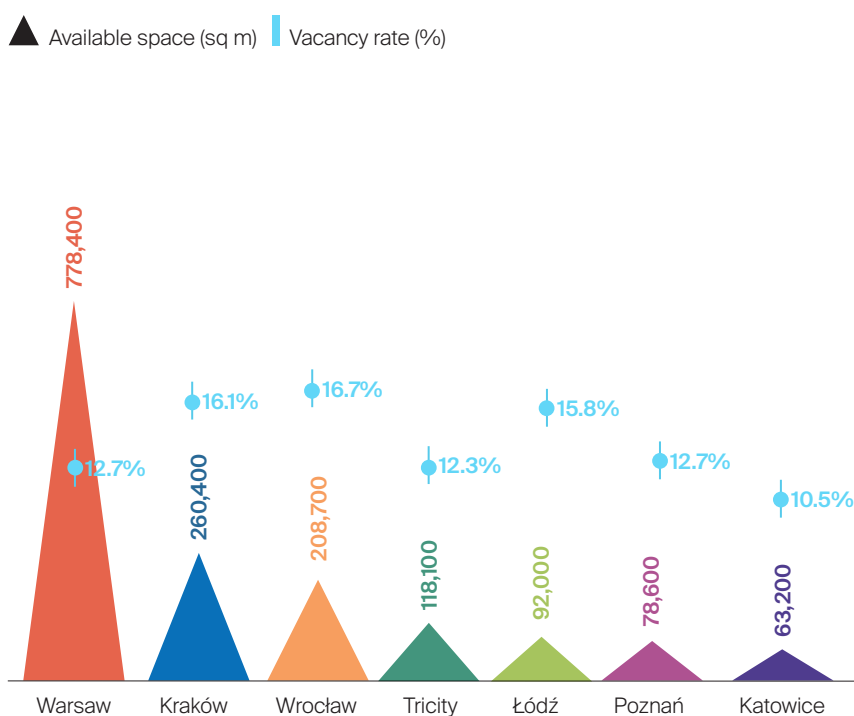


Source: Knight Frank

(1.63m sq m of immediately available space), an increase of 2.2 pp. y-o-y. Over the 12-month period, available office space increased in all surveyed agglomerations except Szczecin; in these locations, the vacancy rate exceeded 10%. The highest vacancy rate in Poland, 16.7%, was recorded in Wrocław while the lowest one - in Szczecin (5.3%).

Across the year, despite the changing market situation, asking rents in both the capital city and regional cities remained stable. Asking rents in Warsaw's Central Business District were in the range EUR 20-25/sq m/month (with even EUR 27-28 for the best office space on the top floors of towers). In other central locations rents were between EUR 15 and EUR 22/sq m/month. Asking rents outside the centre of the capital ranged from EUR 10 to EUR 15/sq m/month. In regional cities asking rates ranged from EUR 8 to 17/sq m/month. Due to the wide range of incentives on offer from building owners to attract new tenants, particularly during the COVID-19 pandemic, effective rates remain up to 20% lower than asking rates.

Chart 2 / Available office space and vacancy rate (Q4 2021)



Source: Knight Frank



Investment market in the office sector

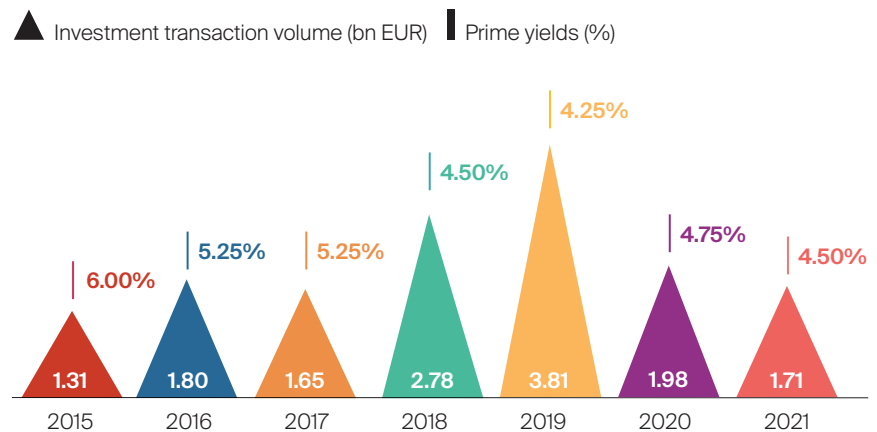
The office sector ranked second in 2021 in terms of investment volume. The allocated capital of approximately EUR 1.7bn was some 15% down on the 2020 figure. Such a situation stemmed from ongoing investor uncertainty over trends in the demand for offices. Although 2021 saw tenants signing lease agreements for more office space than in 2020, renegotiations of existing contracts constituted a significant part of figures, and net absorption levels were at some of their lowest levels in recent years. As a result, investors focused their attention primarily on core products, whose attractive locations and stable incomes from recognized tenants limited investment risk. Consequently, transactions in Warsaw office buildings accounted for 72% of the annual volume in this sector. The list of largest deals includes: Morgan Stanley's acquisition of the Metropolitan office building from DWS for EUR 240m; and Echo Investment's sale of the buildings of Browary Warszawskie - the Brewery Offices, sold for over EUR 152m to DEKA, and the Villa Offices, sold for almost EUR 87m to KGAL.

Regional city business was dominated by Kraków and Wrocław (18% of the transaction volume in total), with the sale of 11 buildings of the Buma Group (sold to Partners Capital / REINO for EUR 200m) having a decisive influence on the result.

At the end of 2021, the yields for prime office buildings in Warsaw were at 4.50%. Buildings of a similar class located in

the major regional cities saw a level of approximately 5.75%. After 18 months of the pandemic many office tenants have developed balanced workplace strategies covering remote and in-office work. If, therefore, the upward trend in demand for offices continues, downward pressure on prime yields in this sector may be observed in the forthcoming quarters of 2022.

Chart 3 / Investment transaction volume and prime yields in the office sector



Source: Knight Frank



TRENDS

1

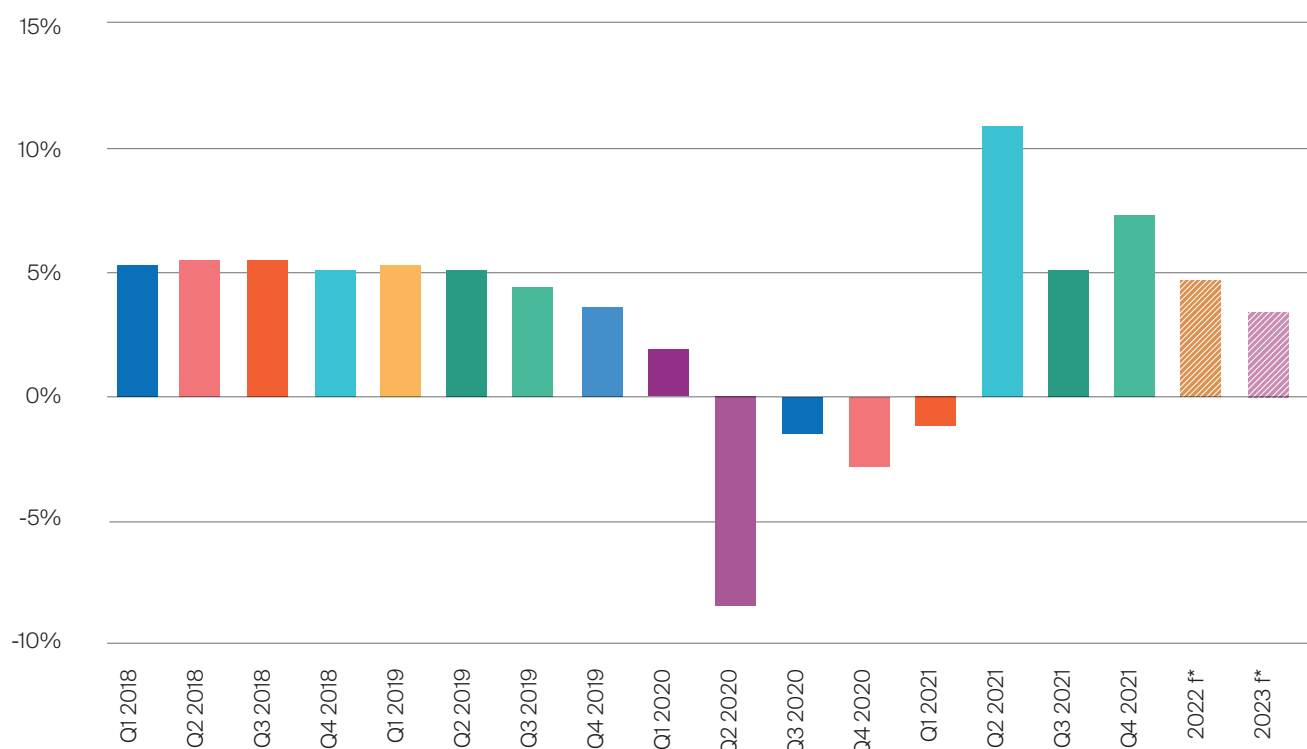
A relatively high new office supply is expected to be delivered in 2022 and 2023 in regional cities, resulting from the revived activity of developers before the pandemic. However, due to the uncertain market situation and a reduction in tenant activity and interest in leasing space under construction, decisions about starting new projects are being put on hold. As a result, the upcoming years will see a significant decrease in the annual supply of office space.

2

Due to the high availability of office space, the vacancy rates may increase in most cities in the upcoming quarters. Even if, however, the market sees a revival of tenant activity in 2022, the scale of this activity may prove insufficient to absorb, in such a short period of time, the office space already available on the market and in projects scheduled for completion in the coming quarters.

3

The high availability of office space and demand not matching supply suggest tenants will take an interest in renegotiating rent rates and seeking incentive packages. On the other hand, rising construction costs (an increase in building material prices and labour costs), coupled with an increase in construction loan costs, may limit investor openness towards lease negotiations, especially in new buildings. In all projects, however, an increase in service charges is to be expected, due to the ongoing increases in the price of services and cost of utilities.

Chart 4 / GDP growth dynamics in Poland (y-o-y)

Source: Statistics Poland, f* - forecast of the World Bank, January 2022



Economic indicators

1

GROSS DOMESTIC PRODUCT

According to the Statistics Poland, Poland's GDP grew by 5.7% y-o-y in 2021 - the best result since 2007. The Polish economy offered positive surprises in the second half of 2021, confirming its resilience in the face of the repeated waves of COVID-19 and disruptions in supply chains. The high GDP growth of around 7.7% in Q4 2021 was a result of, among other factors, high consumer spending and solid investment growth. According to European Commission estimates, Poland's GDP in 2022 may reach up to 5.5%, although a World Bank forecast suggests Poland's GDP growth for 2022 and 2023 will reach 4.7% and 3.4% respectively.

2

UNEMPLOYMENT

According to Statistics Poland, in December 2021 the registered unemployment rate was 5.4%, a rate unchanged from November and, compared to the end of 2020, lower by 0.9 pp. This data offers evidence of labour market resilience to the further waves of COVID-19. According to experts, who view the labour market with much optimism for 2022, there is a good chance to improve upon 2019's result, when the unemployment rate stood at 5%.

3

INTEREST RATES AND INFLATION RATE

Despite last year's NBP forecasts that interest rates would be maintained at

a stable level between February 2021 and, at least, the beginning of 2022, the second half of the year saw the Monetary Policy Council increase interest rates systematically. The Monetary Policy Council made its first rate raise in nine years in October 2021 (from 0.1% to 0.5%). The Council then surprised markets with the scale of its November intervention, raising the base interest rate from 0.5% to 1.25%. Q1 2022 brought further increases of base interest rate - in March it went up to reach 3.5%. MPC's decisions were in response to a level of inflation which rose significantly in H2 2021 due to growth in global raw material prices and supply bottlenecks, among other factors. In 2021 the annual average inflation rate reached 5.2% - the highest it has been for 20 years. Forecasts say that CPI in Poland may exceed 10% in 2022.

Retail sector

77% of the 279,000 sq m of new supply delivered to the market in 2021 was in small cities (of less than 100,000 inhabitants). A total of 214,000 sq m of new retail space was completed there, representing a record-breaking annual historical result for small cities. What's more, some 70% of the retail space under construction is also in small cities.

Investor interest in the construction of small-scale retail parks (5,000-10,000 sq m) shows no signs of weakening. This is reflected in both the structure of new supply (over 60% of new supply was in schemes of this format) and in the amount of space under construction (40% in small-scale retail parks).

COVID-19 accelerated consumer-oriented changes observed in the retail market. The share of online sales in the retail sales total was also higher than in the pre-pandemic period – as it was in months when shopping centres were fully operational. According to Statistics Poland data, November and December 2021 saw this indicator exceeded 10%.



Retail market in Poland

The COVID-19 pandemic has amplified the changes taking place in the retail market over the last few years. The beginning of 2021 brought further pandemic-related restrictions for retail facilities, resulting in the partial closure of shopping centres (with the exception of grocery stores, drugstores and pharmacies) for 70 of the first 90 days of 2021. Footfall surveys conducted by the Polish Council of Shopping Centres revealed that in Q1 2021 in the three weeks in which shopping centres were allowed to fully operate following more than two months of lockdown, shopping centre footfalls were estimated at the level of approximately 70-75% of the level of the corresponding period of 2019. From May 2021, the first month after the fourth lockdown, to December 2021, the average footfall in shopping centres showed an upward trend and reached 92% and 127%, respectively, of 2019 and 2020 levels.

In the same period, the turnover in shopping centres was 0.75% lower than in 2019, and reached a level of 130% of turnover for 2020's corresponding period.

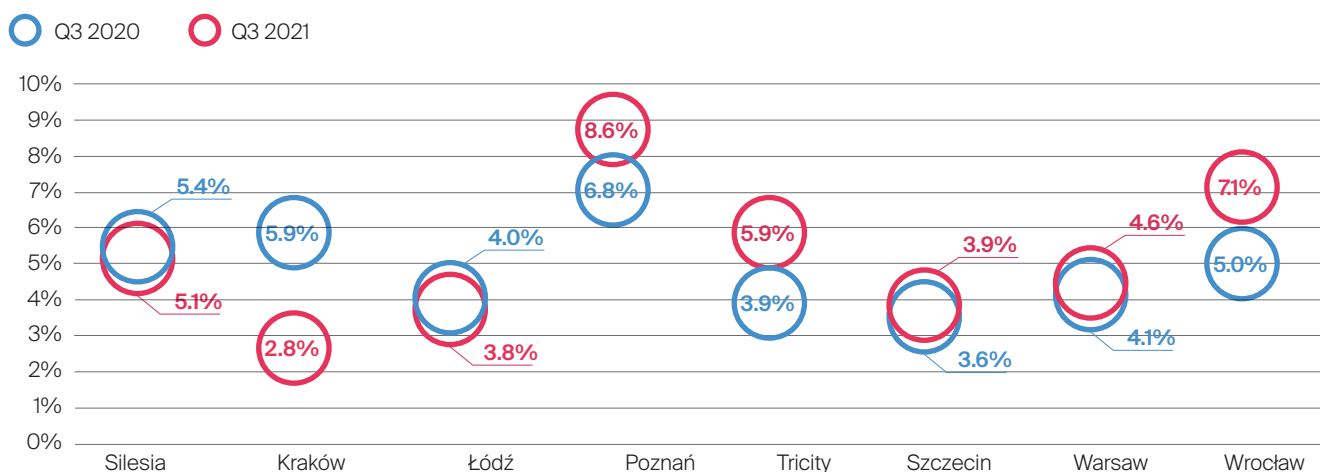
What's more, according to Polish Council of Shopping Centres data, despite re-introduced restrictions due to the growing number of COVID-19 infections, December 2021's turnover was at the pre-pandemic level for the shopping centres surveyed. It is also worth noting that shopping centres are gradually rebuilding towards footfall levels recorded in the pre-pandemic period, indicative of a systematically improving situation in the retail sector in Poland.

The instability has, however, severely damaged the condition of many tenants. After the complete withdrawal from the Polish market by such brands as Camaieu, Salamander, Sportisimo, Stefanel and Promod, there have also been shop closures for Gino Rossi and Badura. Both brands have been taken over by the CCC Group, which will sell their products in physical stores as well as online. It is worth noting that the Polish market continues to attract new brands and offer encouragement for the expansion of existing ones. In 2021, brands such as Camicissima and Half Price (belonging

to the CCC Group), made their debuts in Poland, while in 2022 the first stores belonging to the **dm drogerie markt** chain are due to open. Along with other brands, Primark also announced expansion plans, with planned openings for another four stores in Poland, in shopping centres in Kraków, Katowice, Wrocław and Łódź by the end of 2023. There are also planned new concepts and formats of stores such as Decathlon Basic, which opened in cooperation with the Carrefour chain.

Market research on vacant space in shopping centres conducted at the end of August and the beginning of September 2021 clearly showed the negative effects of the pandemic. The vacancy rate increased from 4.8% to 5.3% over the previous year in Poland's 8 major agglomerations. The reasons behind this increase included the weakened condition of some tenants caused by the pandemic, and their subsequent withdrawal from shopping centres, as well as the changing business strategy of tenants, reducing the space of their premises, or withdrawing completely from the Polish market, as was

Chart 5 / Vacancy rates in 8 major agglomerations



Source: Knight Frank

the case with Tesco, which at the end of October 2021 closed its final stores.

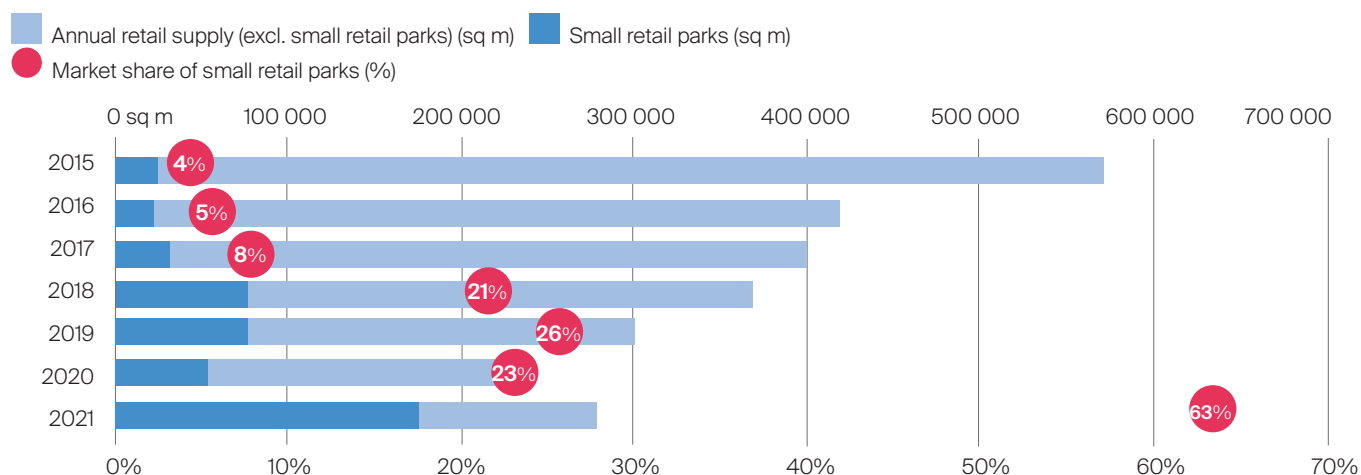
In 2021, however, there was almost 279,000 sq m of new retail space delivered - approximately 117% of the supply delivered in 2020 and almost 95% of the 2019 supply. It is worth noting, that 77% of new supply delivered in 2021 in Poland was in facilities in small cities (less than 100,000 inhabitants), reflecting the changing location structure of retail formats on the Polish market. Over 60% of this space was in small-scale retail parks (5,000-10,000 sq m) - a continuation of

a trend observed over recent years. In the past, the popularity of such facilities (characterised by a lack of common spaces and separate entrances from the parking level to individual units) was mainly attributable to their favourable locations adjacent to housing estates, their accessibility for cars, and the possibility they gave for quick shopping. 2020 and 2021 saw a new addition to their list of attributes - the shopper's perception of increased sanitary safety.

At the end of December 2021, approximately 205,000 sq m of space

was identified as being under construction, located mainly in small cities. The vast majority of this space is scheduled for completion by the end of 2022. It is worth noting that in the upcoming quarters further development of the small retail park format is expected, which is confirmed by data on the current supply of such projects that shows they account for almost 40% of the retail space under construction.

Chart 6 / Annual supply and market share of small retail parks (2015-2021)



Source: Knight Frank



Investment market in the retail sector

The past 12 months has seen the Polish retail sector attract capital of approximately EUR 900m. Although this is a level that still falls far short of the volumes registered between 2016-2019 (approximately EUR 2bn annually on average), it represented a 30% increase on 2020. As much as 1/3 of this volume came in three transactions: Chariot Top Group's sale of M1 Marki to Redefine (for EUR 123m), completing the third stage of its 2017 portfolio transaction (Power Parks in Olsztyn, Tychy, Opole and Kielce was transferred to EPP for EUR 106m); LCN's purchase of the Auchan portfolio from Griffin (in Rybnik, Nowy Sącz, Lublin, Szczecin, Gdańsk and Kobylnica) for over EUR 87m.

Chart 7 / Investment transaction volume and prime yields in the retail sector

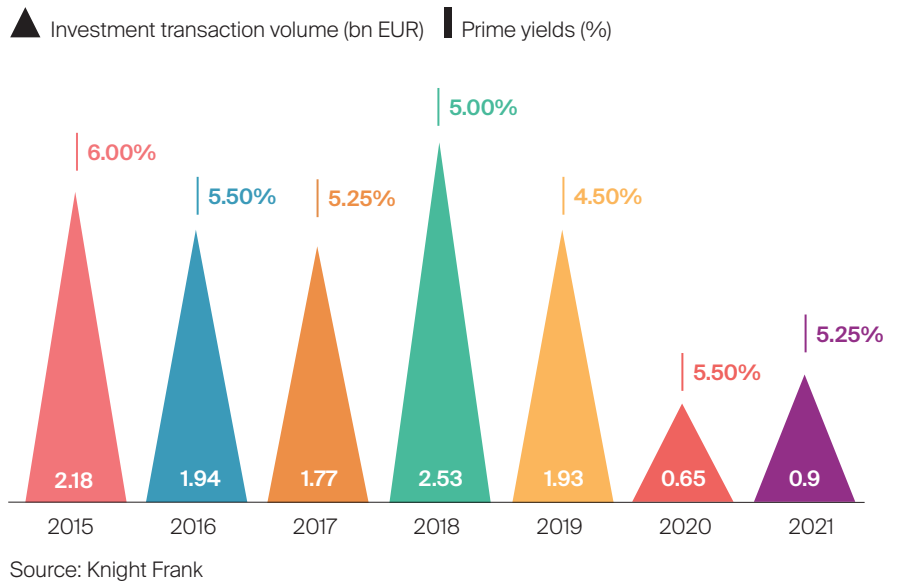
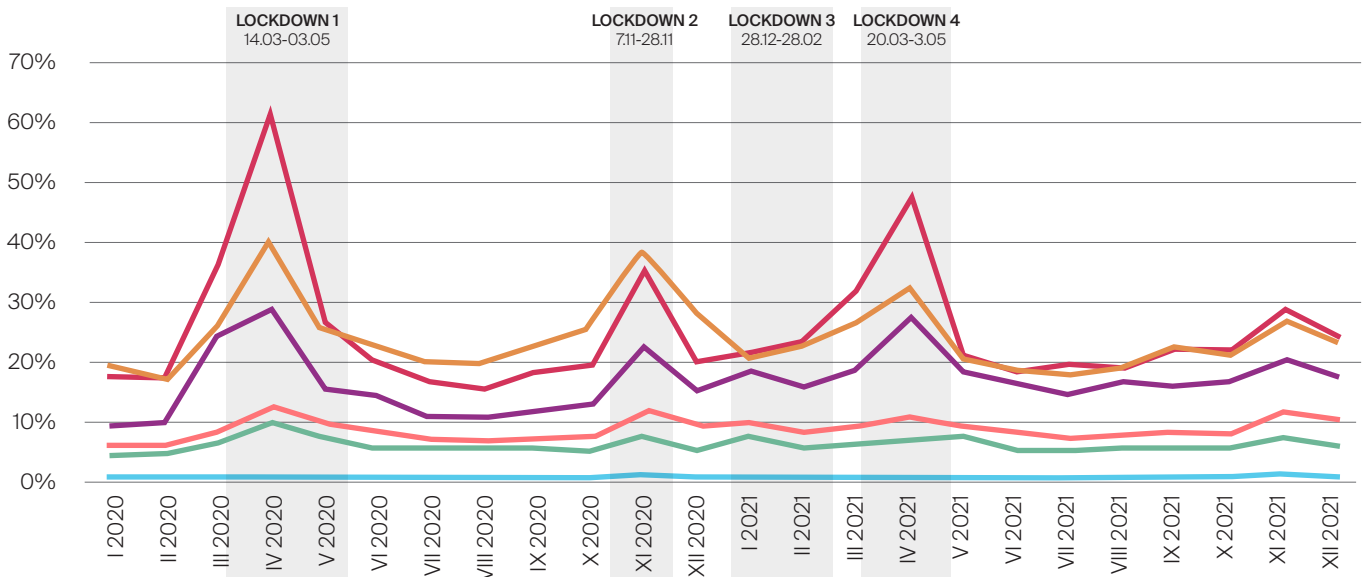


Chart 8 / Share of on-line sales in retail sales (total and in selected retail categories)

- Total
- Food, beverages and tobacco products
- Pharmaceuticals, cosmetics, orthopaedic equipment
- Textiles, clothing, footwear
- Furniture, radio, TV and household appliances
- Newspapers, books, other sale in specialized stores



Source: Statistics Poland



TRENDS

Aside from these deals, the attention of investors interested in the retail sector continued to focus on smaller projects (small retail parks and convenience centres). A significant share in the total transaction volume in 2021 came from the EUR 48m acquisition by the British LCP Properties fund of 12 such projects from several owners, including Hop Stop in Siedlce, Pasaż Chełmiński in Chełmno and Park Handlowy Piast in Piastów. Moreover, the consequences of Tesco's withdrawal from Poland were also felt on the investment market. The list of purchasers in transactions involving the buildings previously occupied by Tesco included Saller, Castorama and Leroy Merlin - to name only the largest.

Although in 2021 (in particular, H2), traditional shopping centres began their recovery from the effects of lockdowns, recording higher and higher footfalls, the acquisition activities of prime schemes remained suspended, with mainly value-add facilities being traded (e.g. Galeria Bemowo in Warsaw and Manhattan Gdańsk, acquired by Futueral for EUR 26.6m and EUR 25m, respectively), i.e. properties that offer investors the opportunity to increase an assets cash flow through, e.g., renovations or rebranding.

In 2021, there were no transactions for prime retail schemes, Knight Frank experts, however, estimate that if such transactions had taken place, the projects would have been priced at around 5.25%. For the best retail parks, yields amounted to approximately 6.75% at the end of 2021, with a tendency to compression due to the high investor demand of the previous two years.

1

The popularity of accessible and quick shopping in local, conveniently situated small retail centres continues. It is therefore expected that new retail space delivered to the market will continue to be in the form of such facilities.

2

It is expected that online shopping will continue to complement retail in its traditional form, the dynamic development of discount brands will continue, and new formats and concepts of existing stores will appear in shopping centres. It is also anticipated that the level of digitisation of retail facilities will continue to grow, including through increases in the level of data use and omnichannel sales.

3

The sales strategies of brands are changing, many of them, as a result of the pandemic, have focused their activities on combining the physical and digital worlds as a way of developing multi-channel sales. Regardless of the sector's further development scenarios, it is also expected in 2022 that the share of e-commerce in retail sales will remain higher than before the pandemic.



Economic indicators

1

RETAIL SALES

In the first quarter of 2021, the Polish government once again imposed significant operating restrictions on shopping centres, which remained in force for 70 of the first 90 days of the year. The following months saw the loosening of these restrictions and a resulting improvement in the mood of retail property owners and consumers alike. As a result, retail sales grew month by month and, in the whole of 2021, they reached a level over 8.1% of that recorded in 2020. A particularly high increase in sales between January and December was recorded in the clothing and footwear sector (32% y-o-y), in the category of vehicles and components (10.7% y-o-y) and in the pharmaceuticals and cosmetics categories (8.6% y-o-y).

2

ONLINE SALES

In pre-pandemic years, online sales had been systematically gaining in popularity among Poles, although their share in retail sales had not exceeded 5-6%. The COVID-19 pandemic, the ban on movement, and the closure of physical shops as a result of imposed restrictions, boosted the popularity of online shopping. In certain months of 2021, the share of online purchases in retail sales as a whole ranged from 7.4% to 11.4% - significantly above the pre-pandemic value, and a good sign for the future.

Warehouse sector

The dynamic growth of the warehouse sector in Poland has been driven by strong demand. As a result of post-pandemic trends and further growth in the e-commerce sector, there was another successive year of record-breaking volume of leased space.

The constant growth in tenant interest in modern warehouse space is resulting in vigorous developer activity, in new BTS and urban format investments, as well as projects delivered on a speculative basis.

Record-breaking tenant activity influenced the highest volume of new completions in the history of the warehouse market in Poland, exceeding 3.3m sq m, and causing a substantial decrease in the vacancy rate level which, at the end of December 2021, was estimated at 4.4%.



Warehouse market in Poland

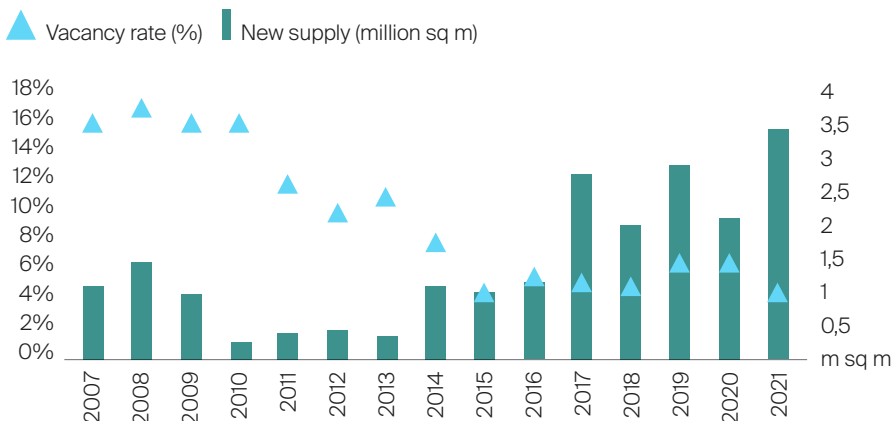
The warehouse market, which has been on upward trajectory for several years, is the fastest growing sector of the real estate market in Poland. Total warehouse stock in Poland at the end of December 2021 exceeded 24.1m sq m, with demand reaching new heights from year to year. Poland's warehouse market shows no signs of let-up in attracting tenants from logistics companies, retail chains,

distributions centres, the e-commerce sector and manufacturing enterprises. The intensifying demand from the e-commerce sector drew developer attention towards locations near major transport routes dedicated to BTS investments, as well as to plots in close proximity to Poland's large cities, where last mile logistics facilities and SBUs (small business units) with representative A class office space are being developed.

The highest concentration of warehousing is still in Warsaw and its surroundings, with over 5.4m sq m of warehouse space (22.6% of Poland's total stock). The share, however, of capital in the market is steadily shifting towards the other "big five" markets and emerging markets areas.

The warehouse sector is the biggest beneficiary of the COVID-19 pandemic, which accelerated trends observable in the warehouse market since 2015. In 2021, the supply of modern warehouse space increased by over 3.3m sq m, increasing the total warehouse stock of the Polish market by over 12%. The Polish warehouse market has not previously seen such a substantial volume of new completions. The biggest increase in warehouse stock came in Upper Silesia, Warsaw (zone I and II) and emerging markets areas. The largest large-scale schemes to receive permits for use between January and December 2021 included: Panattoni BTS Świebodzin (203,000 sq m) for Amazon, GLP Łędziny Logistics Centre (111,500 sq m), Panattoni BTS for DHL (107,000 sq m) in Żerniki nearby Poznań, and Hillwood BTS Rokitno (78,200 sq m) for ID Logistics.

Chart 9 / New supply and vacancy rate in Poland (2007-2021)

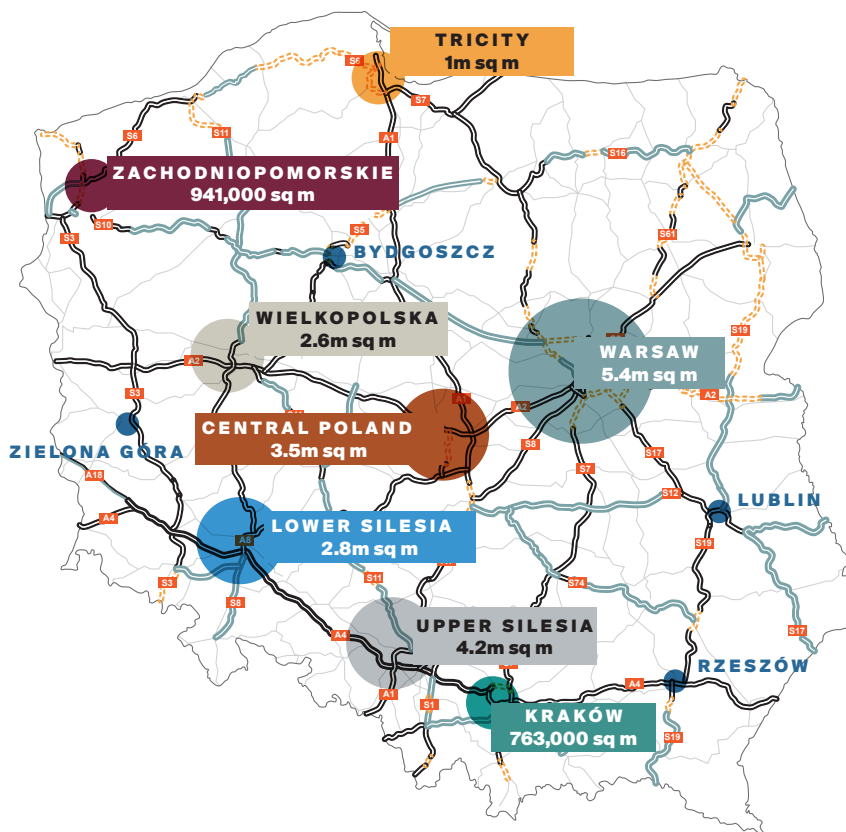


Source: Knight Frank

Map 1 / Warehouse stock by areas of concentration (Q4 2021)

24.1m sq m
WAREHOUSE STOCK
IN POLAND

EUR **2.50-5.25**
MONTHLY ASKING RENTS
FOR WAREHOUSE SPACE



- Existing highways and expressways
- - - Major routes under construction
- - - Planned road investments

Source: GDDKiA, Knight Frank

Developer activity in the sector remains strong, with a record-breaking 4.8m sq m identified as being at the construction stage at the end of December 2021. Large-scale facilities under construction at the end of the final quarter of 2021 included: GLP Wrocław V Logistics Centre (93,600 sq m), Panattoni Park Stargard BTS for TEDI (87,000 sq m), and Hillwood Stryków II (73,000 sq m). Following high tenant interest in modern warehouse space, the market is witnessing a noticeable shift in developer focus toward investments built on a speculative basis to increase the availability of space for immediate lease.

Tenant activity in the warehouse sector continues to grow. The volume of leased space in 2021 reached a record-breaking

7.1m sq m, a figure previously not witnessed on the Polish warehouse market. As a result of post-pandemic trends and the further growth of the e-commerce sector, the volume of signed contracts increased by 36% compared to 2020. The largest finalised deals in 2021 included: pre-let agreement for Zalando in Panattoni BTS Bydgoszcz (140,000 sq m), Hillwood Bydgoszcz (104,000 sq m), and Panattoni BTS in Gorzyczki (82,200 sq m) concluded with an undisclosed e-commerce sector tenant. 2021 saw tenants mainly attracted to the two established warehouse hubs of Wielkopolska and Warsaw (zone I and II), together with emerging market areas, with a visible concentration in the west of Poland. Despite substantial developer activity and a record-breaking take-up

volume, there was another, consecutive quarterly reduction in vacancy rate level – at the end of December 2021, the figure was estimated at 4.4%, with some 1m sq m available for immediate lease. The vacancy rate at the end of Q4 2021 is at a historically low level for the Polish warehouse market.

Asking rents in all the major industrial hubs in Poland in 2021 remained at a stable level. Within the administrative borders of Warsaw they ranged between EUR 4.00–5.25/sq m/month; in zone II - EUR 2.50–4.00/sq m/month. In the largest established warehouse hubs, excluding Warsaw, monthly asking rents were quoted at EUR 2.60–4.30/sq m/month, while in emerging market areas they ranged between EUR 3.50–3.80/sq m/month.



Investment market in the warehouse sector

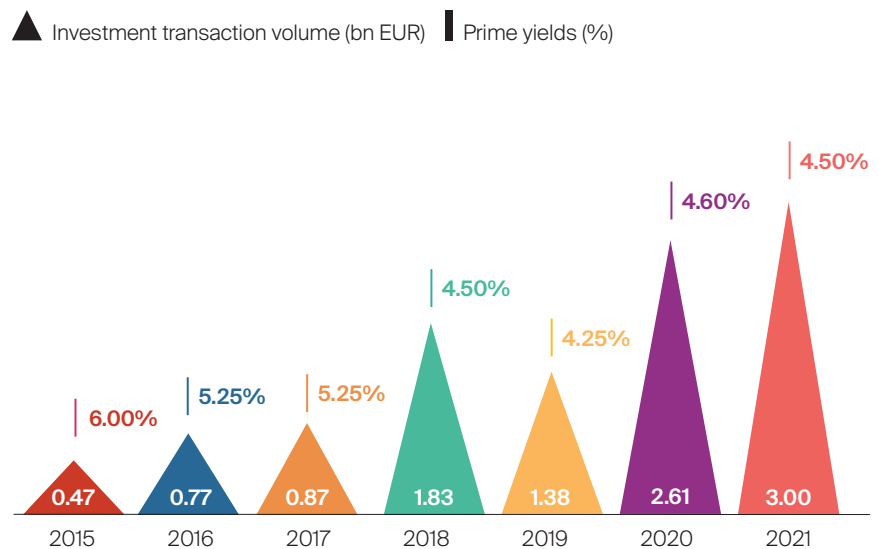
In 2021 investors and foreign funds showed the biggest appetite for the warehouse sector, as in 2020.

Positive expectations for the sector's development (due to, among other drivers, the dynamic development of the e-commerce sector) encouraged investors to put some EUR 3bn into such assets. Such a result is testimony to the trend in record-breaking yearly results shown by the warehouse sector. In 2021, investors spent almost 15% more than in 2020, with the total volume of transactions concluded in the last four years (EUR 8.8bn) nearly double the amount registered in this sector in 2001-2017 (EUR 4.9bn). Portfolio transactions accounted for most of the warehouse sector's 2021 result – the largest of them included: the sale of part of the EQT Exeter portfolio to GIC for EUR 260m; Elite Partners Capital's sale of the Emerald portfolio to Blackstone for EUR 200m; Ares' purchase of a portfolio for over EUR 196m from Panattoni; CBRE IM's acquisition of the Nexus warehouse portfolio from European Logistics Investment for EUR 190m. For the second successive year, the market saw a transaction involving an Amazon Fulfillment Center - this time located in Świebodziń, purchased by an investor from Asia for almost EUR 160m (estimated yield of 4.1%).

Prime yields for transactions of multi-let big box warehouses located in the Warsaw area stood at a level of 5.00%-5.50% at the end of 2021, while in the other major areas of concentration – at 5.25%-6.25%. The best schemes with longer than standard (over 10 years) lease contracts

were priced at 4.25-4.50%. Considering the current high demand for warehouse properties, and a supply shortage in prime assets in Poland, the coming quarters may see a noticeable compression in the sector's yields.

Chart 10 / Investment transaction volume and prime yields in the warehouse sector



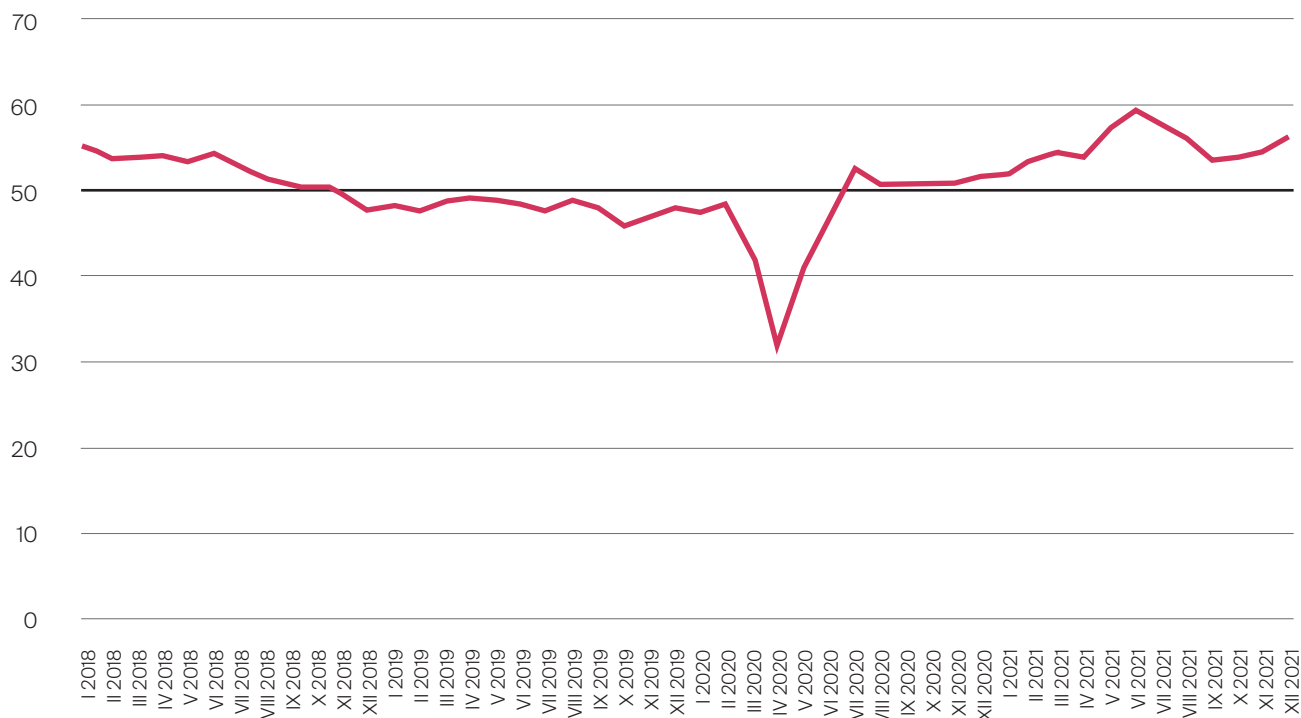
Source: Knight Frank



TRENDS

- The growing importance of online sale channels and trend of nearshoring will create further high tenant interest in modern warehouse space, especially in companies representing the e-commerce sector and related industries such as logistics and distribution centres.
- High demand will lead to ongoing strong developer activity. This will translate into a further growth of warehouse stock in the coming quarters, with a higher share of industrial space built on a speculative basis.

- Increasing construction and operating costs in warehouse facilities may increase the level of the asking rents in the upcoming quarters of 2022.
- „Green” warehouses are part of the ESG strategy already adopted by most leading developers. More and more new warehouse projects are set up with a range of implemented environmental solutions, such as photovoltaic panels, grey water recovery, and greater lighting of office spaces by natural light.
- The dynamic development of the warehouse sector, increasing competition and growing tenant requirements will lead to a diversification in developed warehouse space. As the market matures, the range of warehouse facilities with different functions and uses will grow.

Chart 11 / PMI Index in Poland (2018-2021)

Source: Statistics Poland



Economic indicators

1 PMI

The PMI index for Polish industry reached 56.1 points in December 2021 - the highest value since August 2021. Positive sentiment among large production companies was due to a higher demand for goods (both domestic and from abroad), which led to an increase in orders and a resulting increase in production. Companies, however, still face global problems with the supply of production materials. In recent months, the increase

in production costs and an inflationary trend have also been noticeable.

2 INDUSTRIAL PRODUCTION

According to Statistics Poland data, industrial production in Poland in December 2021 rose by 16.7% compared to December 2020, continuing the upward trend started in October 2021. According to economists, a significant reason for these increases is the recovery of industry in Europe following

the loosening of restrictions in Asia in September and October 2021 (leading to a significant decrease in the disruption of the supply of goods). In Poland, the automotive industry saw a marked upturn in activity, and an increase in marketed production was recorded in 31 of the 34 branches of industry.

Hotel sector

In the last two years, due to the negative impact on the sector of the COVID-19 pandemic, a marked slowdown has been observed in the hotel market. This is reflected in the much lower number of hotel facilities being opened each year.

The period saw 46 hotels opened in Poland, compared to an average annual new supply of 130 new facilities between 2012 and 2019.

2021 saw a change in the structure of hotel guests in Poland - a trend already visible in 2020. The vast majority of the guests, 86%, were domestic tourists. This stemmed not only from government restrictions aimed at halting the spread of the pandemic, but also from a fear among tourists of travel itself.

Market uncertainty was also visible in investor decisions, as they continue to suspend ongoing constructions and delay the commencement of upcoming projects. In addition, investors decided to put back the openings of completed hotels, waiting for the loosening of government restrictions imposed on the economy and an improvement in the general situation regarding the number of infections.



Hotel market in Poland

In the years preceding the COVID-19 pandemic, the hotel market in Poland had recorded increases in the number of new hotels and hotel rooms, and in 2018 and 2019 a record number of new hotels was registered. Year by year, the lure of the Polish market had been intensifying, with the tourism sector attracting an increasing number of visitors. For the hotel sector, however, 2021 brought a continuation of the negative effects of the pandemic first noted in 2020.

Due to a renewed surge in the number of COVID-19 infections, 2021 also saw limits imposed on hotels, among them limits on the number of guests. Moreover, the overall number of tourists using hotel facilities in Poland was lower than in pre-pandemic years. In 2021, the total number of hotel guests reached 14.4 million people, while the average annual number of hotel guests in 2016-2019 reached

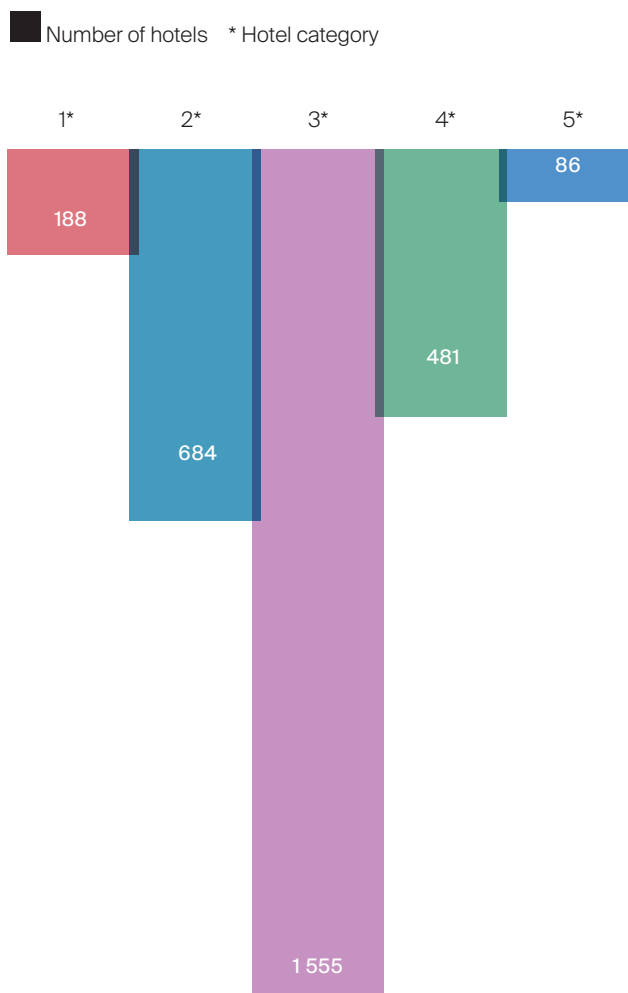
21.5 million. In the last year or so, there has been a significant change in the structure of hotel visitors, the vast majority of whom were domestic guests. In previous years, foreign guests made up an average of 26% of all hotel guests. In comparison, according to the Statistics Poland data, the 2021 figure was just 14%. Moreover, it is expected that in the coming months this trend will be maintained and the vast majority of hotel guests in Poland will continue to be domestic in origin. 2021 saw correspondingly low hotel room occupancy rates. According to Statistics Poland data for 2021, the occupancy rate for hotel rooms in Poland reached an average of 34.5%. In comparison, in preceding years this indicator for Poland had been stable, reaching an average of 52.3% in 2016-2019.

In the holiday seasons of 2020 and 2021, as a result of an increased interest in hotel stays and a resulting increased number

of guests, the operating indicators for hotels, especially those in holiday resorts, temporarily improved and occupancy rates rose. Nevertheless, the market situation failed to improve significantly in the long term. The continuing difficult situation in Poland's hotel sector is also visible in the steps taken by investors. In the last year or so many hotel openings have been postponed due to the temporary limits on guest numbers imposed on hotel facilities. Moreover, as a result of the continuing market uncertainty, decisions were still being made to suspend ongoing construction works and postpone the commencement of new works.

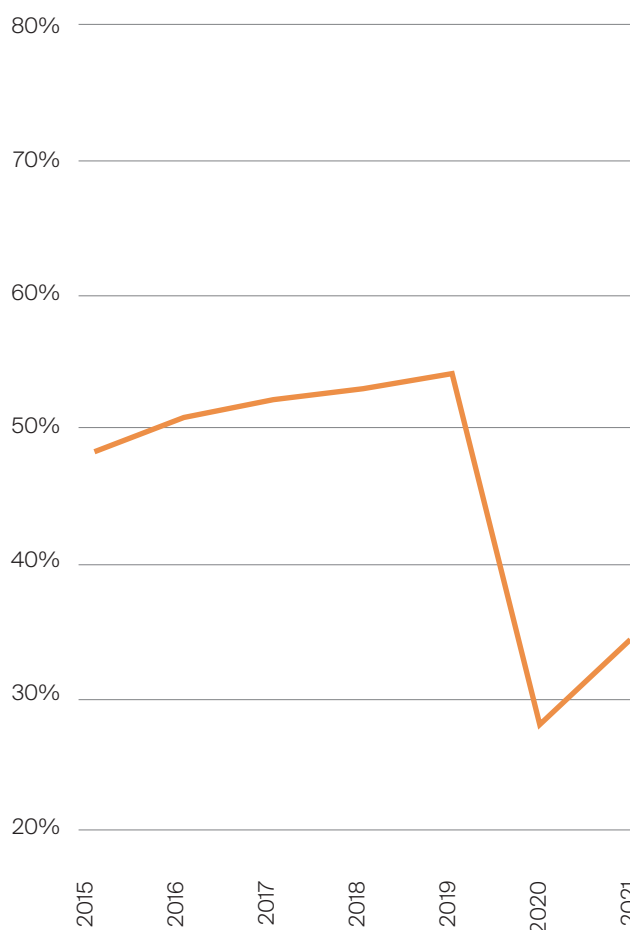
In 2021, a further marked slowdown in the development of the hotel sector was also observed - reflected in the number of new hotels opened. At the end of 2021, there were almost 3,000 hotels in Poland, and the number of hotel rooms had increased to almost 152,000. In 2021, 23 new hotels

Chart 12 / Hotel stock in Poland by hotel category (2021)



Source: Knight Frank

Chart 13 / Average hotel occupancy rate in Poland (2015-2021)



Source: Knight Frank on the basis of Statistics Poland data

opened, increasing the accommodation base by approximately 3,800 rooms. In comparison, 2019 saw 59 hotel facilities with approximately 5,400 rooms delivered to the market. It is also worth noting that since the beginning of 2020, only 46 facilities have begun operations on the Polish market - between 2012 and 2019, an average of 130 new hotels were opened annually. The largest hotels opened in 2021 included; the 4-star Nyx hotel in Warsaw (331 rooms), the 4-star AC by Marriott hotel in Kraków (300 rooms), the 4-star Mercure Katowice Centrum with

268 rooms, the 4-star Arche Hotel Dwór Uphagena in Gdańsk (256 rooms), the 3-star Ibis Styles Kraków Centrum with 259 rooms, and the 4-star Courtyard by Marriott (134 rooms), which is part of the Posejdona complex in Szczecin. At the end of 2021, 23 chain hotels were under construction, with their completion set to add some 3,500 new rooms to the market offer. The facilities being built include; Hampton by Hilton in Białystok (122 rooms), Focus Hotel in Bydgoszcz (120 rooms), and Hyatt Place Kraków with 216 rooms.

Considering the ongoing, challenging market situation, it can be assumed that the activity of developers in the hotel sector is unlikely to increase in the upcoming quarters. Nevertheless, international hotel chains are still announcing their brand debuts on the Polish market, and investors are announcing plans to open new hotels in 2022.

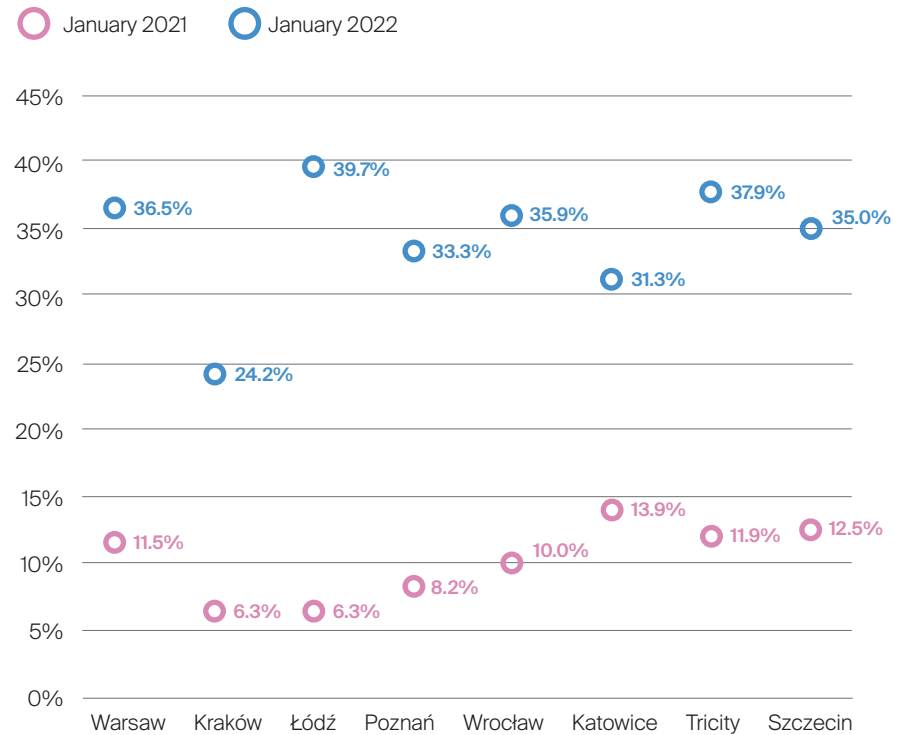


Investment market in the hotel sector

The hotel sector continued to suffer from the pandemic in 2021. Permanent operation of many hotels in conditions of uncertainty regarding the occupancy of hotel rooms and resulting low revenues, meant that investor interest in the sector clearly decreased. Only three investment deals took place in Poland in 2021, with a total value of EUR 121 million. The largest of these was the completion by Union Investment of the purchase of Ibis Styles Kraków Centrum and Mercure Katowice Centrum, concluded in 2019 as a forward purchase transaction.

Although the hotel sector in Poland has never been at the top of the list when it comes to investor interest, the current situation is further complicated by the difficulties in estimating future demand for hotel services. This not only discourages potential investors but also inhibits the activities of banks, as the ongoing pandemic makes it difficult to reliably forecast financial results of hotel facilities.

Chart 14 / Average hotel occupancy in major Polish cities



Source: STR Global



TRENDS

1

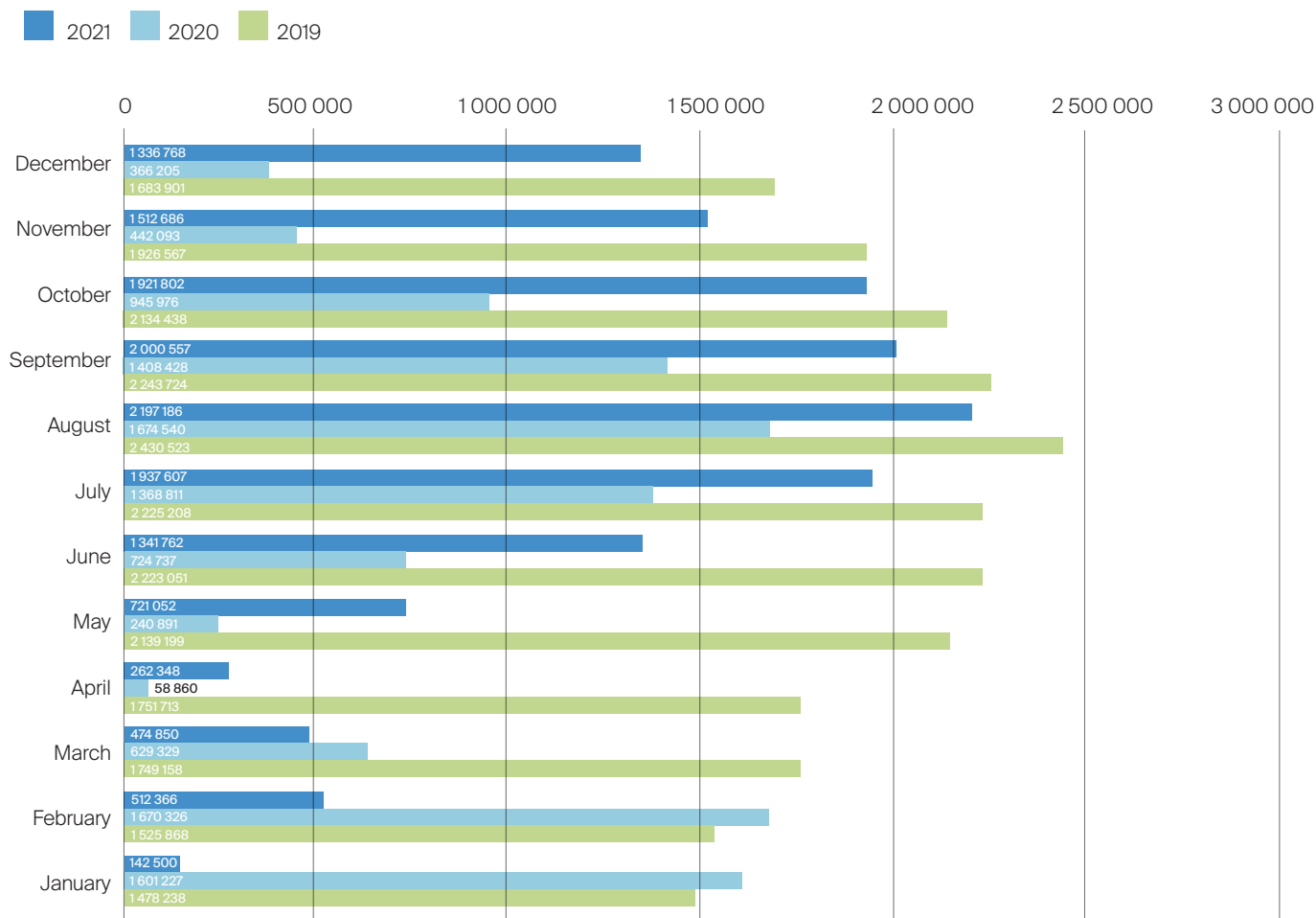
As a result of the difficult situation on the hotel market, changes in investor decisions regarding hotel projects under construction or planned are being observed. Some investments are witnessing changes to their original functions; some construction works are being abandoned, or decisions regarding future plans are being put off until the market situation stabilises. The reasons influencing such investor behaviour include difficulties in obtaining bank financing for new hotels. As a result, a limited supply of new hotels can be expected in the forthcoming years.

2

Despite the large-scale COVID-19 vaccination program, an improvement in the hotel sector and a steady return to 2019 operating rates should not be expected in the coming months. It is foreseen that despite an increase in the number of hotel guests in the summer months, the sector's condition will not fully improve before 2023.

3

The long-term improvement of the economic condition of the Polish hotel market will be greatly influenced by two stimuli; an improvement in the situation on the tourist market as a whole, allied with a revival of the MICE sector (fairs, conferences, congresses and other events) – something which is particularly important to city hotels.

Chart 15 / Monthly number of hotel guests in Poland (2019-2021)

Source: Statistics Poland



Economic indicators

2021 in the tourism sector was marked by the continued fight against the consequences of the COVID-19 pandemic and government-imposed restrictions (e.g. hotel closures or restricted occupancy). According to Statistics Poland data, the first half of 2021 saw the number of tourists in hotels in Poland decrease by 30% y-o-y to 3.45 million, although it should be emphasised that the number of tourists was increasing month by month. During this period 7 million overnight stays in hotels were available to tourists - i.e. 30% down on the corresponding period of 2020. Compared to the first half of 2020, the occupancy rate of bed places also decreased - from 26% to 21.4%. Among

the total number of tourist overnight stays in the first half of 2021, over 92% were attributable to domestic tourists, while the remainder was due to foreign tourists - mainly residents of European countries. Of the 365,000 Europeans, 30% were German and 17% were Ukrainian.

According to Statistics Poland data, the second half of 2021 brought a marked recovery. A total of some 11 million tourists used hotel facilities - 76% more than in the corresponding period of 2020. 38% of this figure were tourists visiting Poland in July and August, with the remaining months having between 1.3 million and 1.9 million visitors. Poles made up the lion's share in

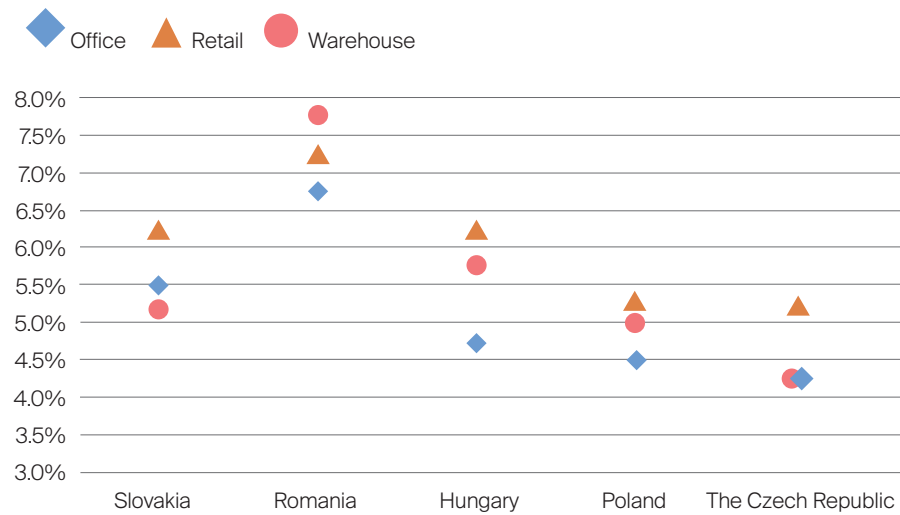
the structure of tourists by country of origin (86%). Among non-Poles (14% in total) almost half were German, Ukrainian or British. From July to December 2021, 22.1 million nights were available, an increase of 70% compared to the corresponding period of 2020. A total of 29 million overnight stays took place throughout 2021 (an increase of 27% y-o-y), and 14.4 million tourists made use of hotel stays (an increase of 29% y-o-y).

Investment market in the Central and Eastern Europe

In 2021, the Central and Eastern Europe region recorded higher investor activity than in 2020. The volume of investment transactions concluded in the five major countries of the region (Poland, the Czech Republic, Slovakia, Hungary and Romania) exceeded the figures from the previous year by almost 10%. Depending on the country, increases ranged from approximately 4% to over 10%, and in Slovakia the volume increased by as much as 45%. In terms of invested capital, Poland has been the undisputed leader in the CEE region for many years and in 2021 the volume of transactions concluded in the country was higher than for the other four countries

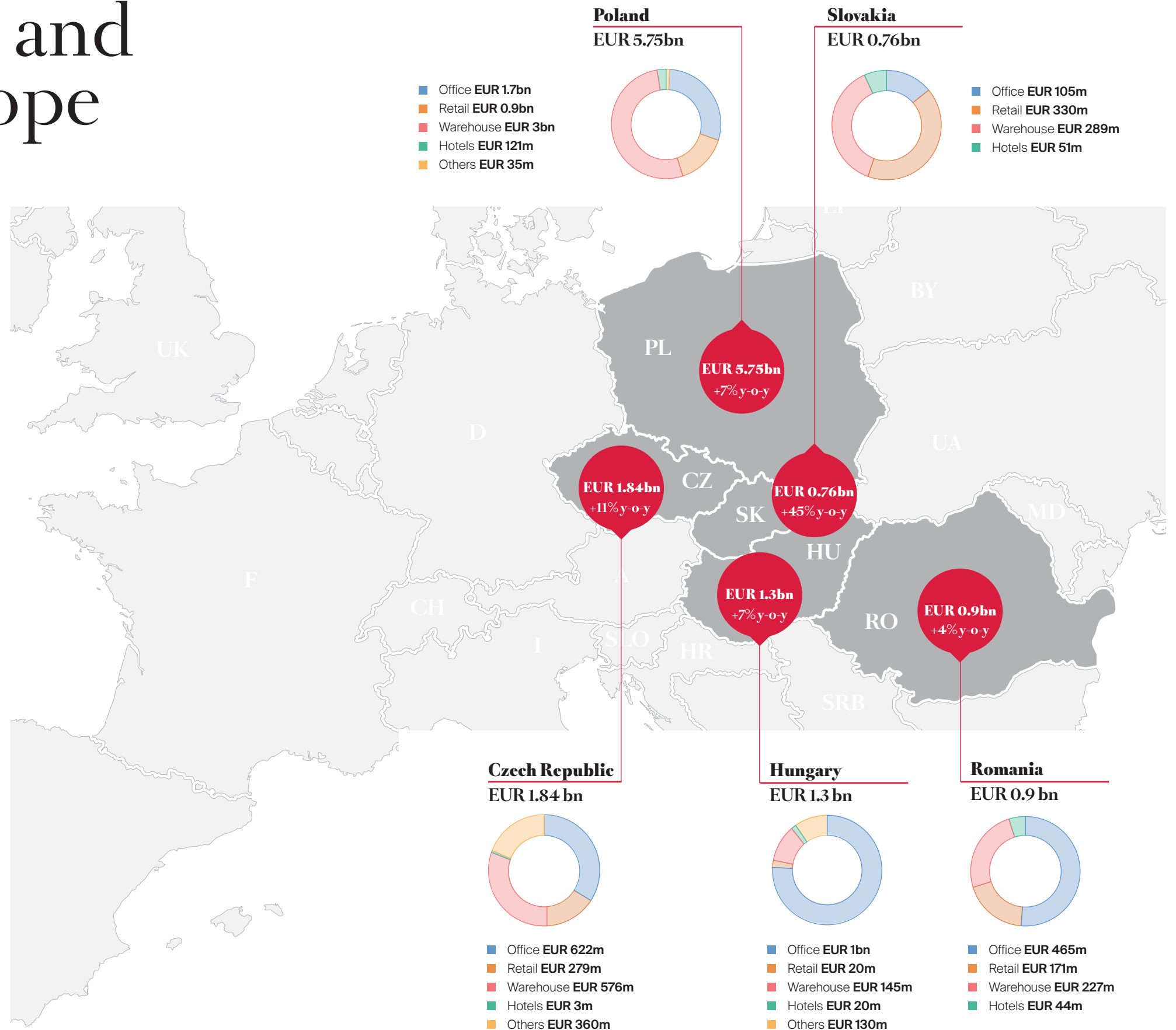
combined. In the structure of transactions in particular countries, the warehouse sector contributed a strong share, although the sector did not dominate in any of the countries to the extent it did in Poland. Office assets maintained their high position on the wish list of investment funds despite the limited offer available for purchase. Compared to 2020, there was a slight recovery in the CEE's retail sector. As in Poland, investor demand in this sector was focussed on, among other targets, small retail parks. Over the 12 months of 2021, the investment market recorded a tendency to compress yields for prime assets, both in the warehouse and office sectors.

Chart 16 / Prime yields by country and property sector (Q4 2021)



Source: Knight Frank

Map 2 / Investment transaction volume in the CEE countries (2021)



Investment market in Europe

It is predicted that 2022 will be a record year for global property investments, with the EMEA region having the potential to attract over 60% of the investment volume. US investors are expected to be the prime movers and sources of capital, and assessments suggest that may account for almost half of asset demand. In Europe, the destinations that will attract the most capital will be the UK, Germany, France and the Netherlands.

Increased investor interest can be expected in all sectors. The office market is expected to rebound sharply, with the highest demand coming from income-focused investment managers and institutions. Further records in the volume of investment transactions in the European logistics sector are also expected. Moreover, it is likely that the residential sector will be an area of interest to many investors with an ever-increasing frequency.

A rise in the role of ESG factors in decision-making by both tenants and investors can be expected, largely due to April 2021's proposed European Commission CSRD directive (Corporate Sustainability Reporting Directive). From 2023, the directive, currently at the preparation stage, will oblige both public and private companies with over 250 employees to report on sustainable issues (ESG).

Ireland (Dublin)

Investors in Ireland will continue to create demand for prime properties, i.e. those with the strongest tenants, the best technical specifications, and ESG-compliant. With limited product availability, there will be lower yields. It can be expected that in 2022 there will be a noticeably wider gap between the yields for prime and secondary offices than in the past, due to declining demand for lower standard offices (resulting from increased renting risk and aging building stock). Ireland's offices are expected to rank in the top 20 for global capital flows.

SECTOR	OFFICES	RETAIL	WAREHOUSE
PRIME YIELDS	4.00%	5.50%	4.00%

The United Kingdom (London)

In 2022, the UK is expected to witness record investment volumes. Due to American private equity capital and the interest of investment funds, the British office sector has the chance to become the main global destination for capital in 2022. The logistics sector ranks second in the UK in terms of investment scale, followed by the residential and retail markets. High demand for real estate is expected in 2022, with North American players expected to dominate the UK investment volumes.

SECTOR	OFFICES	RETAIL	WAREHOUSE
PRIME YIELDS	3.25% (WE) 3.75% (City)	6.75%	3.25%

Spain (Madrid)

Growing demand among office tenants is positive news for the investment market, and it is foreseen that Spain's office sector will find itself in the EMEA region's top ten in terms of cross-border capital flows in 2022. Investor interest in the logistics sector remains strong as Spain is catching up on the shift to e-commerce, and demand for last mile logistics continues to grow. 2022 is expected to be a good year for the hotel investment market as the Spanish tourism industry revives and hotel occupancy levels rise accordingly. The PRS sector will also continue its upward trend in 2022.

SECTOR	OFFICES	RETAIL	WAREHOUSE
PRIME YIELDS	3.50%	6.00%	3.75%

The Netherlands (Amsterdam)

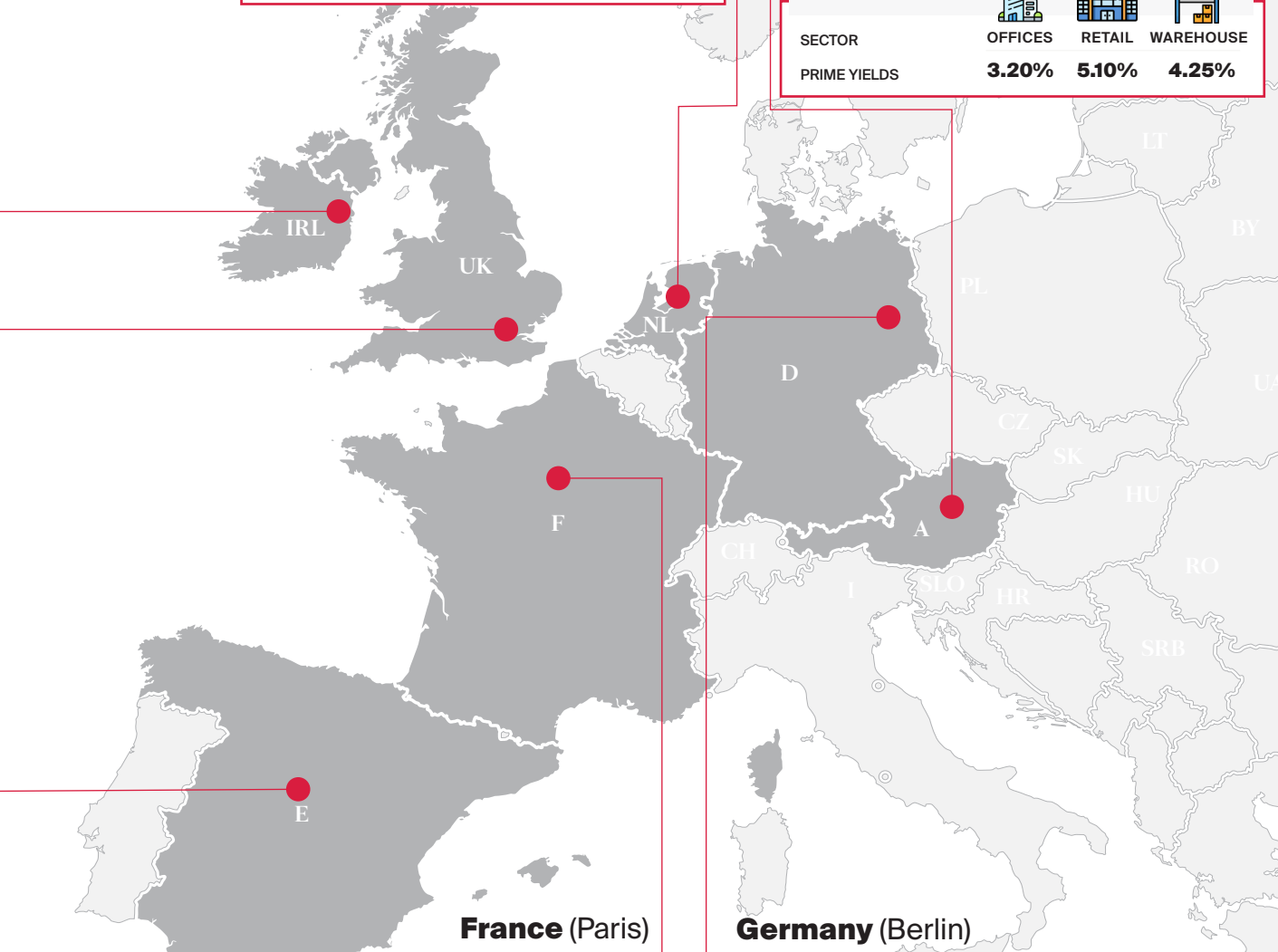
Global investor interest in the Dutch market continues to be high and yields for prime office products are at record lows. Dutch offices are expected to be in the world's top five in terms of capital flows in 2022. Dutch warehouse assets are also highly sought by international investors, and it is predicted that the Netherlands will be the fourth most attractive destination for capital in the EMEA region in 2022.

SECTOR	OFFICES	RETAIL	WAREHOUSE
PRIME YIELDS	3.15%	5.25%	3.50%

Austria (Vienna)

The Austrian real estate market has emerged relatively unscathed from the pandemic. The office sector is expected to attract around a third of the capital inflows to Austria in 2022, with them coming mainly from German investors. Demand pressure for space in the logistics sector is clearly visible. Although there is a current lack of modern logistics space available in the Vienna region, 2022 should bring a high supply of new space and, at the same time, a good supply of potential investment assets.

SECTOR	OFFICES	RETAIL	WAREHOUSE
PRIME YIELDS	3.20%	5.10%	4.25%



France (Paris)

The number of international investors active on the French market remains stable but, as was the case in 2021, the amounts invested by domestic players in 2022 may continue to decline. French offices are expected to appear in the world's top five by investment volume, while warehouses should be in the world's top twenty in terms of capital invested. Residential assets will remain among the most sought after by both French and foreign investors. In addition to traditional housing, housing for the elderly, student dormitories, and some still relatively new formats in France - such as build-to-rent (BTR) - will attract attention.

SECTOR	OFFICES	RETAIL	WAREHOUSE
PRIME YIELDS	2.75%	4.50%	3.25%

Germany (Berlin)

The German property sectors proved resilient to the effects of the pandemic. Office developments did not find themselves facing great difficulties, and German offices are expected to be in the top five in terms of investment flows. Most such capital is expected to come from US investors. The housing and logistics sectors will also be able to count on investor interest, and mixed-use assets offering stable incomes will gain in importance.

SECTOR	OFFICES	RETAIL	WAREHOUSE
PRIME YIELDS	2.60%	4.25%	3.25%

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