



Residential Research
Poland | 2023

Private Rented Sector in Poland

Contents

Introduction	2
Why is it worth investing in PRS in Poland?	4
The foundations	5
Key target groups	8
Supply and availability of product for investors	12
Characteristics of institutional market	15
How to invest in Poland?	17
The future of the institutional PRS sector in Poland	21
JLL in PRS sector	26

Introduction

In 2022, the inflation-related rise in interest rates on mortgage loans has become yet another factor increasing the demand for rental units in almost all metropolitan areas in Europe. Discussions regarding the extent of rental market regulation and the ways to increase the availability of rental units are ongoing in many countries.

The war in Ukraine has had a particularly strong impact on the situation in Poland. Following the outbreak of the war, an enormous number of refugees have entered our country – many of them have found shelter in units leased, or made available free of charge, by Poles. The excess of demand over supply, combined with high inflation of more than 10%, resulted in a large increase not only in rents, but also in the cost of heating and other costs associated with the use of residential units.

The rental market in Poland is still dominated by contracts between natural persons: individual owners of single residential units on the one hand, and tenants on the other. While the institutional rental sector, operating on the basis of free-market rents and professional rental of premises located in buildings intended entirely for that purpose,

has been effectively established in Poland for less than 10 years, said sector has only grown significantly over the recent years. This is due to the entry of a number of large international entities into this market, which is developing almost exclusively through the construction of new buildings, characterised by a good energy standard, attractive locations and a structure of units well adapted to local demand.

While the developer sector is experiencing problems with unit sales, caused by the decline in mortgage lending, the existing PRS (Private Rented Sector) projects are bringing excellent results, with new developments being rented very quickly despite high rents. In comparison to previous years, residential developers have recently become much more interested in establishing cooperation with investors who are seeking either individual buildings or long term opportunities to invest in platforms covering the entire production chain: construction, rental and management of buildings. We can also observe the first sales of buildings that were rented for numerous years. Despite the ongoing war in Ukraine, there are no fundamental threats to the functioning of the Polish economy and social life in our country, including the institutional rental sector.

The potential for the development of the institutional rental sector in large Polish cities is enormous. This is attributable to several factors, including the growing demand caused by changes in the housing preferences of young Poles, for whom renting has become a typical way of becoming independent in the first stage of adult

life, the needs of economic migrants or refugees seeking a safe place to live, the development of cities resulting from the continuously low level of urbanisation, the process of household singularisation, as well as mobility associated with various forms of employment.

It is important to emphasise that the designed and existing PRS facilities are also setting trends in the ESG area. Taking the long-term efficiency of building operations and the maintenance of value into consideration fosters the development of projects featuring innovative architectural and technological solutions, all of which is hidden behind the “E” in “ESG”.

We are very proud that JLL’s residential team has promoted the growth of the institutional rental market in Poland for more than a decade, and that since 2016 we have been involved in roughly two thirds of the total advised transaction volume in the Polish living sector. As we remain committed to being the advisory leaders in this area, we would like to invite you to read our report and contact us.

Paweł Sztejter
Head of Living Investments, Poland



Why is it worth investing in PRS in Poland?

Major drivers of the growth of the private rented sector in Poland

- The significant structural housing deficit estimated at 1.5 million units, compared to 15.3 million flats currently available across the country. In the 6 largest cities alone, the deficit exceeds 0.5 million, not including Ukrainian migration. The average number of rooms per person is the lowest in the European Union, the overcrowding rate is the fourth highest. This demonstrates the vast undersupply of housing and urgent need for new stock.
- The migration of Ukrainians, initially for work pre-2022, and after 24th February 2022, for refuge and security – which further increased the housing deficit across Polish cities. The inflow of migrants from other countries, especially Belarus, Pakistan, and India. The concentration of foreign migrants in a number of major metropolitan areas, including their respective satellite cities.
- Lack of rental stock in all major cities. For example, only a few hundred modern apartments below 60 sqm available for rent on the private market in Warsaw. Nearly 100% occupancy of existing PRS projects and typical lease-up period of less than 3 months. Average rent increases of 20-40% y-o-y in major markets.
- In the last 4-5 quarters – the decreasing creditworthiness of Poles and lower acceptance of long-term borrowing commitments. In addition, renting is now competitive or cheaper than a mortgage payment for the same type of apartment.
- Gradual change, especially among the younger generation, regarding homeownership in the early years of their career; a growing preference for renting linked with freedom of choice regarding both job and place to live. This change is accelerated by the quickly increasing quality of rental stock.
- The migration of young Poles from the provinces (both smaller cities and rural areas) for studies to major academic centres such as Warsaw, Kraków, Wrocław, Poznań and Gdańsk. Retention of university graduates in major metropolitan areas as well as the migration of non-graduates to these cities.
- Higher availability of residential product offered to institutional investors given the sharp drop of individual sales and developers' need to maintain their operational activity.
- Likely yield compression for PRS investments over the next few years. Interest rates are expected to decrease over time, along with inflation. Opportunity to benefit from the increase of capital values.
- The growing maturity of the market as shown by the increasing activity of investors, specializing in acquiring PRS projects, setting up JV structures or developing PRS rental platforms via the acquisition of residential developers.

The foundations

With a population of 38 million, Poland is the largest country in Central Europe. The country offers a competitive polycentric urban structure, with a well-positioned capital city, five cities above 500,000 inhabitants and several sizable third tier markets. The real population in the largest Polish cities is undoubtedly larger than stated in official statistics, as there is no obligation to register changes in residence. In the last few years, these cities have also seen an influx of young specialists seeking and finding jobs in the BPO/SSC, IT, and construction sectors. The student population in Warsaw, Kraków and Wrocław is sizable, with a rapidly growing number of foreign students. However, the overall ageing of the population also holds potential for investments in the senior housing sector. As household sizes are on the decline, the overall number of households is expected to grow.

Living conditions and the housing deficit

Poles have one of the least advantageous living conditions in the EU. This stems from a combination of the low number of units per 1,000 inhabitants, the small average areas of units, especially flats in the cities, and the low quality of a large percentage of existing housing stock.

The issue of Poland's housing deficit has been the subject of many estimates and publications. One of the methods utilized indicates that Poland would need three million units to be on a par with the EU average for the number of units per capita per 1,000 inhabitants. Despite the completion in the last few years of 5-6 new homes per 1,000 inhabitants, the gap between Poland and the EU average has not significantly narrowed.

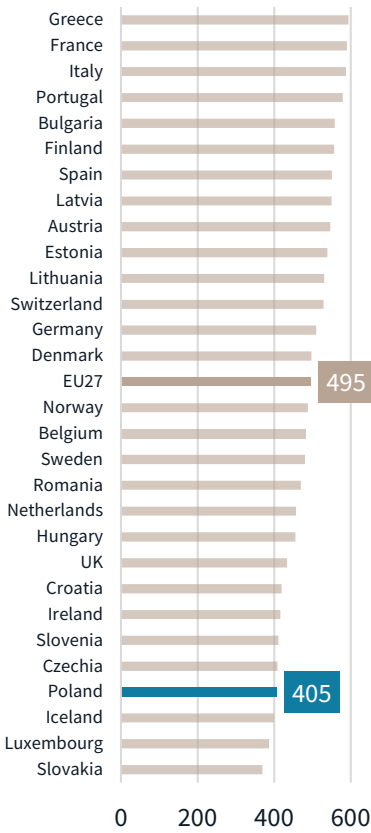
Official estimates, made by Statistics Poland (Central Statistical Office) in 2019, measured the deficit at 640,000 units with additional replacement/renovation needs estimated at 1,500,000 units.

The insufficient number of apartments is one issue, another is the size compared to other EU countries, especially in the cities. This is reflected in the average usable area per capita, which is the smallest in Europe: below 30 sq.m compared to an EU average of well over 40 sq.m. As a consequence, Poland has one of the highest overcrowding rates in Europe.

Estimated housing deficit (2021), excluding war migration: Warsaw: 200,000; Kraków: 60,000-80,000; Tri-City and Wrocław: 50,000; Poznań and Łódź: 40,000.

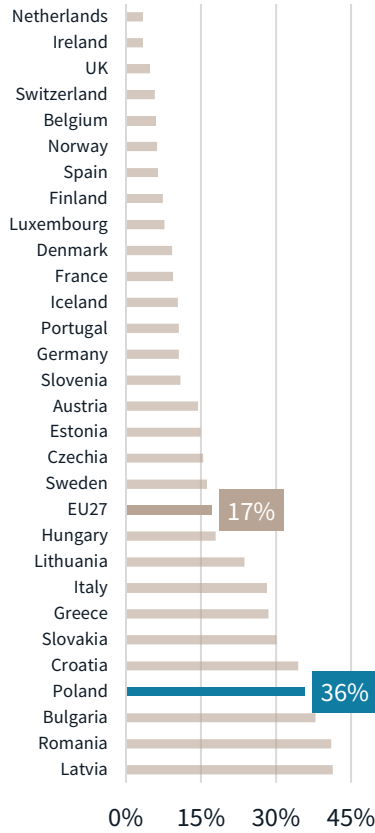
The additional migration deficit can be estimated at around 100,000-200,000 flats - taking into account the agglomerations of the largest metropolitan cities.

Number of dwellings per 1,000 inhabitants



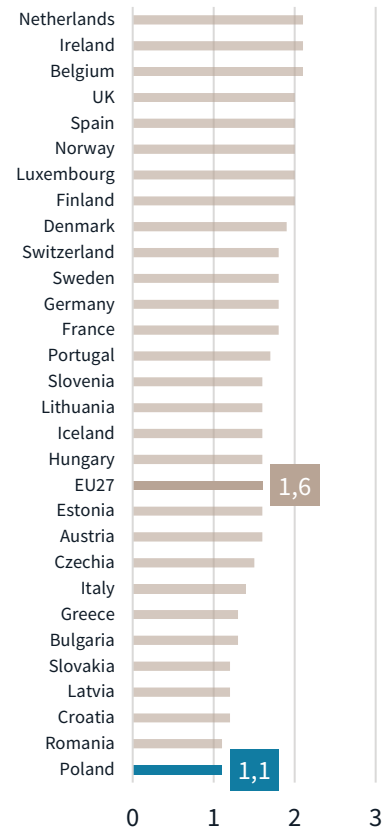
Source: Statistics Poland, 2021 (Poland) and OECD, 2020 or latest year available

Overcrowding rate



Source: Eurostat, 2021 or latest year available

Average number of rooms per person



Source: Eurostat, 2021 or latest year available

There are two categories to be distinguished: housing needs (or gap) and housing demand. While the first category is of an objective value and does not take into account the financial situation of households, the second does depend on a realistic evaluation of income, prices, creditworthiness and access to other sources of financing. This second category – demand – relates to market products, be it apartments for sale or those that are for rent on free-market terms. At any time, demand is not a stable number, not only due to gradual market saturation over time but also due to changes in affordability and mortgage lending conditions.

JLL’s approach: the deficit must be calculated locally. It is concentrated mostly in the largest

metropolitan areas. JLL estimates take into account, on the one hand, more realistic estimates of population, including university students, non-registered immigrants and new migrants, as well as commuters working in largest cities and spending weekends with families in smaller towns. On the other, the natural level of vacancies resulting from ownership changes, family transfers as well as the unavailability of units permanently designated for non-residential purposes are also taken into consideration.

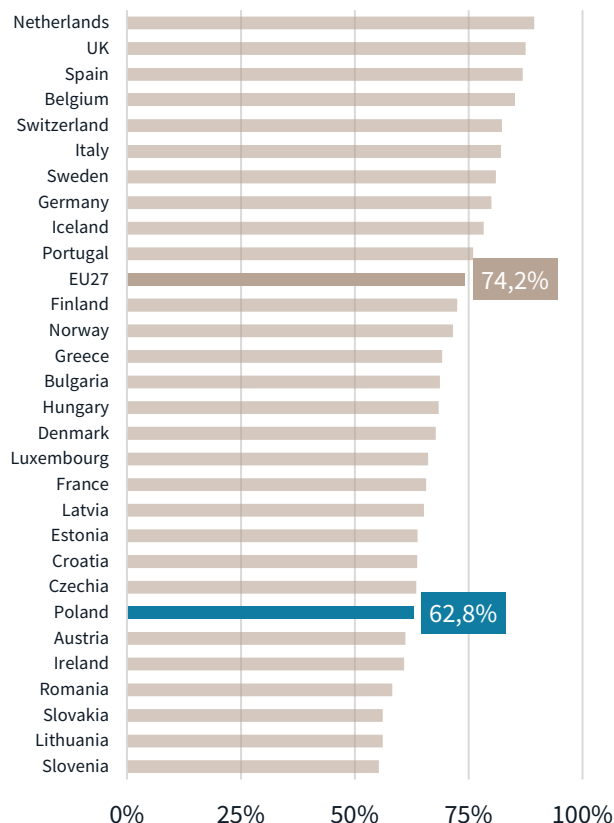
The deficit calculated according to such an approach would be approx. 200,000 units in Warsaw, 60,000-80,000 units each in Kraków, Tri-City and Wrocław, 50,000 in Poznań and 40,000 in Łódź.

The low level of urbanization in Poland compared to Europe

The “housing gap” in Polish cities in comparison to most EU countries as well as the EU-27 average has stemmed from a relatively low level of urbanization, as well as a lower level of housing construction, whose roots can be traced back to the 1940s.

It is very likely that in the next 20-30 years, the process of urbanization will continue to be a significant demand driver firstly for rental housing and later for new housing in general. The urbanization process will see the populations in the suburbs of the largest metropolitan cities increase, while the number of inhabitants of small and medium towns will decline.

Urbanisation degree in Europe



Source: Eurostat, 2021 or latest year available



LivUP, Warsaw, Jagiellońska 36 Street

Key target groups

Until the beginning of the war in Ukraine in February 2022, the core tenant groups were young professionals, university students, and either singles or childless couples. The share of families with children among tenants was below 20%. At the end of 2021, the number of tenants started growing, fuelled by young individuals and households whose creditworthiness was limited due to both the rapid increase in mortgage interest rates and tightening policies regarding creditworthiness. In the first few weeks of the war in Ukraine, hundreds of thousands of war refugees escaped to Poland. They were predominantly made up of mothers with children, single women, and the elderly. The majority of refugees found accommodation in the largest cities, many in rental flats. This sudden influx had an impact on the structure of tenants.

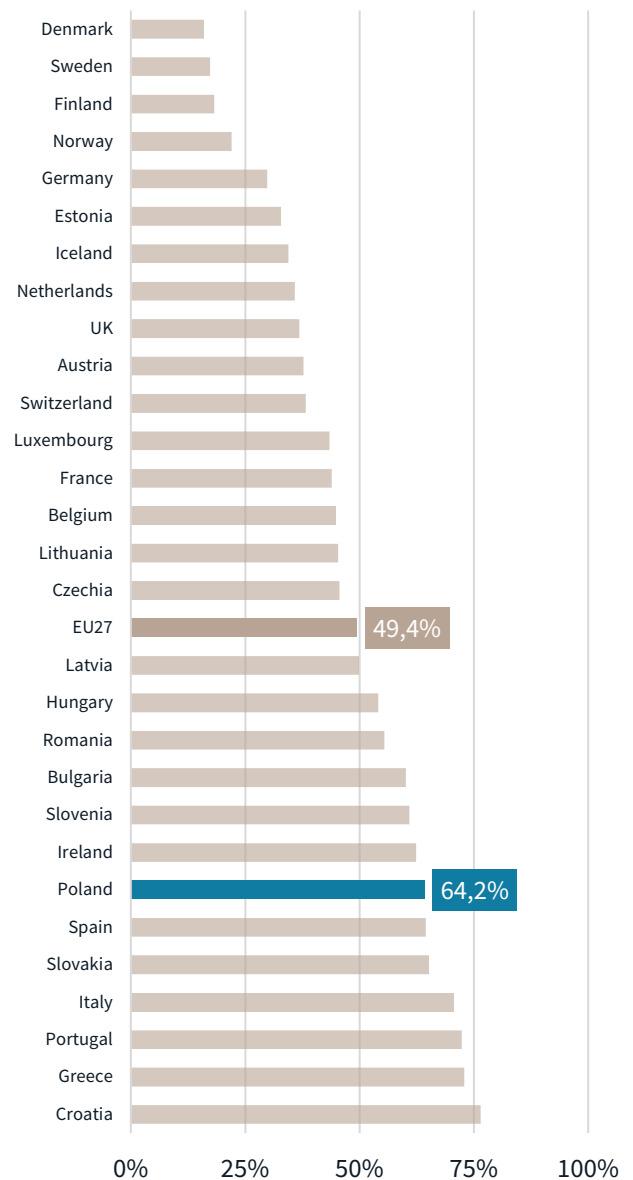
At the moment, the key demand groups are as follows:

- Young working people – singles and couples
- Students
- Young families with child/children
- Foreign migrants, including refugees from Ukraine
- Others (medium-term rental)

Young adults living with their parents

The lack of apartments and relatively high prices have resulted in a high percentage of young adults aged 18-34 living with their parents. As many such apartments are small, it is an important contributing factor to the high overcrowding rate. However the decreasing unemployment rate is encouraging young people “to leave the nest” and look for their own accommodation.

Share of young adults aged 18-34 living with their parents



Source: Eurostat, 2021 or latest year available

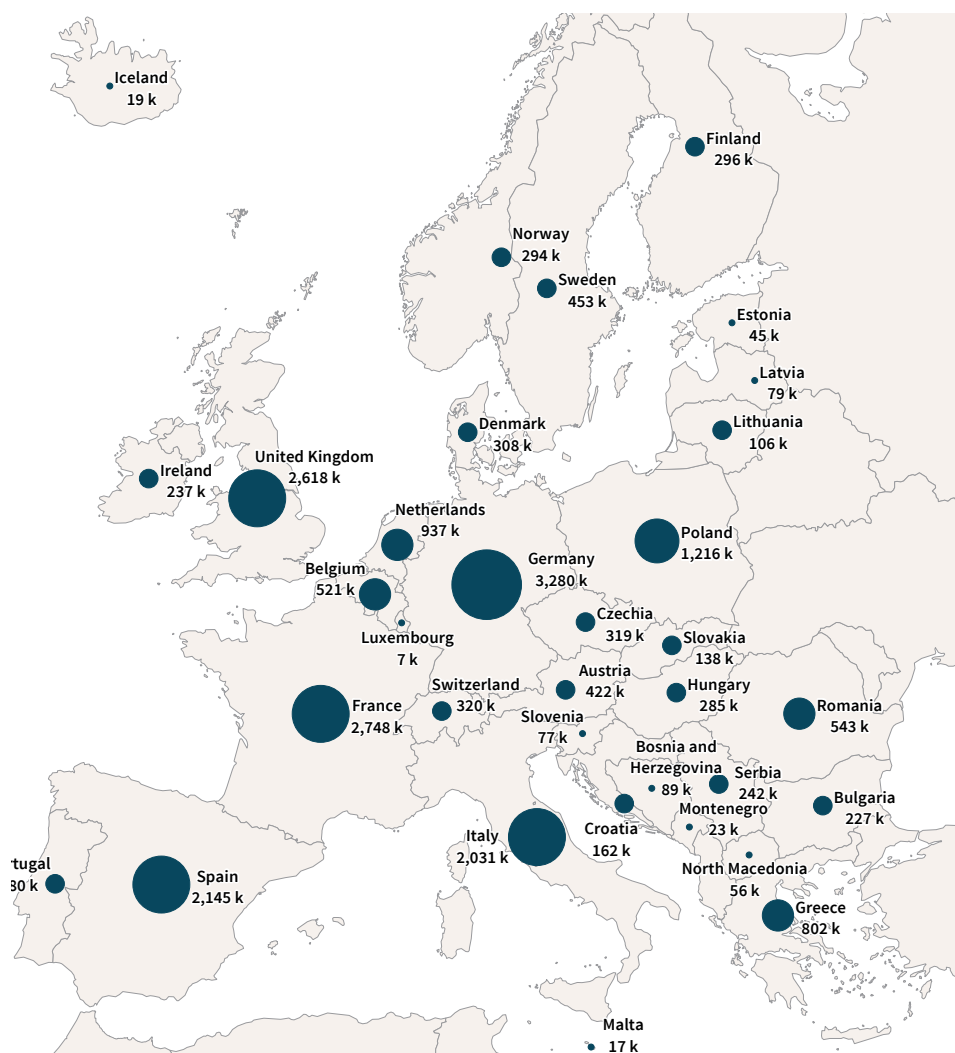
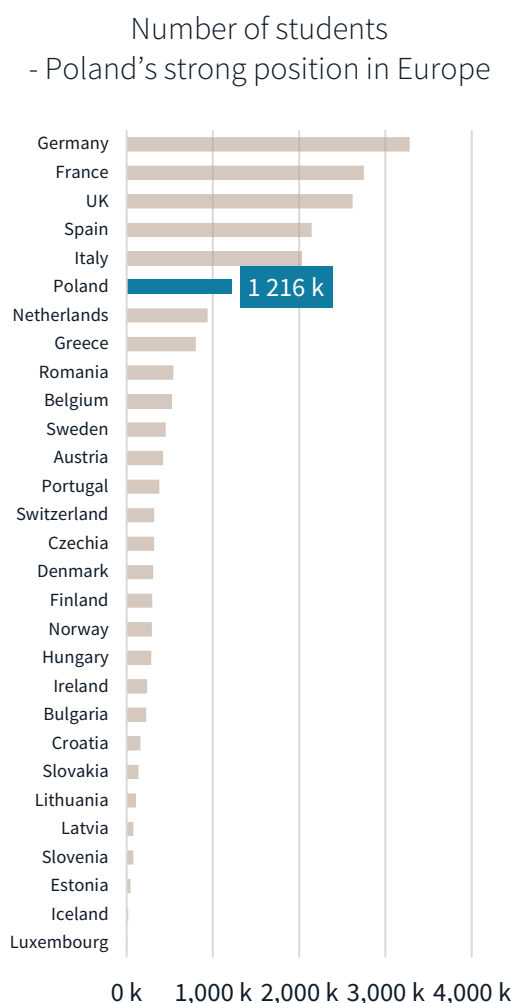
The growing number of university students

Poland is one of European leaders in terms of the number of university students. Due to the very limited stock of student dormitories, 45-50% of students rent a flat on a free-market basis while an additional 25-30% share a flat with other students.

After a period of initial rapid growth in the early post-socialist years, the population of students declined in 2009-2018. A major cause was the fall in the population demographics of the 15-19-year and 20-24-year groups in Poland. However, in the last five years, the number of university students has stabilized. According to official forecasts, a moderate increase in student

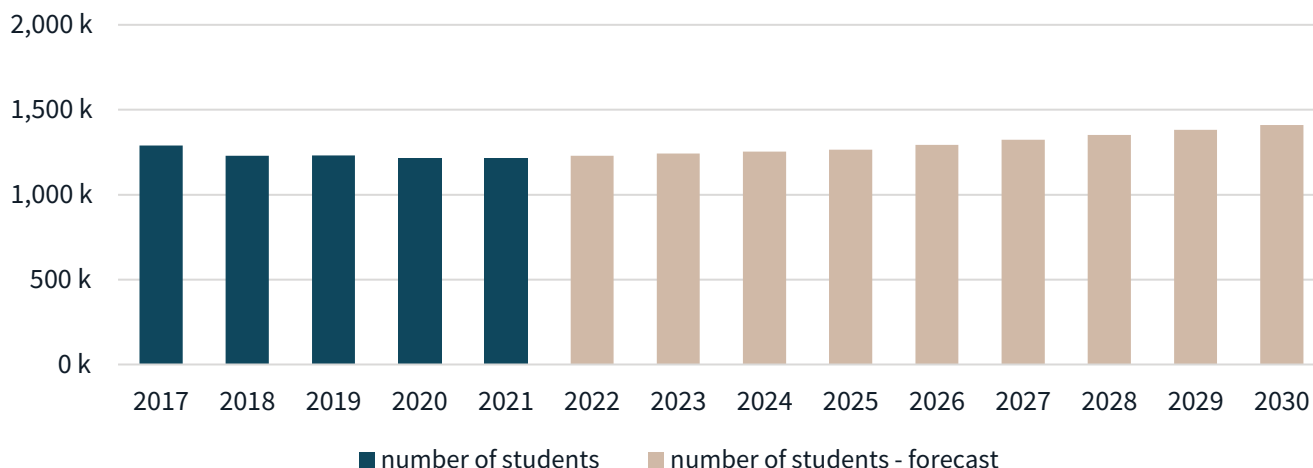
numbers nationwide is expected. Poland's student population should exceed 1.4 million by the end of the decade or 1.6 million when post-graduate students are included.

An important factor that is contributing to the increase in demand both in PRS and PBSA sectors is the rapid increase in the number of foreign university students. The war in Ukraine has resulted in a new wave of Ukrainian students coming to Poland. The number of students from Belarus has increased as well. Overall, the increase in foreign students looks set to continue for years to come.



Source: GUS, 2021 (Poland) and Eurostat, 2020 or latest year available

Student population in Poland – growth and outlook



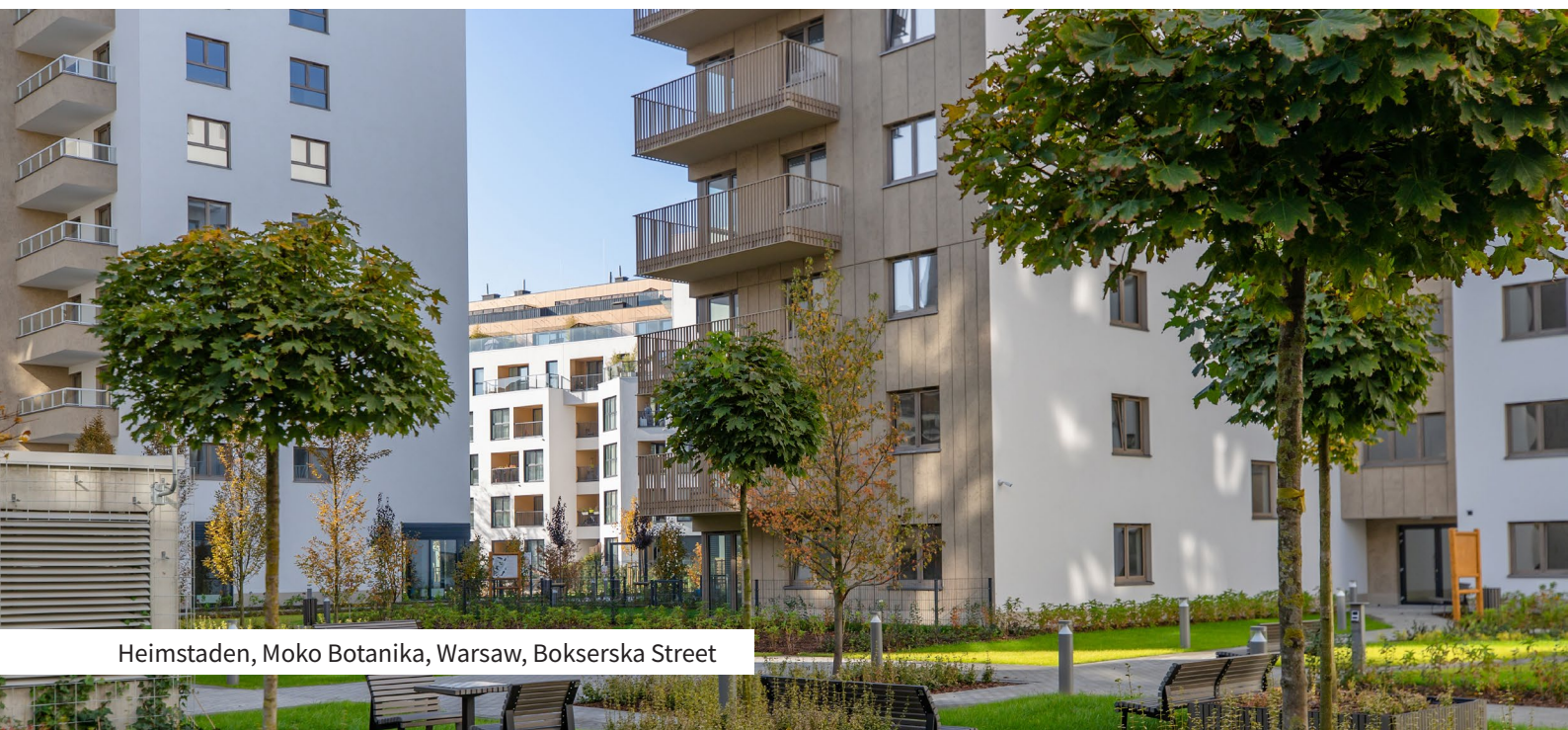
Source: GUS, 2021 (Poland) and Eurostat, 2020 or latest year available

Number of students (as of 2021)

221,000 Warsaw	132,000 Kraków	108,000 Wrocław	89,000 Poznań	82,000 Tri-City
65,000 Łódź	60,000 Lublin	51,000 Katowice	37,000 Rzeszów	31,000 Szczecin

85,000

foreign students in academic year 2021/2022



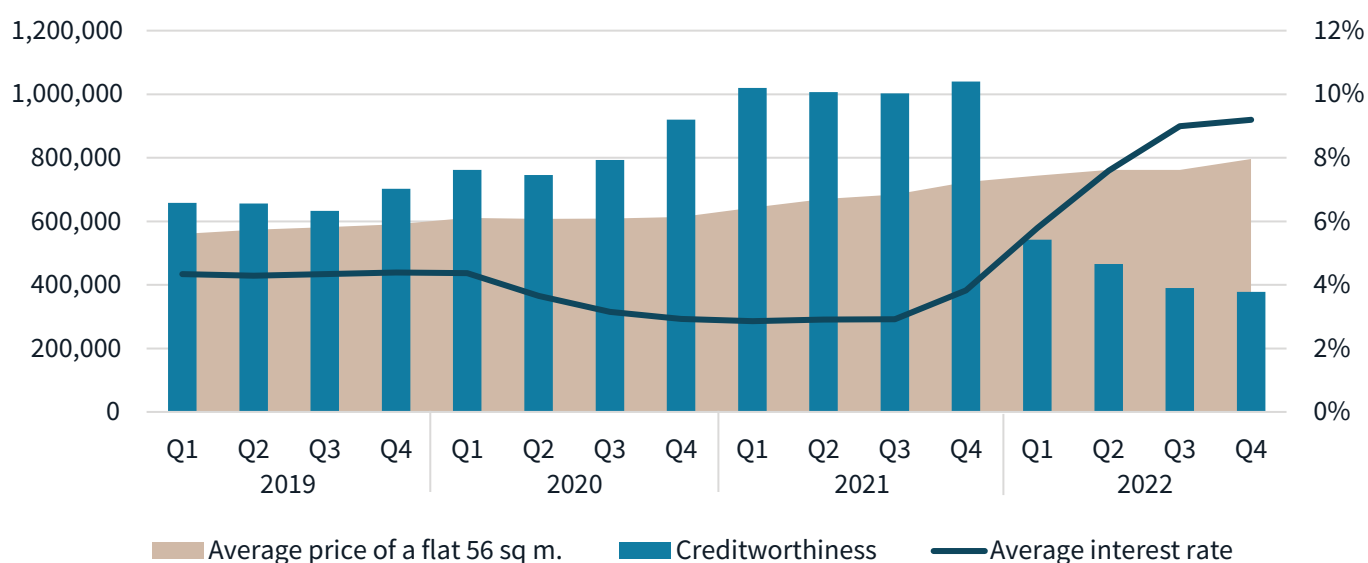
Heimstaden, Moko Botanika, Warsaw, Bokserska Street

A decrease in mortgage availability

For a long time renting a flat was more expensive than paying a standard mortgage rate for the same type of apartment. This situation has reversed at the beginning of 2021 due to higher prices, and growing interest rates. In addition, tightened

rules of creditworthiness calculation since April 2022 limited dramatically the possibility to borrow money for first-time buyers. As a result, many of them decided to continue or start renting a flat.

Change in creditworthiness – Warsaw – family 2+1



Source: JLL based on NBP and Amron data, 2022

Migration including an inflow of war refugees

In most cases, foreign migrants, both war refugees as well as economic migrants, seek jobs and homes in major metropolitan areas, with rented apartments sought for accommodation. In Poland, the major ethnic group, until February 2022, were predominantly Ukrainian men, who came for work or studies. However, due to the war, the majority are now war refugees predominantly comprising women, children and the elderly.

The second major ethnic group is from Belarus. Both these groups intend to stay for longer in Poland as they integrate quite well with the local population, are able to learn the language and can therefore find employment. In the case of Ukrainians, an important reason to extend their stay is the participation of their children in the Polish education system.

1.0 million

Ukrainians have registered for PESEL (the Polish electronic system for social security) in order to receive an ID number.

Supply and availability of product for investors

Official statistics relating to the free-market rental sector in Poland are incomplete. The data from the 2021 National Census has not been published yet. The total number of private rental units can be estimated currently at around one million, meaning that private units rented on free-market terms comprise approx. 7.4% of the total occupied stock in Poland. The value of the individual landlord rental market in Poland in 2021 was worth approximately PLN 30 billion.

The institutional private rental sector (PRS) in Poland is at a very early stage of development. The total number of units in operating institutional PRS assets at the end of 2022 comprised just over 10,000 flats. The total annual rental value of the institutional PRS sector in 2021 can be estimated at approx. PLN 300 million, i.e., 1% of the total Polish rental market value.

Rental stock

1 million units
= 7.4% of the total stock

PRS stock

10,800 units = 1.0% of rental stock
= 0.065% of the total stock



Vantage Rent, Wrocław, Legnicka 33 Street

Insufficient supply

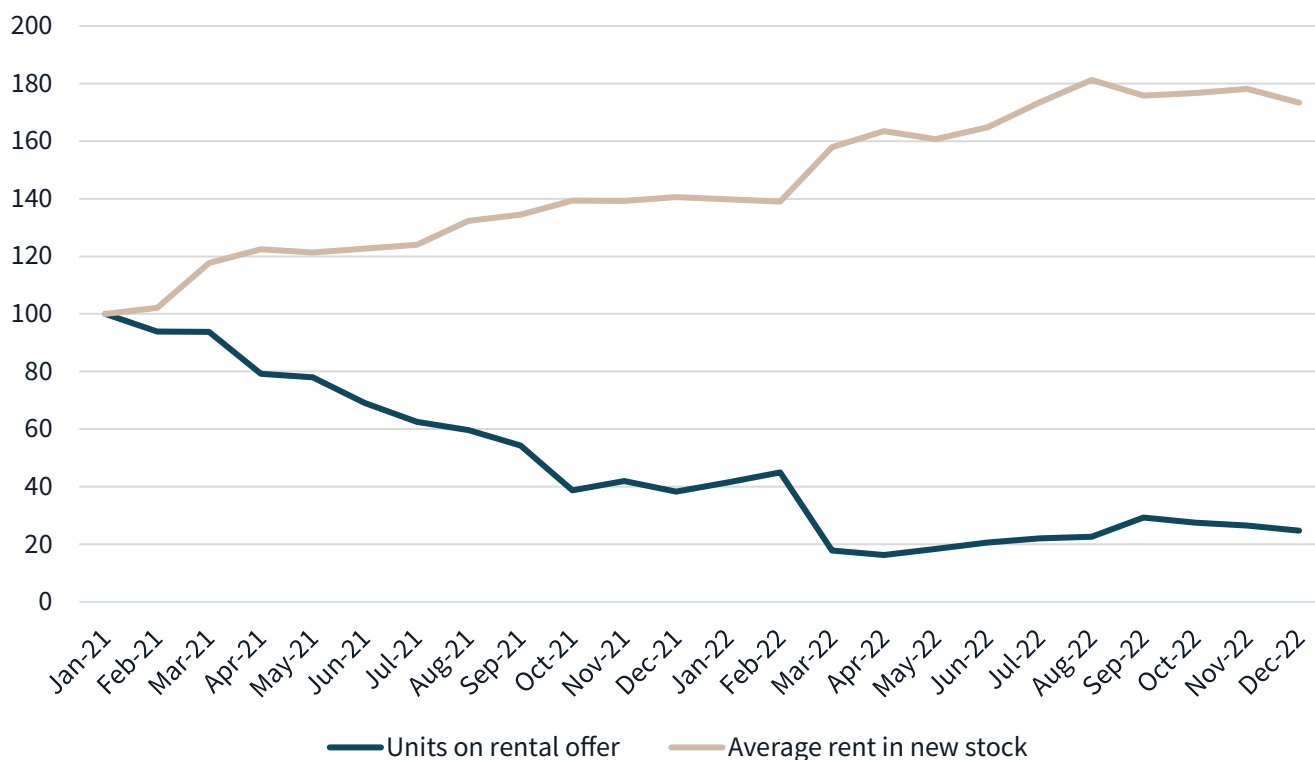
The lack of rental stock can be traced to both a structural shortage as well as more recent developments on the demand side. In the autumn of 2021, the return of employees to the office, and university students to on-campus learning, increased demand. The number of offers and reports from agents indicate that the vacancy dropped to 4-5% by year-end, which is very low for the private market. Since late 2021, demand has started to increase with a gradual inflow of tenants who had to abandon plans to purchase a flat due to rising interest rates and decreasing creditworthiness. Finally, the war in Ukraine has resulted in a massive influx of refugees. The refugees immediately started looking for private rental units with many being successful in their search. They paid the market rental rate or were lodgers who were partially supported by

the Polish state or Polish landlords. In many cases one small apartment accommodated 2-3 families.

Although in H2 2022, a large number of refugees returned to Ukraine, over one million still live in Poland. From a demand perspective, a key fact is that the majority of refugees have decided to stay in the largest metropolitan areas, either within the cities' borders or in the surrounding areas.

As a result of an excess of demand over supply, the number of available rental units decreased significantly, with March 2022 seeing the steepest drop. From Q4 2021 Q4 2022, asking rents increased by 20-40% in major Polish, as the private market maintains an exceptionally low vacancy level of 1-2%.

Dynamics of average rent in new stock and available rental offer.
January 2021 = 100



The increasing availability

There is an increasing availability of residential product due to the willingness of residential developers to provide institutional investors with new build-to-suit buildings, and a large surplus of permits compared to project commencements.

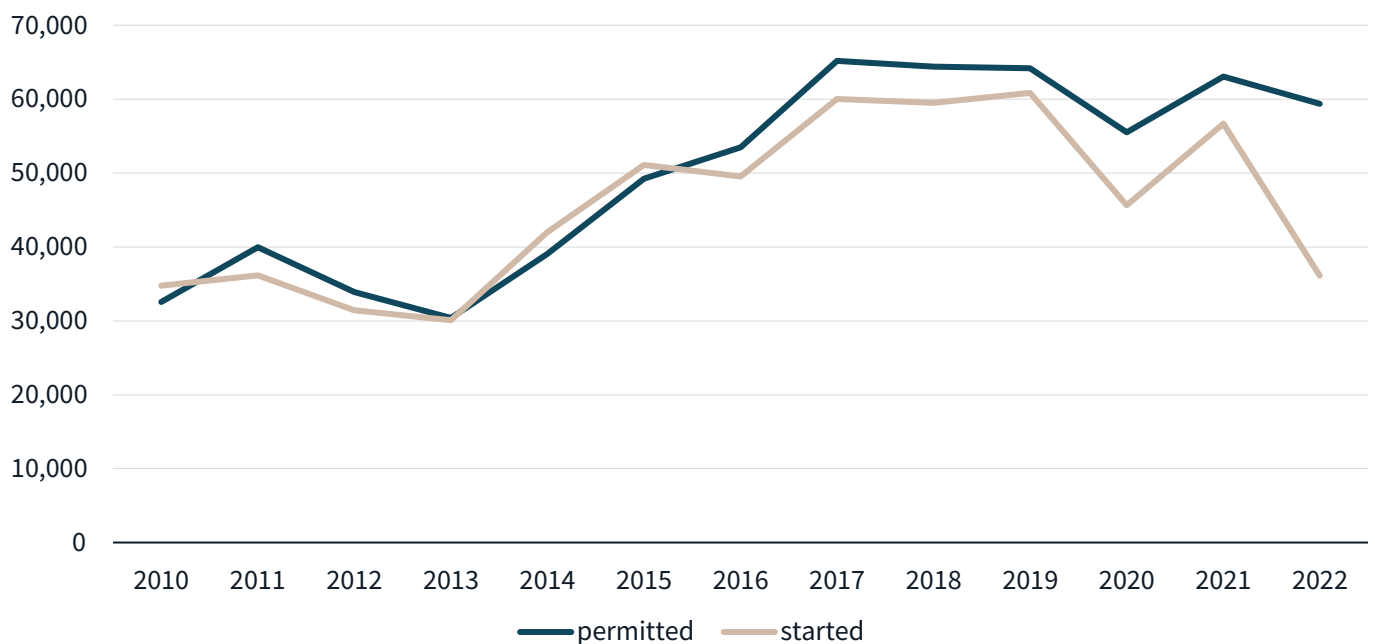
Until the end of 2021, due to an excess of individual demand on the BTS market, developers were rather reluctant to offer buildings for rent to institutional investors, especially at any significant discount.

In 2021, the number of new units completed by Polish developers nationwide stood at a record 142,000 units. The results of 2022 were even slightly up on the previous year. Residential developers, encouraged by results in 2021, applied and received in 2022 a record-high number of units on building permits: over 200,000.

On the other hand, the slowdown of sales resulted in a sharp decrease in the number of units in construction projects started in 2022: approx. 115,000 units. In addition, developers have a non-utilised excess of permits for construction which exceeds 2020 and 2021. It can be estimated that there are non-utilised permits for 170,000 units across the whole country, of which 40,000 units are in the country's six major metropolitan areas.

The drop in sales has created a unique window of opportunity for PRS investors: a long list of projects with a valid building permit, available for forward purchase. Some of these projects may, however, require redesigning in order to fit rental purposes. At the same time, institutional sales help developers alleviate the effects of lower private sales levels and increase the availability of much-needed housing stock.

Number of new residential units permitted and started (by developers and cooperatives)



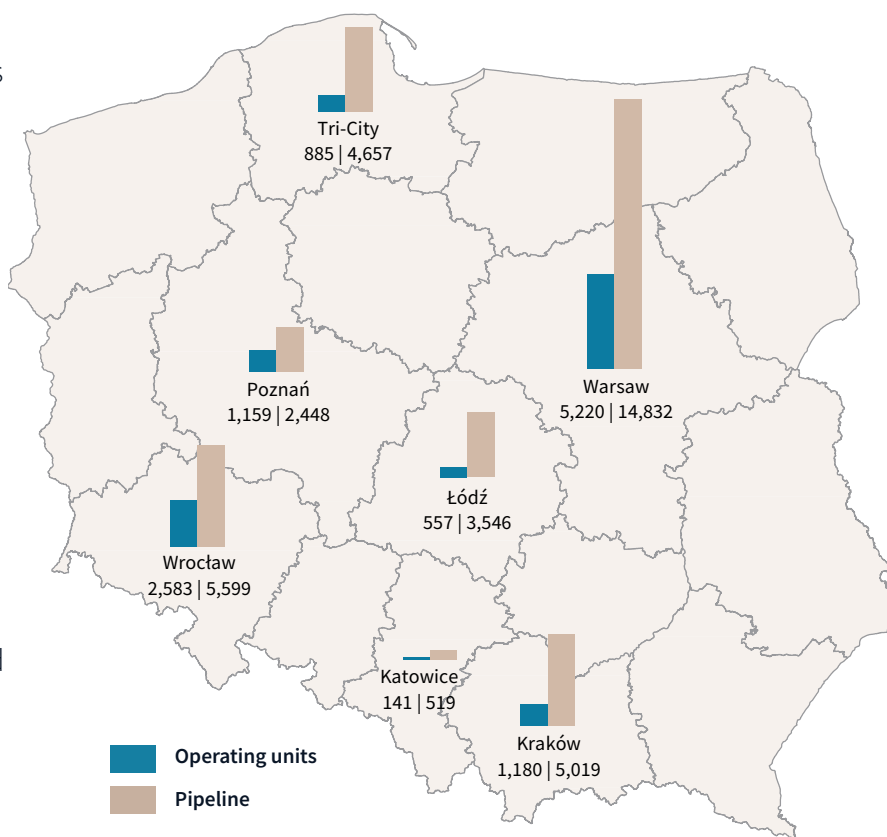
Source: JLL based on GUS data, 2022

Characteristics of institutional market

The advantage of the Polish institutional rental market, which is currently at an early stage of development, is first of all its vast potential. The considerations regarding the future, which are presented in the report, indicate on the one hand, a constant lack of apartments as well as a great deal of interest from current and future tenants. These two elements should lay the foundations for further rapid development of the rental market in Poland.

Why is the Polish real estate market more interesting for foreign funds in terms of investment? Undoubtedly, this is due to the high dynamics of rent growth, in contrast to other European countries. In addition, it is worth mentioning the moderate level of rent regulation. As last year proved, in the inflationary environment that Poland is currently experiencing, landlords were able to flexibly adjust lease terms to market conditions. Currently both rent and other fees are settled in Polish zloty (PLN).

The individual rental market is dominated by fixed-period contracts – usually one-year contracts. In the case of institutional entities, this type of contract is also the most popular, although there are also contracts for an indefinite period. Options include an institutional rental agreement (where the tenant is obliged to submit a notarial statement with the permanent address of residence in the event of eviction) and a contract for the temporary provision of accommodation (used as a standard solution by institutional owners in the case of units in properties built as commercial premises on plots with non-residential functions).



4,300

Units completed in 2022

10,800 (December 2022)

Total number of operating units

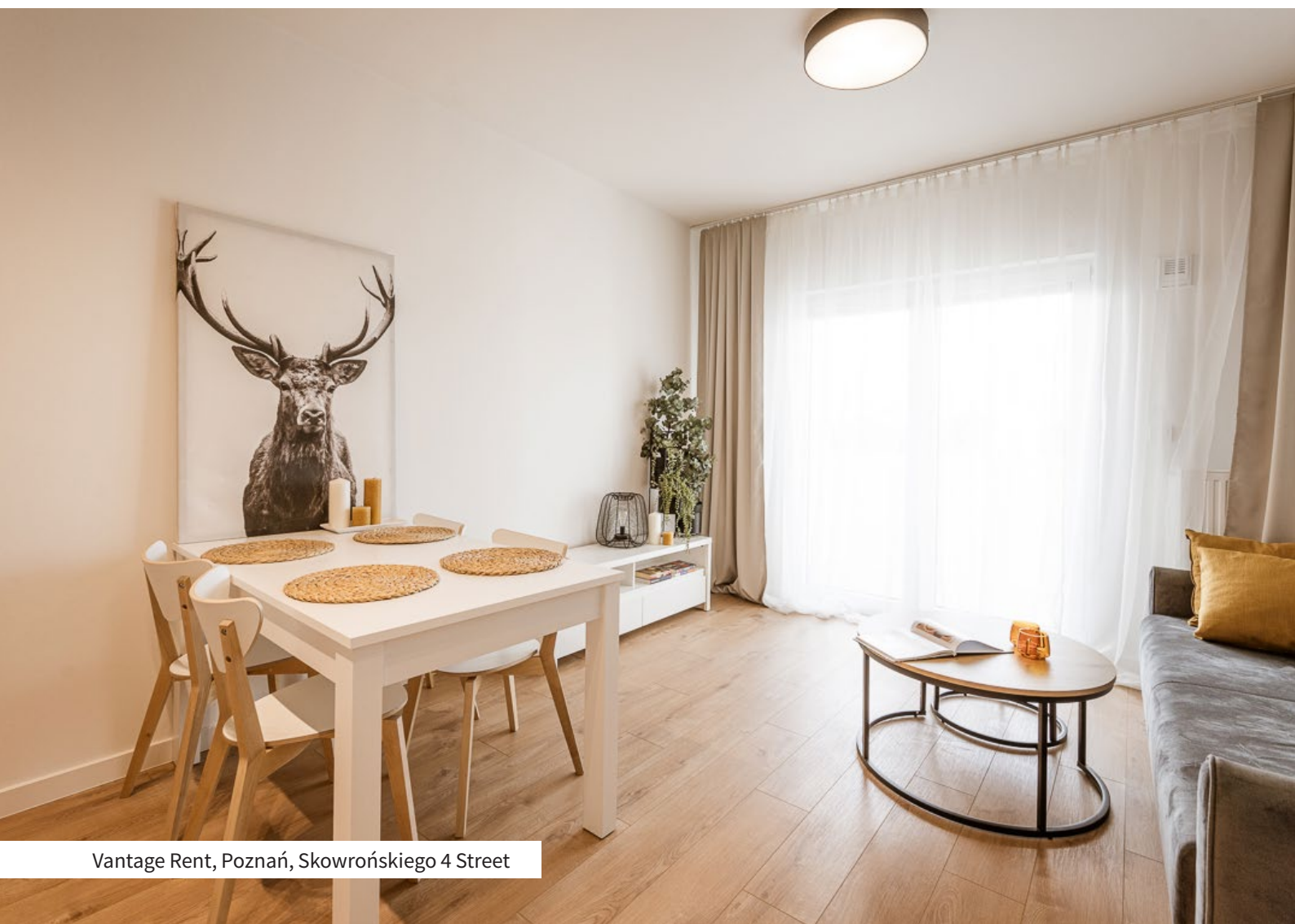
41,800

Pipeline 2023-2027

To date, there have been no cases of evictions in institutional private tenancy stock. Most landlords currently use either a contract for the provision of premises in non-residential premises or an institutional lease contract. All professional landlords use thorough screening methods and select the most reliable tenants. In the case of rent arrears, problems are usually effectively solved through negotiations.

In Poland, funds can purchase various types of residential investments. Most investors choose a classic housing product, primarily due to the low risk of significant regulatory changes in this respect. Secondly, the possibility to keep the path of exit in the form of selling the building to

individual buyers is an additional advantage. However, buildings for rent can also be built on non-residential land. The segment of service premises in Poland, which are in fact typical apartments, is a relatively new phenomenon. Currently, such projects are distinguished, among others, by a lack of area restrictions (the possibility of preparing small units), a lack of daylight requirements (more flexibility on layouts), lower parking ratios, VAT deduction on acquisition or more land plots in good locations. However, one should take into account, the introduction of new regulations relating to renting such premises on medium and long-term rules or possible changes in the field of design.



How to invest in Poland?

Investment opportunities

Forward deals

Given the lack of standing assets, investors in the Polish PRS market typically sign forward deals with developers, ensuring the construction of tailor-made residential projects.

The largest transaction of this type to date was the purchase of about 2,500 apartments by Heimstaden from Budimex Nieruchomości (Spravia) in 2021. In the same year, the Nordic investor NREP also entered the Polish market by buying several assets (including one co-living project) from Finnish developer YIT.

Following the interest rate hikes in 2021/22, investors have been facing challenges related to higher financing costs. Consequently, they are shifting from forward funding (traditionally the most common transaction structure in the Polish PRS market) to forward purchases (with a downpayment of typically 10-30%) in order to shift the need for external financing by 18-24 months.

Acquisition of standing assets

As the number of operating PRS projects is extremely limited, it is only recently that the Polish market has begun to see trades of standing assets.

In 2022, Catella sold its Pereca 11 project in Warsaw, which was also the first Polish PRS project to be acquired by a foreign fund in 2016. Catella sold another operating project in Kraków (TRIO – mix of PRS & PBSA) to Dutch investor Van der Vorm Vastgoed.

It is anticipated that we will only see a few such transactions in the next few years. The existing supply of institutional projects throughout Poland remains small, meaning that there will be limited opportunities for funds that are exclusively interested in this type of transaction.

Joint ventures (JVs)

The Polish market has recently seen an increasing number of opportunities to enter into equity partnerships with local developers to mutually build a PRS platform.

One of the most prominent examples of an existing partnership is Resi4Rent, a JV between PIMCO and Polish developer Echo Investment. R4R was the first major private platform of apartments for rent in Poland and currently owns the largest number of operating projects. The company recently obtained a EUR 50 million loan from the EBRD for further development of the platform.

Platform deals will likely be a growing part of the market, as they allow investors to participate in the developer's profit margin and quickly build up scale, while providing developers with immediate liquidity and a stable cash flow going forward. JVs on individual projects are currently more prevalent in the student housing sector than in PRS.

Acquisition of a developer

In light of the limited availability of PRS stock, some investors have chosen to enter the Polish housing market by acquiring a local developer. Examples of M&A deals include the purchase of Vantage Development and Robyg by German investor TAG Immobilien in 2019 and 2022, respectively. TAG’s Polish portfolio includes both BTS and BTR projects.

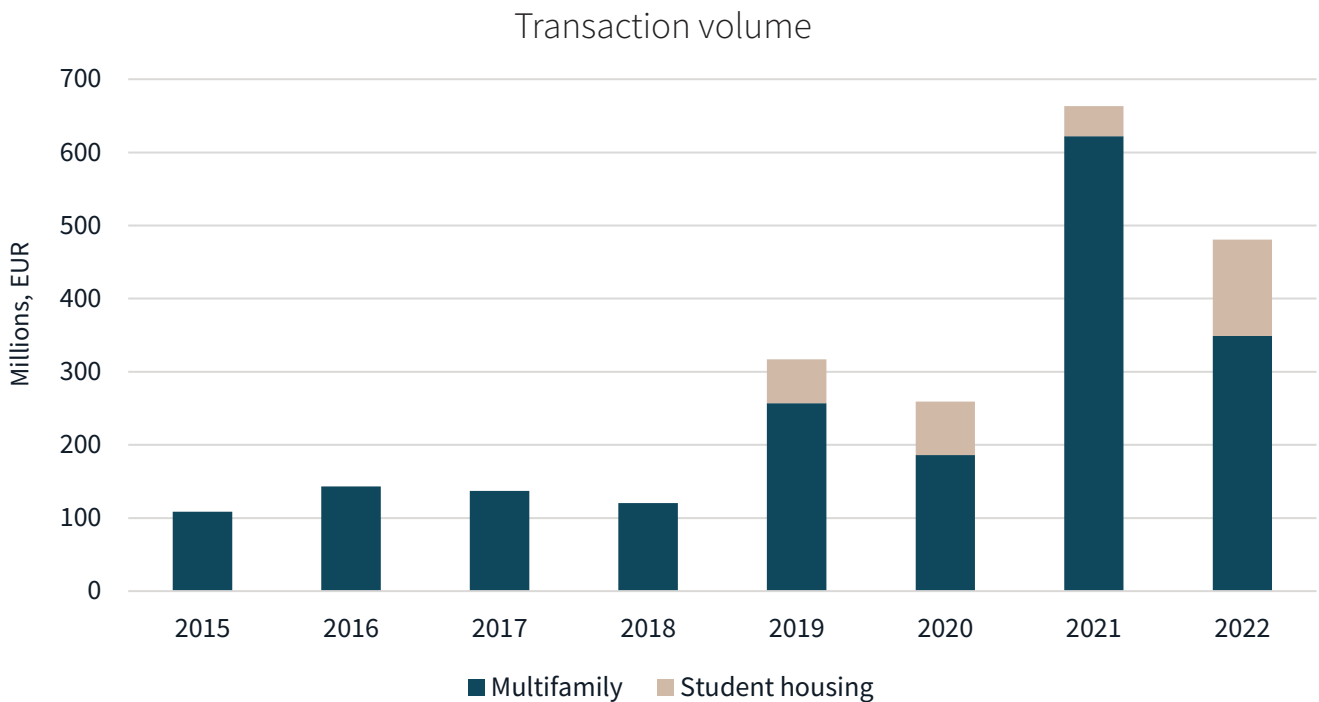
Another example is the acquisition of Polish developer Murapol by Ares and Griffin Real Estate in 2020. While Murapol continues to develop flats for sale, part of its pipeline is designated for BTR purposes as part of the Life Spot platform which already includes multiple operating assets.

Moreover, a few other developers are preparing to start discussions on M&A deals with investors.

Refurbishments and conversions

Refurbishments and conversions of office buildings into residential projects are still a niche on the Polish market. A well-known example of a revitalisation project is the building complex at Św. Barbary in Warsaw which was acquired by Zeitgeist AM from Orange in 2019. The investment includes the conversion of an old office building into a modern PRS project.

Although profitability often remains a challenge, conversions of offices into PRS might become a larger part of the market in light of limited residential product and companies’ increasingly comprehensive ESG requirements.

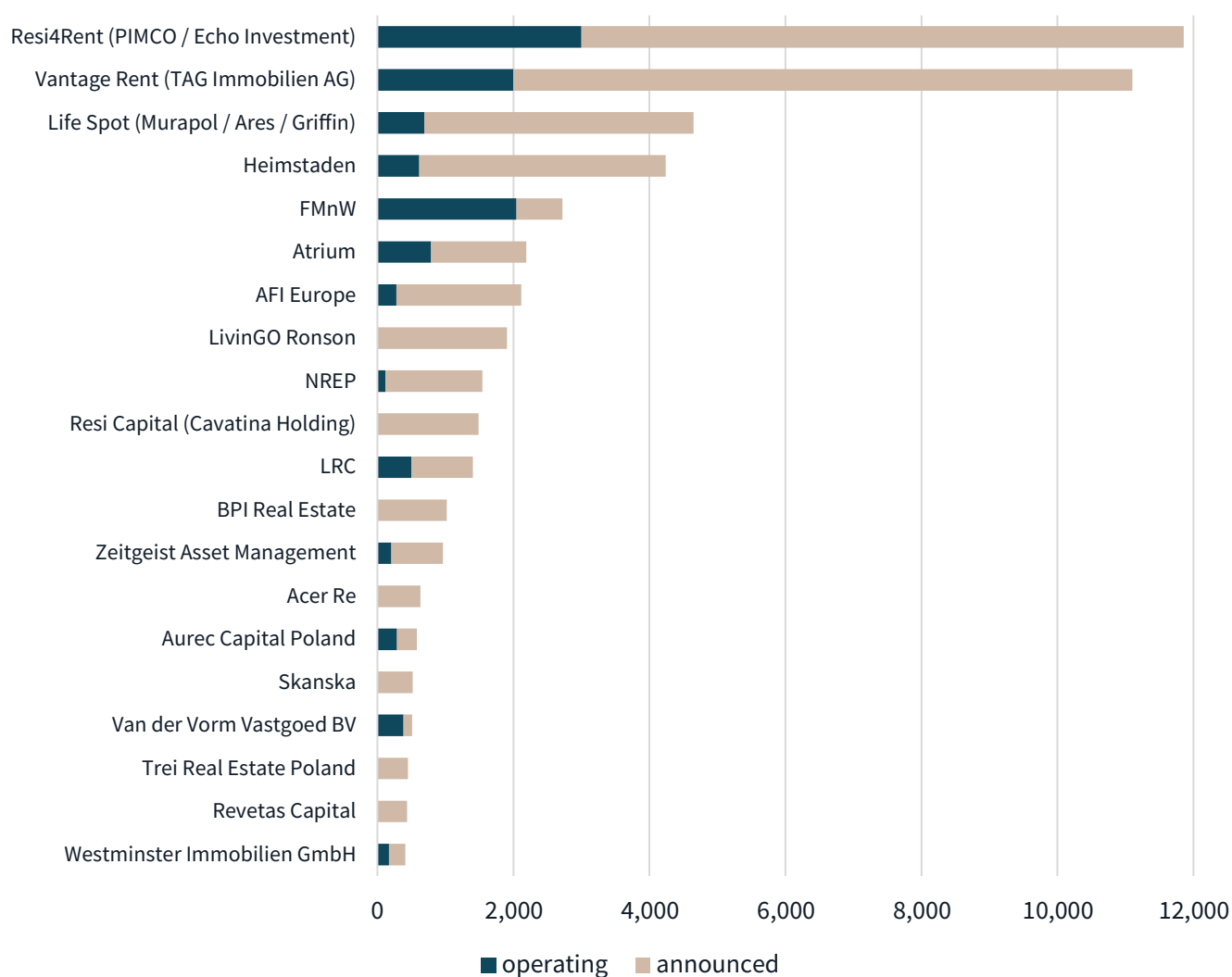


Source: JLL, Q4 2022

Active players on the market

- The list of announced pipelines confirms the very high interest of numerous players in building large portfolios of apartments for rent.
- Resi4Rent, the leader in terms of the number of rental units in operating projects, currently has nearly 3,000 apartments in its offer, with the vast majority already rented. The second largest landlord, the state-owned Fundusz Mieszkań na Wynajem (FMnW), owns more than 2,000 units throughout Poland.
- The most significant pipelines are currently planned by Vantage Rent (TAG Immobilien), Resi4Rent (PIMCO and Echo Investment) and Life Spot (Ares and Murapol). Meanwhile, the competition is growing.

Largest landlords of multifamily assets



Source: JLL, February 2023



Heimstaden, Moko Botanika, Warsaw, Bokserska Street

The future of the institutional PRS sector in Poland

In the mid-term, the current excess of demand over supply on the rental market will persist. Major reasons will be the limited new supply due to the slowdown of new residential construction caused by the economic slowdown and high financing costs driven by inflation. On the demand side, the population of renters in the largest cities should gradually increase due to the high costs of mortgages, migration, and social patterns as well as the gradual decongestion of apartments occupied by Ukrainian war refugees intending to stay for longer or permanently in Poland.

Given the difficult situation of the state budget and new priorities such as defence, energy security and healthcare combined with green transformation initiatives, it is highly unlikely that the current and future governments could, despite some efforts, effectively develop any significant municipal or social housing programs.

Currently the institutional PRS sector, both in terms of operating assets and the pipeline, is concentrated in or on:

- A number of major cities, such as Warsaw, Kraków, Wrocław, Gdańsk and Poznań.
- Almost exclusively in central or sub-central districts, and locations with convenient access to job markets, well-served by public transport.
- Projects dominated by small, one-bedroom apartments, with limited additional amenities.
- Medium finishing standards, suitable for long-term rental.

This approach is unlikely to change within the next few years. In the longer term, the markets should gradually expand both in geographical terms as well in the types of products and target groups, especially regarding families and senior citizens.



Mid-term pipeline

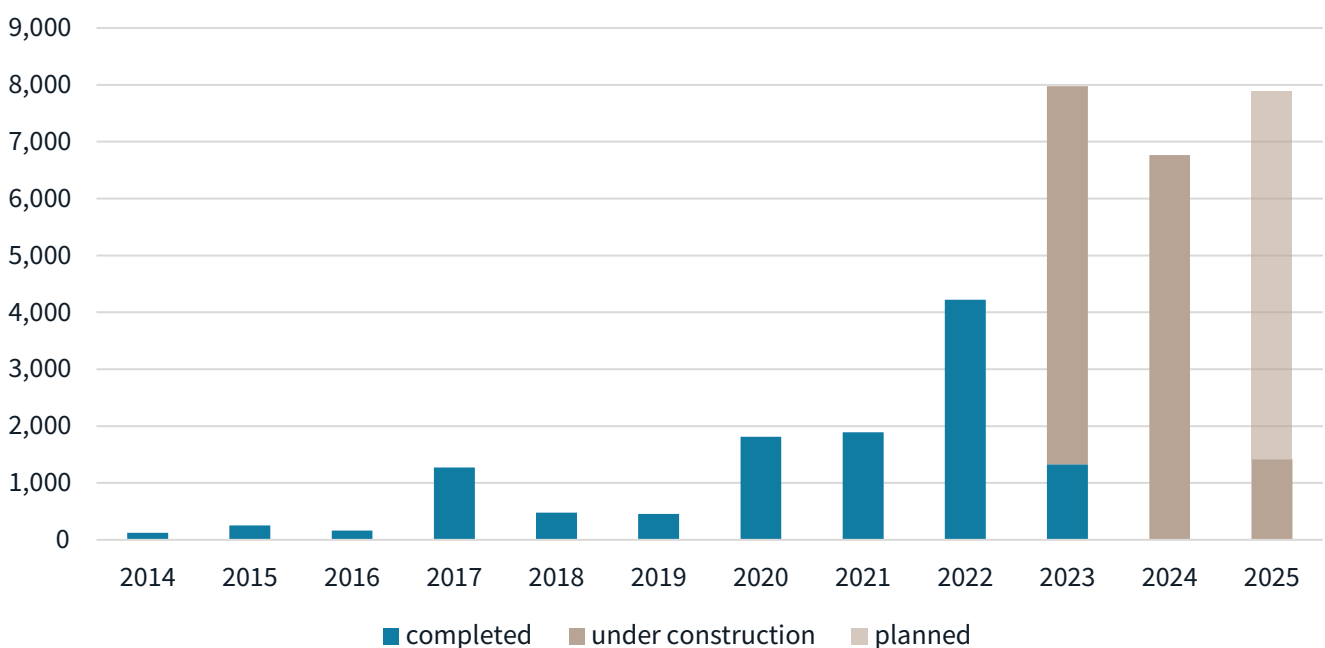
The war in Ukraine and high inflation have made many operators and investors alter their plans for future expansion. As of the beginning of 2023, the pipeline of new rental stock until the end of 2025 is much smaller than was planned a year ago. At the same time and on a monthly basis, new apartments bought as an investment by individual landlords in 2020-21 will appear, especially in 2023, in major city markets.

The large corporate investors already prefer a design-build-operate model where the developer acts as part of the same financial group. The construction of the first new projects in 2023 will most likely be from this category. Later some forward purchase transactions shall take place. These projects, however, will be completed and put up for rent in mid-2025 at the earliest.

While the total number of apartments in operating projects only just exceeded 10,000 units in December 2022, by the end of 2023, this number should be close to 19,000. There are an additional 5,200 units under construction, with the majority looking to be delivered in 2024. There is a chance that this number will be increased by a few projects, originally started as BTS but eventually sold to institutional investors.

At the beginning of 2023, however, the number of additional units in planned projects with an announced delivery date in 2025 is close to 6,600 units. If completed according to schedule, it would raise the total size of PRS stock in Poland to 30-31,000 units. There are other announced projects with approx. 20-25,000 units but their delivery date depends on market conditions.

Number of institutional rental units, operating and pipeline



Source: JLL, February 2023

Mid-term supply-demand relation

With regard to the war in Ukraine, it seems rational to assume that despite the great efforts of Ukraine and its allies, the conflict may well stretch to 2024 or beyond. In an optimistic scenario, although a successful resolution to the war would bring a huge positive impulse for both the Polish and Ukrainian economies, it will not mean that the residential market in Poland will return to what it was in 2021, which saw record-low interest rates and extensive build-to-sell demand. The inflation rate should decrease gradually over the next few years, and mortgage interest rates will most likely remain over five per cent for the foreseeable future. Many Ukrainian refugees have returned to their homes, but many have nowhere else to go and have chosen to stay in Poland for a longer period of time, or maybe even permanently. A Polish economy that will be recovering after the slowdown in 2023 will need more employees. The rate of income growth

should return to positive levels in real terms. Economic migration driven by climate change, especially from Asia, will result in a new wave of potential tenants in major metropolitan cities. These three major factors should keep demand for rental units at a high, and steadily increasing level.

With inflation forecasts in 2023 hitting 15% but falling to around 7% in 2024, the nominal annual rent increases in the range of 4-6% per year seem to be on the conservative side. In the following years, rental growth will be closely related to wage increases in major target groups, most likely in the range of 100-300 bps over the CPI rate.

A comparison of conservative projections for future demand with an overall supply of rental units from both institutional PRS projects as well as individual buy-to-let units augurs well for the sector's future.



Net yields for PRS and PBSA product

The high-interest rate environment has undoubtedly led to a slowdown in investment activity as well as a shift from forward funding – traditionally preferred by developers – to other transaction structures currently being discussed such as forward purchase, JVs, and platform deals.

Compared to pre-war levels, prime yields for multifamily forward deals have seen a decompression over the course of 2022 – by around 75-100 bps to an estimated

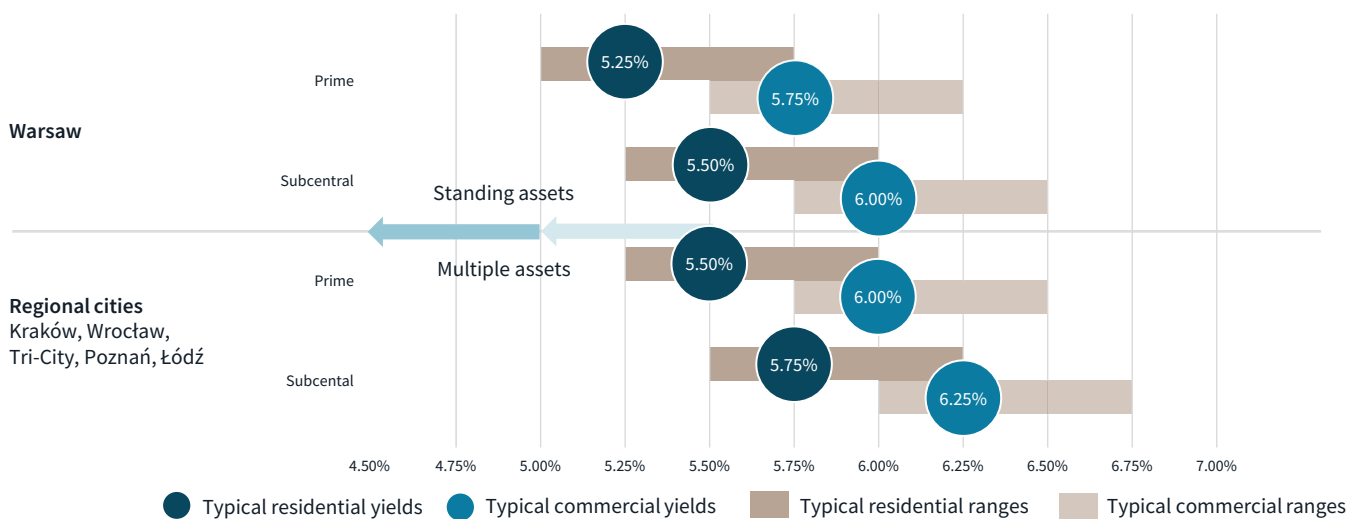
5.25-5.50% in Warsaw and 5.50-5.75% in regional cities based on deals under negotiation – due to rising financing costs and an increasing offer of higher yielding investment alternatives such as bonds. For student housing and commercially zoned PRS, prime yields now stand at 5.75-6.00% in Warsaw and 6.00-6.25% in regional cities. Given the extremely limited transactional evidence, it can be estimated that yields for standing assets with stabilised cash flow should trade at a premium of 30-60 bps relative to forward deals.

Polish PRS market offers:

- High rates of return compared to Western, Southern European and Nordic countries.
- High potential for rent growth and capital appreciation.
- High probability of yield compression over time.

Living sector net yields in Poland

Estimates of NOI yields based on negotiated & closed forward deals in 2022 (single assets)



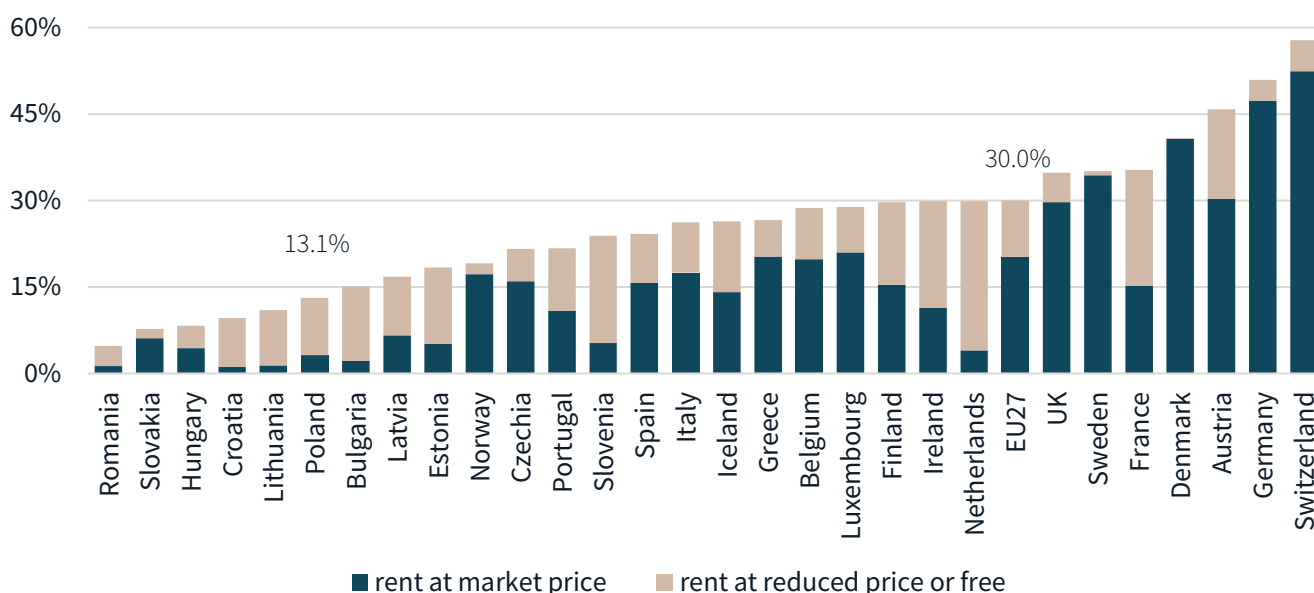
Source: JLL, Q4 2022

Significant long-term development potential

The current share of stock rented on free-market terms in Poland is amongst the lowest in the EU. This is because Poland along with other CEE countries saw extensive privatisation in the post-communist political and social transformation. Since the late 2010s, this trend has reversed: the number of rental units has gradually increased but their share in total stock is far from what they are in Germany or Denmark, as well as countries with high ownership rates such as Portugal, Spain and Ireland. Even an increase in the share

of households renting flats in Poland by one percentage point would mean an additional 140,000 rental flats, while the current estimated PRS pipeline by 2025 may only see 30,000 rental units. In the long term, Poland will gradually move to roughly 7-8% by the mid-2030s with stock in the sector increasing to approx. 400-450,000 units. This means that the PRS sector looks set for a tenfold increase in its stock over the next 10-15 years.

Tenants structure in Europe



Source: Eurostat, 2021 or latest year available

”We are observing a growing interest from a variety of investors, both domestic and international, attracted by the stable income streams and long-term returns that the sector offers. As the market continues to develop, we expect to see a wider range of investors and capital structures. In response to changing market needs, we as JLL Capital Markets – together with JLL Living – have been extending our range of services to include equity and debt capital raising products under tailored capital structures in the PRS sector (JVs, M&As, fundraising for platforms, securing mezzanine financing, special situations, distressed assets) in order to assist different client groups with their entry and expansion in the Polish PRS market.”


Dmytro Havrylenko

Head of Capital Markets, JLL Poland


JLL in PRS sector

- JLL Living Team – the largest residential advisory team in CEE, more than 30 professionals with over 25 years of experience (known as REAS Residential Advisors before joining JLL in 2019), providing PRS/PBSA and M&A transaction advisory, development consultancy based on unrivalled market research and data analytics.
- The Polish Living team has played a leading role in laying the groundwork for the institutional rental market in Poland since 2007. Between 2016 and 2022, the team successfully advised on 15 PRS & PBSA investment deals amounting to more than EUR 750 million, i.e. roughly two thirds of the total advised volume in the Polish living sector.
- An important advantage of JLL in Poland is our renowned Tétris team performing fit-outs in PRS projects.
- Truly pan-European market offer. We closely cooperate and exchange know-how with JLL living investment teams across Europe, including the CEE region. Local offices in major Polish cities.
- Close cooperation with the office and retail teams, advising on mixed-use projects.


Selected deals in Poland with JLL involvement:



Budimex BTR Portfolio	Purchaser Heimstaden
Location 5 cities across Poland	Vendor Budimex Nieruchomości
Units 2,500	JLL Involvement Buy-side



Marvipol BTR Portfolio	Purchaser Heimstaden
Location Warsaw	Vendor Marvipol Development
Units 650	JLL Involvement Sell-side



Atrium BTR Projects	Purchaser Atrium
Location Warsaw & Kraków	Vendors AGMET & CNT
Units 650	JLL Involvement Buy-side

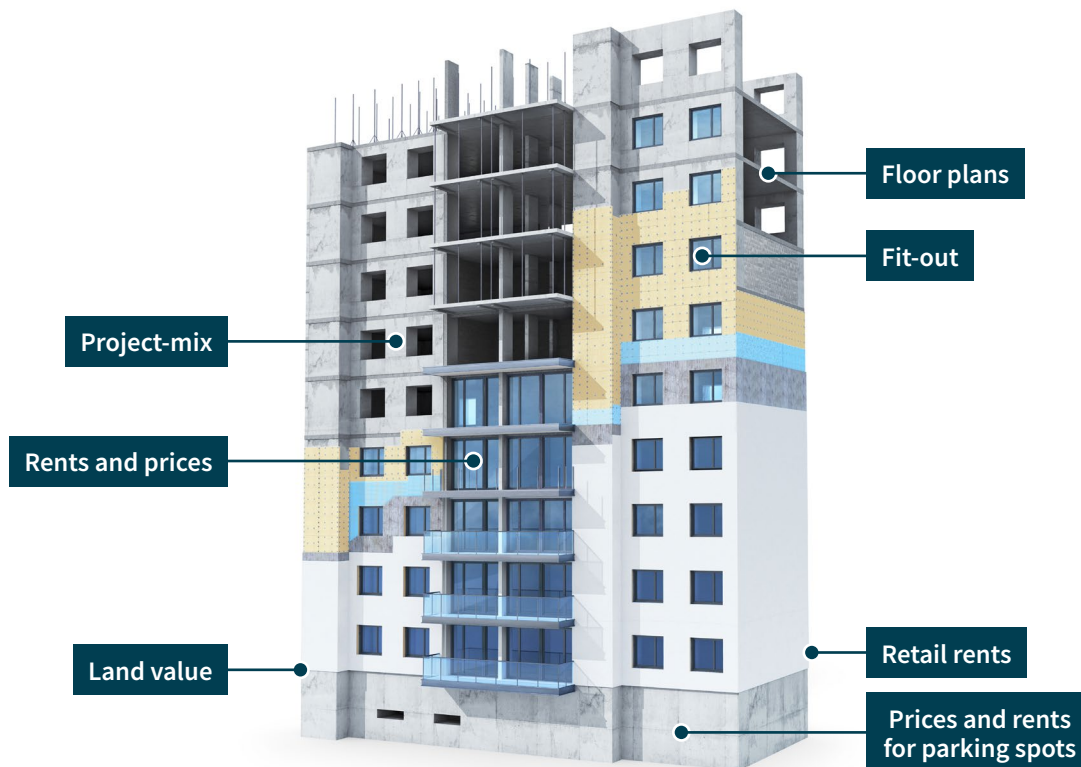


Raławicka 58	Purchaser Zeitgeist AM
Location Kraków	Vendor Activ Investment
Units 182 (+248 student rooms)	JLL Involvement Sell-side

Our integrated services in the living sector include:

- Market Research & Analysis
- Investments & Transaction Advisory
- Product & Development Advisory
- Due Dilligence
- Highest & Best Use Analysis
- Feasibility Studies
- Valuations
- Land Transactions
- Ground-floor Retail Advisory
- ESG Consulting
- Corporate Finance, Equity & Debt Advisory
- Project & Development Services
- Fit-out Design & Build (Tetris)

Built-to-Sell | Built-to-Rent | Student Housing | Co-Living
Micro-apartments | Second Homes | Senior Housing



Design – sample of projects of Tetris Poland.

In order to attract potential tenants, it is crucial to take into account market trends in the areas of apartment design and sustainability. Tetris designers have a proven track record of both PRS and other residential projects of varying standards, with a focus on investors' and tenants' expectations. In light of this, Tetris is paying close attention to both budgetary considerations and the currently popular feedstock, materials, patterns, or colors on the market.

Selected PRS projects:



LivUp Jagiellońska 36
3,380 sqm, Warsaw



AFI - Złota 83
12,000 sqm, Warsaw

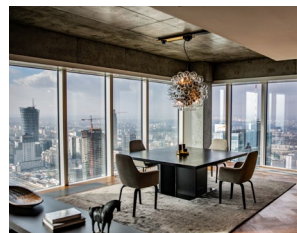
Examples of other residential projects:



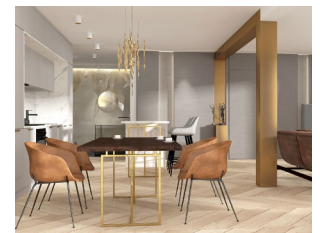
Młyn Maria
5,400 sqm, Wrocław



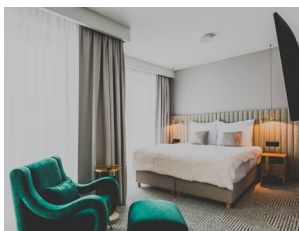
Holm House 3 Sitta by Skanska
2,000 sqm, Warsaw



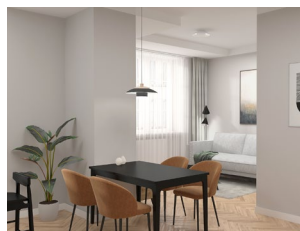
Złota 44
21,000 sqm, Warsaw



Sea and Lake
2,850 sqm, Mielno



Royal Tulip Warsaw Apartments
312 apartments, Warsaw



Zeitgeist - Św. Barbary
2,500 sqm, Warsaw



Holm House 4 Sitta by Skanska
650 sqm, Warsaw



Cosmopolitan
9,000 sqm, Warsaw

Tétris Poland's team of architects and engineers delivers interiors of a high standard of quality that will satisfy even the most demanding users. Tétris creates inspiring, efficient, and sustainable residential spaces, from concept design to construction work and turnkey solutions.

See below the hottest trends of 2023 according to our designers.

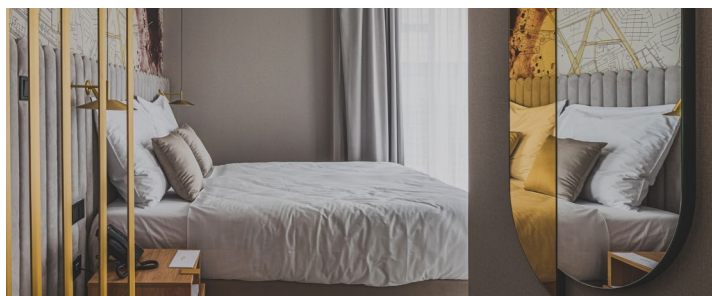
01/ Smart apartment

Equipping apartments with modern equipment to allow intelligent management.



02/ Multi-functions

Adaptation of the space to carry out a quick and efficient rearrangement of the area.



03/ Art

References to timeless pieces of art in painting, printmaking or sculpture.



04/ Nature shapes

Introducing nature-inspired shapes and forms into interiors, i.e. roundness, ovals.



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**We can support you with expert advice
that reflects your business needs and priorities.**

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About JLL:

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