

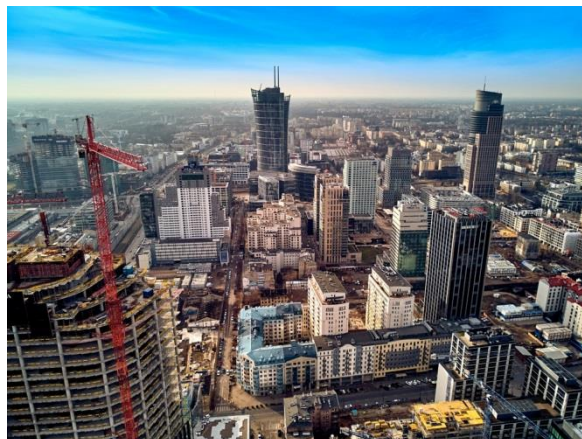
# Poland

## Real Estate Special

Your success is : our benchmark

## Poland's real estate market continues to expand

	Page
1. Introduction	1
2. Macroeconomic conditions	2
3. Office real estate market	6
4. Retail real estate market	13
5. Logistics real estate market	19
6. Hotel real estate market	23
7. Outlook	27



Source: udmurd/ Shutterstock.com

**Claudia Drangmeister**  
 Sector Strategy  
 +49 511 361 6564  
 claudia.drangmeister@nordlb.de

**Contributor**  
**Lennart Thoralf Ahrens**

### 1. Introduction

#### Polish real estate market benefiting from dynamic economic development

The Polish economy is currently growing at an unstoppable pace. Economic output has risen by a total of 22 % over the past five years alone. Thanks to these favourable economic fundamentals, the market for office, retail and logistics real estate is expanding, bringing it increasingly into line with western European standards. Given the construction boom, it comes as no surprise that the tallest building in the EU – the Varso Place complex, measuring 310 m – is currently being built in Warsaw's central business district (CBD). The Varso Place complex is a mixed-use property providing office, retail and hotel space. The hotel market is also growing steadily due to the constant rise in domestic and foreign tourist visits as well as Warsaw's new-found significance as a location for trade fairs and congresses.

#### Central Europe's largest real estate investment market

In light of these positive conditions, the Polish real estate market is growing ever more attractive as an investment destination, as reflected in the latest investment market figures. Poland, central Europe's largest real estate investment market, recorded almost € 7.3 billion in investments in commercial real estate in 2018, breaking the previous year's record by 43 %.<sup>1</sup>

#### Aim of this study

The aim of the study is to analyse the latest market development while outlining the potential and the challenges associated with the Polish real estate market. Along with macroeconomic conditions, it will look at current developments and trends in the office, retail, logistics and hotel market segments.

<sup>1</sup> BNP Paribas: Investing in Poland 2019



## 2. Macroeconomic conditions

### Economic development: Poland is among the EU's growth champions

Poland recorded dynamic GDP growth of 5.1 % in 2018, the highest growth rate since 2007. Last year, Poland – along with Ireland and Malta – had one of the fastest-growing economies in the EU, at well above the European average of 2.0 % for the EU 28.<sup>2</sup> Despite an anticipated slowdown in economic performance in 2019, Polish GDP is still forecast to post above-average growth of 4.2 %, with growth set to remain at a high 3.6 % in 2020 as well.

Economic growth was primarily driven by strong private consumption and an increase in public investment fuelled by the improved use of EU funding. Private consumption spending increased by 4.4 % year on year. Private demand was stimulated by rising employment and wages, with the rise in wages being amplified by an increasing shortage of labour.

The good situation on the labour market and the high level of consumer confidence should continue to bolster private consumption this year. Fiscal policy measures – including an increase in benefits for children, supplementary payments for pensioners and income tax cuts for young Poles up to the age of 26<sup>3</sup> – will have a favourable effect on private household income. Thanks to higher levels of capacity utilisation, low interest rates and a rise in demand, private investments appear poised to increase following an extended period of weakness, helping to compensate for the slowing growth in public investment. Imports and exports are expected to continue rising, although a weakening global economy could have a negative impact on the development of exports.

### Government debt down

Government debt has also decreased in recent years as a result of favourable macroeconomic development. In 2018, the budget deficit fell by 1.5 % year on year to 0.4 % of GDP – substantially lower than the level outlined in the national budget and the best figure since the start of the Third Republic in 1989. The public debt ratio declined to less than 49 % of GDP thanks to a rise in tax revenue (attributable to higher consumption and improved tax administration) and a decrease in government social security subsidies.

### Economic indicators (change from previous year in %)

	2016	2017	2018f	2019f	2020f
<b>Real GDP growth</b>	3.1	4.8	5.1	4.2	3.6
<b>Private consumption</b>	3.9	4.9	4.4	4.5	4.2
<b>Unemployment rate*</b>	6.2	4.9	3.9	3.8	3.5
<b>Inflation (HVPI)</b>	-0.2	1.6	1.2	1.8	2.5
<b>Current account balance**</b>	0.0	0.1	-0.5	-1.0	-1.4
<b>General government debt**</b>	54.2	50.6	48.9	48.2	47.4
<b>Budget deficit**</b>	2.2	1.5	0.4	1.6	1.4

Source: European Commission, f = forecast, \*in % of workforce, \*\*in % of GDP

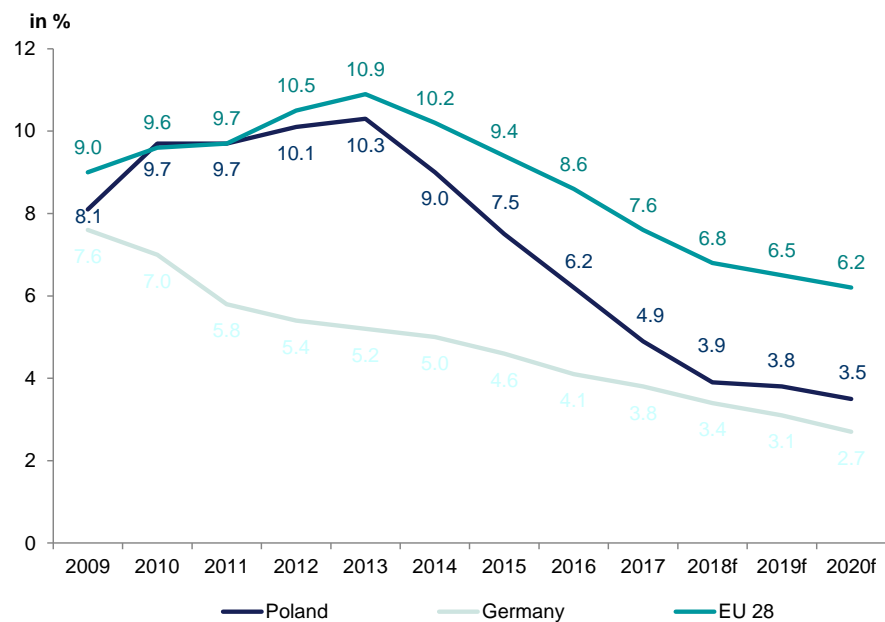
<sup>2</sup> European Commission: European Economic Forecast. Spring 2019

<sup>3</sup> These social programmes were announced by Law and Justice (PiS) [Prawo i Sprawiedliwość], Poland's ruling political party, at a party convention on 23 February 2019. They are slated to enter into force before the upcoming parliamentary elections in October.

## Poland is nearing full employment

The continued positive situation on the labour market, along with demographic developments (see below), is increasingly leading to a shortage of skilled labour that will continue on account of persistently high demand for labour, thereby fuelling the need for foreign workers. In light of the labour shortage, employment growth is likely to slow somewhat from 0.3 % in 2018 to 0.1 % in 2020. An unemployment rate of 3.9 % is expected for 2018 and is set to fall to 3.5 % by 2020, giving Poland the third-lowest unemployment rate in the EU behind the Czech Republic (2018: 2.2 %) and Germany (2018: 3.4 %).

## Development of average unemployment rate<sup>4</sup>



Source: Eurostat, EU Commission forecasts, internal research

## Demographic change presents a challenge

With a population of roughly 38 million, Poland is the sixth-largest country in the EU (as at 1 January 2018). Poland's birth rate of 1.39 children per woman (EU 28: 1.60; Germany: 1.60) left the country's population virtually unchanged year on year. At 40.3 years in 2017, the average age (median age) was relatively low compared to other countries in Europe (EU: 43.8; Germany: 45.9).<sup>5</sup> Between now and 2050, Poland faces a considerable increase in the median age and a decrease in its population to 34 million inhabitants<sup>6</sup> due to a low birth rate and emigration. The number of births rose again in 2017 and stood at more than 400,000 live births for the first time in many years. The Polish government aims to counteract the population decline by implementing new family policies (particularly the Family 500+ [Rodzina 500+] programme, launched in 2016)<sup>7</sup> and by making targeted efforts to attract foreign labour.

<sup>4</sup> ILO concept, annual averages

<sup>5</sup> Eurostat

<sup>6</sup> Central Statistical Office Poland

<sup>7</sup> The programme, which has provided 500 zlotys per month and child to families with two or more children since 2016, aims to increase the birth rate and reduce child poverty by improving living conditions.

**Mazovia, home to Warsaw, is the most powerful economic region**

At € 12,200 (2017), GDP per capita is still significantly lower than the EU average (€ 30,000). At a regional level, the Mazovia region – centred around Warsaw – had by far the highest GDP per capita (€ 19,500). Within the region, Warsaw stands out with a GDP per capita of € 26,600. Mazovia accounts for 22.4 % of national GDP. The southern part of the country, centred around Krakow and Katowice, represents the second most powerful economic region, accounting for 20.3 % of national GDP (GDP per capita: € 11,900). The Poznan-Szczecin area is the third-strongest region, accounting for 15.8 % of national GDP.<sup>8</sup>

**Economic policy focus**

The national-conservative Law and Justice party (PiS) [Prawo i Sprawiedliwość] has been in power in Poland since mid-November 2015. It has been pursuing an economic policy that reflects certain nationalist traits (such as “repolonisation”), strong government intervention and socialist tendencies (support for poorer segments of the population). The “Morawiecki Plan”, as it is known, is an economic stimulus package that calls for reindustrialisation measures, support for innovative companies and international expansion. What is more, the government has cut corporate income tax for small businesses, and the New Investment Support Act, which entered into force in 2018, has expanded tax benefits nationwide that used to apply only within certain special economic zones.

However, some of the measures spearheaded by the PiS-led government are somewhat problematic from an economic perspective, such as a new bank levy, additional value-added tax for major retail chains, a law outlawing retail sales on Sundays and a controversial reform of the justice system.<sup>9</sup>

**Zloty stable of late – still no plans to switch to euro**

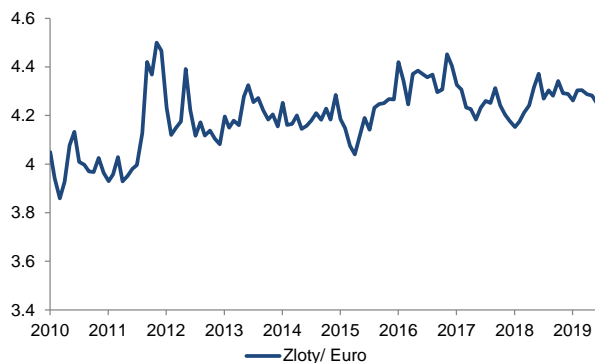
Like other eastern European countries, Poland has agreed to introduce the euro in the long run. So far, the country meets only three of the five required accession criteria: price stability, public finances and long-term interest rate convergence. Legislation is not fully compatible with the agreement, and Poland does not fulfil the exchange rate criterion.<sup>10</sup> Under the European Exchange Rate Mechanism (ERM II), the respective countries' currencies may gain or lose value against the euro only within a limited band. Since April 2000, however, Poland has had a system of flexible exchange rates that enables the National Bank of Poland to intervene in the foreign exchange market to achieve inflation targets. After fluctuating markedly between 2016 and 2018, the zloty's exchange rate has been rather stable since early 2019 (see chart on page 5). The exchange rate currently stands at 4.253 zlotys to the euro. Due to past turbulence surrounding the single currency and domestic political considerations, the Polish government plans to introduce the euro only in the medium to long term.

<sup>8</sup> Eurostat

<sup>9</sup> The EU Commission has taken legal action against Poland for endangering the rule of law in connection with the implementation of a controversial move to force judges on Poland's Supreme Court to retire at a certain age, thereby jeopardising the independence of the judicial system (see EU Commission press release, 24 September 2018).

<sup>10</sup> EU Commission: Convergence Report 2016

## Exchange rate development



Source: Bloomberg, internal research

## Development of yields on Polish and German government bonds (in %)



Source: Bloomberg, internal research

## Stable risk assessment

Poland's refinancing rates currently stand at 2.86 % for 10-year bonds. The spread between 10-year Polish and German government bonds currently amounts to roughly 290 basis points once again after falling below 200 basis points in late 2014.

Thanks to good macroeconomic fundamentals, a stable monetary policy framework and a resilient banking system, Poland's ratings with various agencies remain consistent, with Standard & Poor's and Fitch awarding the country an A- (outlook stable) rating and Moody's giving the nation an A2 (outlook stable).<sup>11</sup> The comparatively low GDP per capita is cited as one of the reasons why Poland's rating has not been raised.

## Polish real estate market has seen positive development

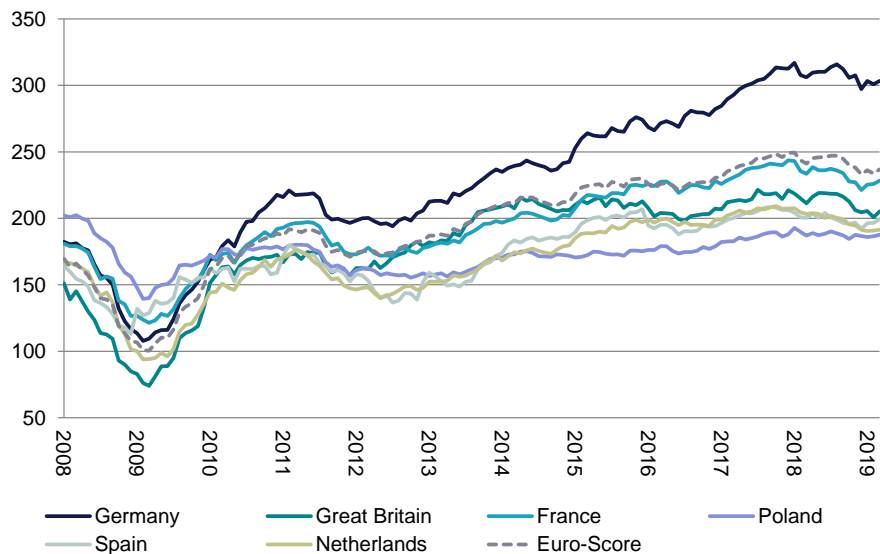
The favourable underlying conditions are also having a positive effect on the Polish real estate market. According to the Deutsche Hypo Real Estate Economy Index (REECOX)<sup>12</sup>, the Polish real estate market has seen extremely positive development without any major volatility since 2008. The Polish real estate market is even on a par with some western European markets (see chart on page 6). The consistency that has characterised the Polish real estate market continued in the first quarter of 2019, with the country's REECOX gaining 0.5 % compared to the previous quarter to rise to 187.6 points.

## Remarkable development in the real estate share index

The development of the input variables has been somewhat contradictory lately. The Polish leading share index WIG 20 rose slightly, by 1.6 %, ending March at 2,312 points. The Polish real estate index WIG Developers presented a very different picture: following decreases in the last three quarters, it saw a dramatic double-digit rise of 15.5 % to approximately 2,213 points at the start of the year, above its level a year earlier – remarkable in that, apart from January 2018, this was its highest level since 2011. However, according to the economic sentiment indicator (ESI), the assessments of Polish real estate experts do not point to further increases. Following a decline of 1.7 % to 104.8 points, the index is at its lowest level since autumn 2017.<sup>13</sup>

<sup>11</sup> Bloomberg, Börsen-Zeitung<sup>12</sup> The REECOX is based on an econometric model that covers the input variables DAX, DIMAX, economic sentiment indicator, ECB base rate and 10-year German government bond (Bund) yields.<sup>13</sup> Deutsche Hypo REECOX: Country report Poland Q1 2019

### Deutsche Hypo REECOX: development of Polish real estate activity compared to selected core European markets



Source: Deutsche Hypo Real Estate Economy Index (Reecox); internal research

### Outlook: macroeconomic conditions

Demographic development	→
Real GDP growth	↗
Number of employees	→
Unemployment rate	↘
Inflation	↗
Private consumption	↗

The Polish economy saw dynamic development in 2018. The positive economic development is likely to continue this year, albeit at a somewhat more moderate rate. Thanks to a further rise in wages and salaries, private consumption will remain the key driver of growth in the years ahead. Growth in investments is expected to slow slightly due to the more restrained development of projects co-financed by the EU, with the increase in private investments able to compensate for only part of the decrease. The main source of risks for the positive development of the Polish economy lie in the potential decline in international trade, which would also have an impact on the Polish economy. However, potential concerns regarding the independence of Poland's justice system could also have a negative impact on future investments.

## 3. Office real estate market

### Polish office real estate market sees dynamic development

The office real estate market has been able to benefit substantially in recent years from the advancing transformation of the economy and the related dynamic economic development. A great deal of this development stems from Poland's role as the largest nearshoring<sup>14</sup> location for business services in Europe.<sup>15</sup> Demand for office space is at a record high, whereas the vacancy rate is at a record low. The record investments in office real estate and the amount of office space under construction underscores the sector's optimism. Most of the current office floor space of 10.36 million m<sup>2</sup> is located in the country's nine leading metropolitan areas.<sup>16</sup> Warsaw is by far the largest and most developed Polish sub-market.

<sup>14</sup> Nearshoring refers to the outsourcing of economic activities to a nearby country. Poland is one example of a nearshoring location from a German perspective. It is different from farshoring. From a German perspective, farshoring could involve outsourcing economic activities to India, for example.

<sup>15</sup> Jones Lang LaSalle: Business Service Sector in Poland 2018

<sup>16</sup> These areas are the capital city of Warsaw, as well as the eight regional markets Krakow, Wroclaw, Tri-City (Gdansk, Gdynia and Sopot), Katowice, Poznan, Lodz, Lublin and Szczecin.

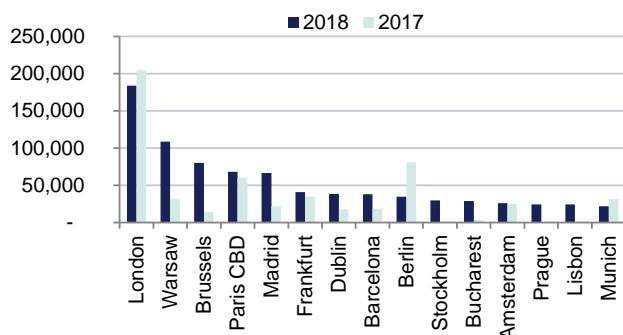
### Warsaw: record high office space demand

The record high office space demand seen in Warsaw in 2018 corresponded to take-up of 858,400 m<sup>2</sup>, an increase of 4.7 % year on year.<sup>17</sup> At 47 %, the lion's share of take-up was attributable to the city centre, comprising the Central Zone<sup>18</sup> and the CBD. Accounting for roughly 240,000 m<sup>2</sup>, the Central Zone (the outer part of the city centre surrounding the CBD) was responsible for 28 % of overall demand in Warsaw. The CBD – Warsaw's centre, where the city's most expensive buildings are located – recorded take-up of 163,000 m<sup>2</sup> (19 % of take-up) in 2018. Mokotow accounted for a further 25 %, or roughly 214,500 m<sup>2</sup>.<sup>19</sup> Taken together, the seven remaining less central districts of Warsaw<sup>20</sup> accounted for approximately 240,000 m<sup>2</sup> (28 %) of demand. Large spaces were in particularly high demand, with leases exceeding 5,000 m<sup>2</sup> accounting for a 31 % share.

### Co-working and flexible office space gain importance – Warsaw second among European cities

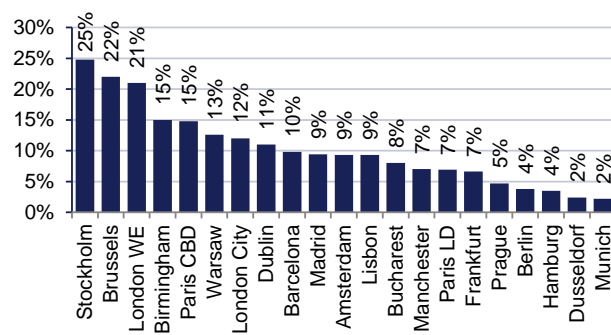
The lion's share of demand for office space in Warsaw comes from consultancy firms, banks, insurance companies and other business service providers. Co-working and flexible office providers have recently joined the traditional forces behind the demand for office space. In terms of take-up (108,550 m<sup>2</sup>), Warsaw is the second-largest market in Europe after London for flexible and co-working spaces, according to a study by Savills.<sup>21</sup> At 12.6 %, Warsaw's demand for co-working and flex offices placed it in the upper one-third of the 21 European locations examined with regard to their share of total take-up. Cities such as Stockholm (24.8 %) and Brussels (22 %) led the pack, with the German cities of Düsseldorf (2.4 %) and Munich (2.2 %) bringing up the rear.

**Flex space take-up in major European office locations in m<sup>2</sup>**



Source: Workthere, internal research

**Share of total take-up accounted for by flex space take-up in 2018**



Source: Savills Flexible Office Space, internal research

<sup>17</sup> Savills: Markets in minutes; office market in Warsaw 2019

<sup>18</sup> The City Centre comprises the City Centre North, City Centre East, City Centre South and City Centre West.

<sup>19</sup> Cushman & Wakefield: Marketbeat Warsaw office market 2018

<sup>20</sup> Jerozolimskie Corridor, Zwirki i Wigury Corridor, East, West, North, Pulawska, Ursynow & Wilanow

<sup>21</sup> Savills: Flexible office space 2019



### Completions somewhat more modest recently after years of brisk construction activity

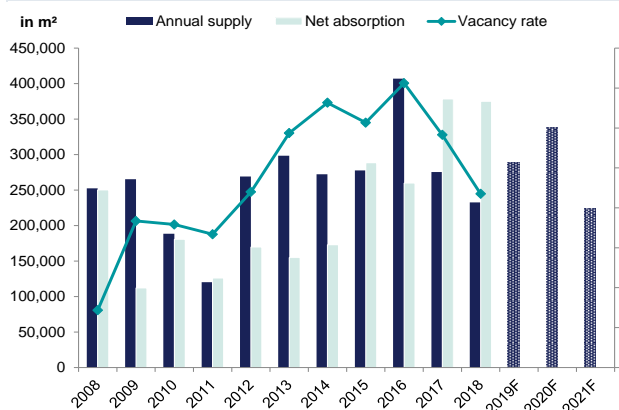
Warsaw's total office floor space stood at approximately 5.46 million m<sup>2</sup> for 2018 as a whole. As a result, roughly half of all Polish office floor space is located in the capital. Total office floor space increased by some 3.4 %, or 232,700 m<sup>2</sup>, year on year.<sup>22</sup> Completion volume in 2018 was therefore down 57 % on the record set in 2016 and 73,000 m<sup>2</sup> lower than the annual average between 2013 and 2017 (see chart).<sup>23</sup> The most notable completions included Proximo II (19,950 m<sup>2</sup>) in City Centre West and Equator IV (19,200 m<sup>2</sup>) in the Jerozolimskie Corridor. The moderate rate of completion in Warsaw in 2018 created a supply gap, helping the market to develop to the benefit of lessors. One noteworthy phenomenon was that the market saw the conversion of former industrial buildings in 2018, with roughly one-third of the space on offer being provided to the market by way of such measures. The conversion trend was driven by the dwindling availability of developable land in connection with rising quality standards on the part of potential tenants. The massive extent of these complex and cost-intensive building conversion measures underscores the maturity of Warsaw's office market.

The rising number of cost- and time-intensive major projects – such as Varso (142,000 m<sup>2</sup>), which is scheduled for completion in the CBD in 2020 – is a further indicator of the market's maturity.

### Vacancy rates in Warsaw at a record low

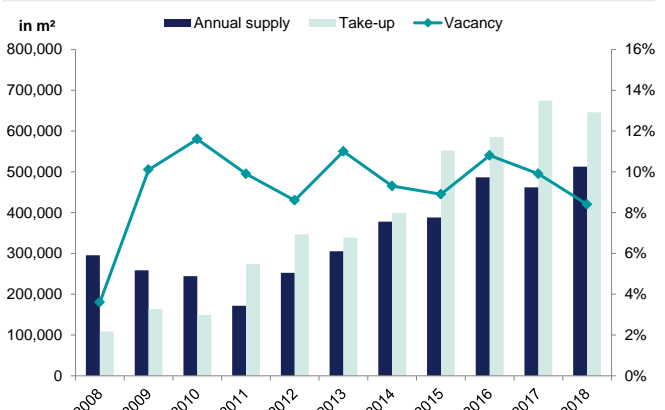
Over the past two years, absorption of space has exceeded the creation of space, forcing potential tenants to utilise existing space or rent space still under construction beyond the space completed in 2017 and 2018. The vacancy rate fell to 8.7 % in 2018, which was 300 basis points lower than in 2017 and the lowest level since 2012. In central locations, the approximate vacancy rate stood at a mere 5.4 %. The North Zone, Warsaw's least-developed district, recorded the lowest vacancy rate (2 %), with the highest vacancy rate (18.5 %) seen in the less central Mokotow Sluzewiec district.

**Warsaw office real estate market: new properties, absorption<sup>24</sup> and vacancy rate**



Source: Knight Frank, internal research

**Regional markets: new properties, take-up and vacancy rate**



Source: Savills, internal research

<sup>22</sup> CBRE: Warsaw office market Q4 2018

<sup>23</sup> Knight Frank: Warsaw office market 2018

<sup>24</sup> Net absorption refers to the change in utilised office space (leased or owner-occupied) over a particular period of time in relation to the vacancy rate and the space being offered on the market for the first time during the same period.

**Construction activity  
expected to continue rising  
in Warsaw**

Construction activity is expected to rise sharply in Warsaw once again between 2019 and 2021, with an estimated completion volume of 851,000 m<sup>2</sup>. Most of the office space under construction is being created in the City Centre and the CBD (81 %). Mokotow accounts for a further 6 %. The remaining 13 % is divided up among Warsaw's other districts, in which the office market plays a less important role.<sup>25</sup> The developments underscore the popularity of central locations among project developers.

**Prime rents in Warsaw up  
once again**

In light of the supply gap caused by falling vacancy rates and the limited amount of space on offer, the market is currently developing to the benefit of lessors after providing lessees with a stronger negotiating position in years past. Prime rents in the most central locations (City Centre including CBD) increased by € 1 year on year in 2018, peaking at € 24.00 per square metre per month in the most popular and exclusive locations. Prime rents in less central locations remained stable at € 15.50 per square metre per month on average in the fourth quarter of 2018.<sup>26</sup>

**Regional markets  
increasingly interesting as  
an alternative to Warsaw**

Regional office locations accounted for total office floor space of 4.9 million m<sup>2</sup> in 2018 (47 % of total Polish office space), which equated to an increase of 12 % compared to 2017.<sup>27</sup> The leading office markets are Krakow, Wroclaw and Tri-City<sup>28</sup>, which together accounted for more than one-quarter of total Polish office space in 2018. Apart from Warsaw, Krakow and Wroclaw are the only two locations with more than 1 million m<sup>2</sup> in office space. Regional locations are growing increasingly interesting for international companies in the business services sector, since the regional markets offer lower wage costs compared to Warsaw. Along with focusing entirely on locations outside the capital, companies have a tendency to shift activities that do not necessarily need to be located in Warsaw to smaller cities and open branch offices there.<sup>29</sup> The business services sector is particularly important for regional markets, as roughly 200,000 of the sector's 279,000 employees in total are based in the eight smaller cities outside Warsaw.<sup>30</sup> With 64,000 employees, Krakow is Poland's largest business services hub.<sup>31</sup>

**High demand for space in  
regional markets**

Despite falling 4 % short of the record take-up seen in 2017, demand in Poland's regional markets remained high in financial year 2018. At 644,800 m<sup>2</sup>, take-up in 2018 exceeded the regional average for annual office space take-up since 2008 by 67 %.<sup>32</sup> With take-up of 210,000 m<sup>2</sup>, Krakow saw the highest demand for office space, followed by Wroclaw at 162,900 m<sup>2</sup>. Tri-City and Poznan recorded less than 100,000 m<sup>2</sup>. Together, these four locations accounted for 81 % of total regional office space demand in 2018.

<sup>25</sup> BNP Paribas: AAG, office market in Warsaw 2018

<sup>26</sup> CBRE: Marketview CBRE: Marketview Q4 2018

<sup>27</sup> CBRE: Poland, regional cities offices Q4 2017; Cushman & Wakefield: Marketbeat office market regions 2018

<sup>28</sup> Tri-City refers to the area in and around the neighbouring cities of Gdansk, Gdynia and Sopot, see: BNP Paribas Spotlight on Office Market in TriCity 2018

<sup>29</sup> BNP Paribas: At a glance H2 2018

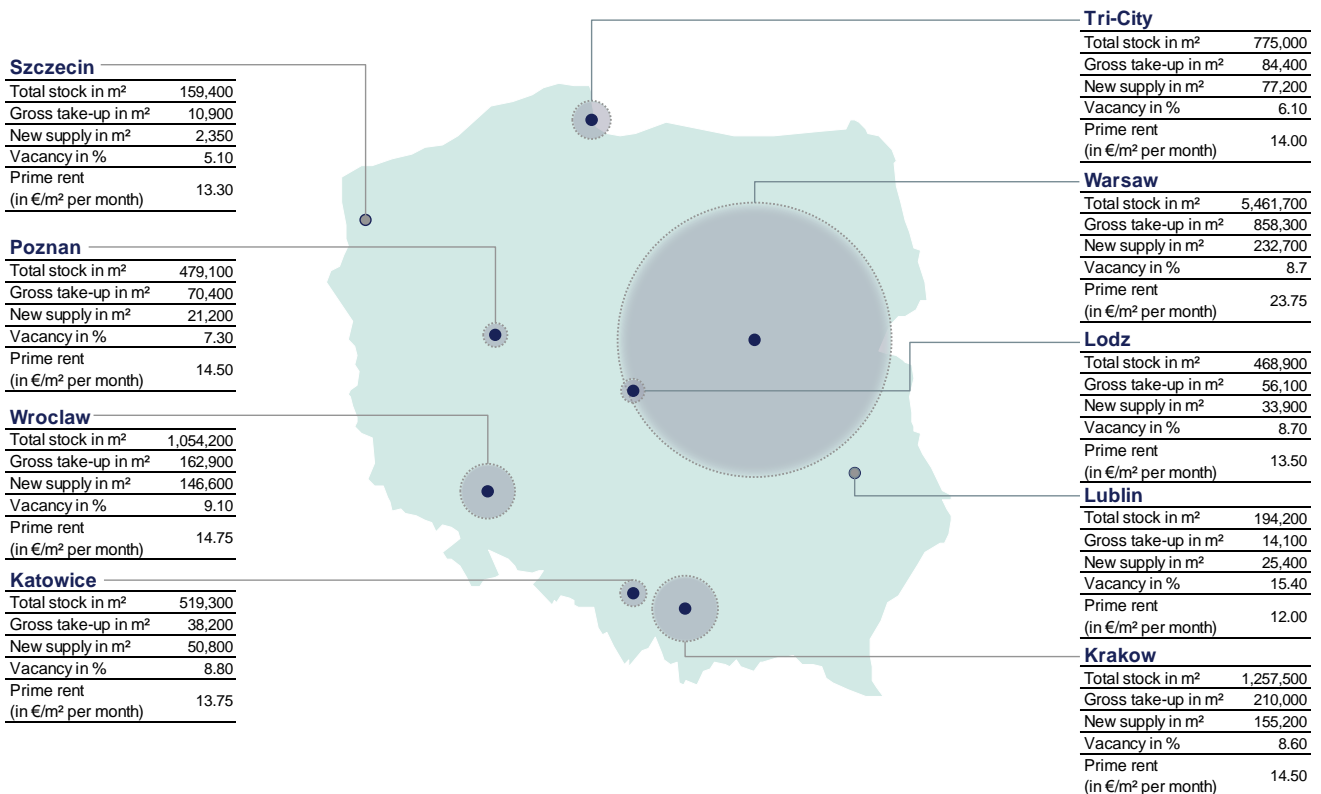
<sup>30</sup> Savills: Regional office market in Poland 2019

<sup>31</sup> Colliers: The largest office markets in Poland 2019

<sup>32</sup> Savills: Regional office market Poland 2019

The four less-developed office real estate markets – Katowice, Lodz, Lublin and Szczecin – accounted for the remaining 19 % of demand. By sector, IT companies were responsible for the highest share of office space take-up (34 %), followed by the financial sector (20 %), management consultancy (14 %), manufacturing (10 %) and retail (6 %).<sup>33</sup>

### Poland's leading office locations at a glance



Source: Cushman & Wakefield, internal research

### Rising regional stock thanks to record growth

Office space growth hit a record high in 2018. At 512,600 m<sup>2</sup>, completed space in all regional markets exceeded the 500,000 m<sup>2</sup> mark for the first time, underscoring the increasing popularity of regional office locations. Krakow, Wrocław and Tri-City accounted for the lion's share. These three regional markets made up roughly three-quarters of total completed office space in 2018. Completion was significantly lower in Katowice, Lodz, Lublin and Poznan. Large spaces are also the primary source of demand in regional markets, with projects in the 15,000 to 20,000 m<sup>2</sup> range accounting for more than half of the newly created space on offer.<sup>34</sup>

### Regional vacancy rate at its lowest level since 2008

Thanks to high demand for office space nationwide, the average regional vacancy rate fell by 1.5 percentage points year on year to a record low of 8.4 %, <sup>35</sup> its lowest level since 2008. At 5.1 %, Szczecin had the lowest vacancy rate, followed by Tri-City at 6.1 %. Poznan, Krakow, Katowice and Wrocław rounded out the middle. Lublin had the highest vacancy rate, at 15.4 %.<sup>36</sup>

<sup>33</sup> ibid.

<sup>34</sup> BNP Paribas: AAG, office market in regional cities 2018

<sup>35</sup> CBRE: Marketview Q4 2017

<sup>36</sup> Cushman & Wakefield Marketbeat 2018

The least-developed markets, Szczecin (4.9 %) and Lublin (4.1 %), saw the sharpest declines in vacancy rates. Due to the sluggish increase in space, potential lessors in Szczecin were largely forced to utilise existing, vacant spaces in 2018.

**Brisk construction activity: record space of 593,000 m<sup>2</sup> expected for 2019**

Right now, some 80 projects with a floor area of 920,000 m<sup>2</sup> are currently in construction in regional markets.<sup>37</sup> The regional markets are therefore seeing brisker construction activity than Warsaw (851,000 m<sup>2</sup>).<sup>38</sup> With a total of 450,800 m<sup>2</sup>, Krakow and Wroclaw account for roughly half of total construction activity. By comparison, construction activity is slower in Tri-City, Poznan and Lodz, with significantly less space under construction in Katowice and Szczecin and no notable projects under way in Lublin. Observers expect 593,000 m<sup>2</sup> of office space to be completed in 2019, setting a new record. An additional 458,000 m<sup>2</sup> is slated for completion in 2020, with 525,000 m<sup>2</sup> to follow in 2021. It can therefore be expected that some 1.5 million m<sup>2</sup> of office space will be created in the regional markets in the next three years.<sup>39</sup>

**Regional prime rents stable with a trend towards slight increases**

Regional prime rents have been comparatively stable in recent years, with a tendency towards a slight increase in rents observable in 2018. Prime rents increased by an average of 1.1 % in the regional sub-markets between 2017 and 2018. At the end of the year, regional prime rents ranged from € 12.00 per square metre in Lublin to € 14.75 per square metre in Wroclaw. Krakow, Poznan and Tri-City rounded out the middle in 2018. Katowice, Lodz and Szczecin, along with Lublin, were among the least expensive locations.<sup>40</sup>

**Investment volume soars to new heights – focus on Warsaw**

At € 2.75 billion, office real estate accounted for the largest share of overall investment volume in the country (38 %). Last year, 28 transactions worth € 1.7 billion and accounting for roughly 63 % of all Polish office real estate investments were completed in Warsaw alone.<sup>41</sup> The most significant transactions were Gdanski Business Centre II (over € 200 million), Skylight & Lumen and the Warsaw Spire (each over € 150 million), as well as Cedet (over € 100 million).<sup>42</sup> The regional markets recorded a total of 24 transactions with a volume of approximately € 1 billion, placing regional transaction volume roughly on par with the previous year.

**Yields still falling sharply nationwide**

Observers noted a steady compression of prime yields in 2018. With the exception of 2014, prime yields for office real estate has been under pressure nationwide since 2009 and hit a 10-year low of 4.75 % in 2018.<sup>43</sup> Regional office locations offer incentives from an investor's perspective. Prime yields in regional office locations ranged from 5.75 % in Krakow to 8.25 % in Szczecin, placing them consistently higher than in Warsaw (4.75 %).<sup>44</sup>

<sup>37</sup> Savills: regional office market in Poland 2019

<sup>38</sup> Knight Frank: Warsaw office market 2018

<sup>39</sup> Savills: Regional office market in Poland 2019

<sup>40</sup> Cushman & Wakefield: Marketbeat office regional markets 2018 summary

<sup>41</sup> Cushman & Wakefield: Marketbeat Warsaw office market Q4 2018

<sup>42</sup> Cushman & Wakefield: Poland office snapshot Q4 2018

<sup>43</sup> BNP Paribas: Investing in Poland 2019

<sup>44</sup> Cushman & Wakefield: Office market snapshot Q4 2018



**Outlook****Office real estate market**

Demand	→
Supply	↗
Office employees	↗
Vacancy rate	↗
Prime rent	↗
Investment volume	→
Prime yield	↘

The office real estate market developed dynamically in 2018. Last year, Wrocław became the third sub-market after Warsaw and Krakow to exceed the mark of 1 million m<sup>2</sup> of office space for the first time. Demand for office real estate was above average. Accompanied by a moderate increase in new construction and high demand, the vacancy rate fell nationwide to its lowest level in years. Thanks to the strong growth of the Polish economy, the high demand for office real estate throughout the country appears likely to continue. The Polish real estate market is benefiting from qualified labour in conjunction with constantly rising, yet lower wages than in western Europe, making Poland an ideal outsourcing location. Poland is also particularly suitable for business service providers and could grow even more attractive as a nearshoring and outsourcing destination following Brexit.

Both established companies and new companies alike, such as providers of flex and co-working spaces, are contributing to the further increase in demand for office space. The country is also seeing a trend towards decentralisation and diversification of location, with businesses increasingly opening branch offices in regional locations due to the short supply of qualified labour and rising rents in Warsaw.<sup>45</sup> Against this backdrop, it is safe to assume that the number of people working in offices will continue rising in future and that it will grow increasingly difficult to recruit enough qualified specialists. New construction of regional office real estate could reach a new high in 2019 before stabilising in 2020 and 2021. The number of expected office space completions is slated to rise in Warsaw as well between 2019 and 2021, albeit less sharply than in regional locations. As a large share of the new space is already pre-let, the high level of space absorption appears likely to continue nationwide despite the initially brisk creation of space in 2019 and the anticipated high demand for office space moving forward, meaning that the vacancy rate in Warsaw will rise over the next two years before probably resuming its decline in the long term.<sup>46</sup> The effect is likely to occur to a similar extent in the regional markets. It can therefore be expected that vacancy rates in the regional markets will gradually rise in the quarters ahead – except in Katowice, Poznan and Lublin – before stabilising in the medium to long term.<sup>47</sup>

Against the backdrop of Warsaw's supply gap in 2018 and the related improvement in lessors' negotiating position, rent concessions are expected to decline, with prime rents in central locations coming under upward pressure. Rents in less central locations are likely to remain stable, both regionally and in Warsaw.<sup>48</sup>

The extensive creation of new spaces in regional markets should lead to a further increase in investment activity. In Warsaw, investment activity over the remaining course of the year is likely to remain virtually on par with the level seen in the previous year. On account of keen investor interest, prime yields will also remain under pressure nationwide going forward, meaning that compression will continue both in Warsaw and in the regional markets. The factors described indicate an advanced office real estate cycle.<sup>49</sup> For the time being, however, we do not believe that a downturn is on the horizon.

<sup>45</sup> Skanska: CEE investment report 2018

<sup>46</sup> BNP Paribas: Warsaw Q4 2018

<sup>47</sup> Colliers: The largest office markets in Poland 2019

<sup>48</sup> Colliers: Market insights 2019

<sup>49</sup> Cushman & Wakefield: European Shopping Center Development Report 2018

## 4. Retail real estate market

### Good signs despite ban on Sunday trading

With a population of roughly 38 million, Poland is the largest retail market in central and eastern Europe, ahead of the Czech Republic, Hungary and Romania. Good conditions – including rising employment figures and wages – have led in recent years to the expansion of a middle class with high purchasing power and high standards in terms of products, services and brands. Although Poland's retail market is growing increasingly western European, the region still offers plenty of potential for newcomers and investors.<sup>50</sup> Twenty-nine previously unrepresented brands entered the Polish market in 2018, with Scotch & Soda, Chanel Fragrance & Beauty Boutique and Huawei making their debuts, to name just a few examples.<sup>51</sup> Despite making clear inroads, e-commerce currently accounts for a modest share of just 4.3 % of total sales.<sup>52</sup> As a result, bricks-and-mortar retail remains the preferred channel for Polish consumers. The controversial ban on retail trading on Sundays, which partially entered into force in early 2018, therefore constitutes a major challenge. The law successively reduces the number of Sundays on which retail trading may take place from two Sundays a month starting in March 2018 to one Sunday in 2019, with the aim of fully outlawing Sunday retail openings in 2020.<sup>53</sup> While the rules have not diminished the high level of investor interest, they appear to be having a negative impact on customer numbers<sup>54</sup> and especially on smaller retail companies, even though the aim of the law was to support small businesses.<sup>55</sup>

### Warsaw is the leading retail location in central and eastern Europe

CEE Comparison	Purchasing power capita/ year	Retail stock in m. m <sup>2</sup>	Retail sales growth 2012 - 2017	Shopping centre density in m <sup>2</sup> per 1,000 capita
Warsaw	12,473 €	1.94	26%	517
Prague	10,908 €	1.10	21%	345
Bucharest	5,698 €	1.20	46%	320
Budapest	7,650 €	1.00	25%	328

Source: BNP Paribas CEE the Retail, as at November 2018

### Improving consumer climate

In spite of the situation, the consumer confidence index for Poland<sup>56</sup> has seen extremely positive development in recent years. Statistics Poland (GUS) and the National Bank of Poland measure consumer confidence by surveying households. The index ranges from -100 to +100. A positive figure indicates that the majority of consumers are optimistic and vice versa. In 2014, the index for Poland stood at a negative average value of -17.0 before rising to 2.4 in 2017 and reaching 5.7 points one year later. Consumer confidence stood at 8.2 points in March 2019 before falling to a nevertheless high level of 7.2 points in April.

<sup>50</sup> BNP Paribas: CEE the retail 2018

<sup>51</sup> Jones Lang LaSalle: Polish retail market 2019

<sup>52</sup> ibid.

<sup>53</sup> <https://emerging-europe.com/news/opposition-to-polish-sunday-trading-ban-grows/>, as at 9 May 2019

<sup>54</sup> Jones Lang LaSalle: Polish retail market 2019

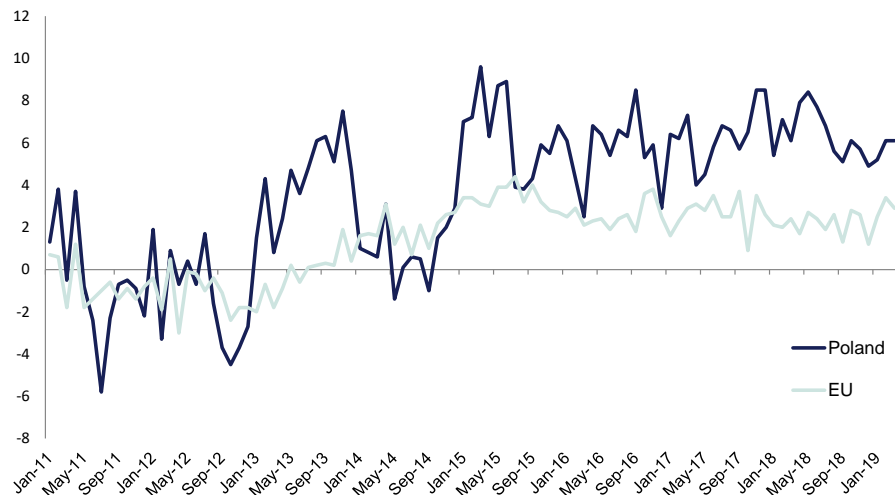
<sup>55</sup> Jones Lang LaSalle: DNA of real estate – Summary 2018

<sup>56</sup> Central Statistical Office Poland (GUS)

### Retail sales see significantly sharper rise than EU average

Retail sales have consistently posted positive development since September 2014 (see chart). Polish retail sales growth rates have at times even been over twice the EU average in recent years. The most recent developments stand out in this regard, with Polish retail sales growth outpacing the country's five-year average to come in at 6.1 % in both February and March 2019. The strong and steady growth indicates a maturing retail market that is not yet fully saturated but is catching up with western Europe.

### Real retail sales (excluding cars) in Poland and EU average (change in %, yoy)



Source: Eurostat, internal research

### Shopping centres dominant

The Polish retail real estate market is dominated by shopping centres. Nation-wide, 419 shopping centres provided a gross leasable area (GLA)<sup>57</sup> of approximately 10 million m<sup>2</sup> in 2018, accounting for 71 % of the country's total retail GLA of 14 million m<sup>2</sup>.

### Shopping centre density nearing overall European average

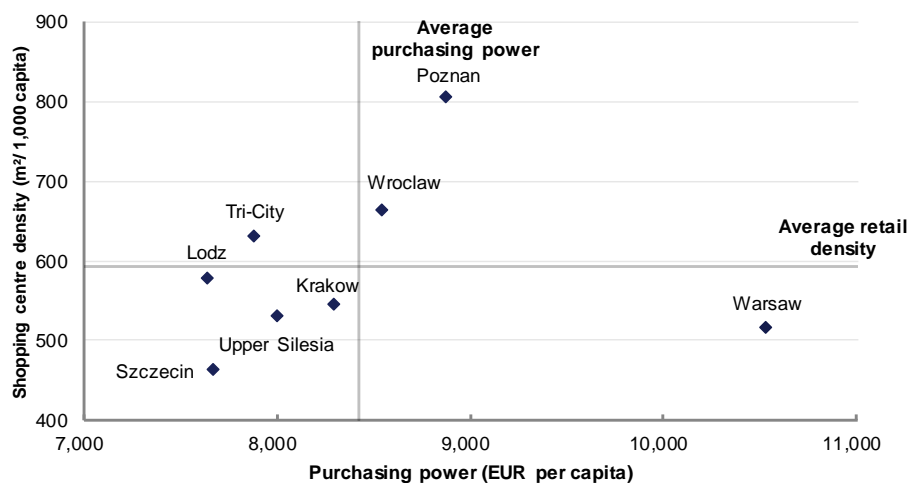
Throughout 2018, approximately 435,000 m<sup>2</sup> of GLA was made available to the retail market. As a result, newly completed floor space was down slightly by 7 % from the previous year's figure of 466,000 m<sup>2</sup>. A total of ten new shopping centres was completed. At 62,000 m<sup>2</sup> of GLA, the most significant completion was Forum Gdansk in Tri-City. The fourth quarter saw the most brisk activity in 2018, with 136,000 m<sup>2</sup> coming on the market due to completed projects such as Libero in Katowice (45,000 m<sup>2</sup> of GLA), Nowa Stacja in Pruszkow (26,800 m<sup>2</sup>) and Galeria Hosso in Swiebodzin (12,000 m<sup>2</sup>).

Project developers were particularly interested in urban areas in 2018, with 82 % of shopping centre floor space being completed in major cities. The country's leading retail hubs include Warsaw, Poznan, Wroclaw, Tri-City, Lodz, Krakow, Szczecin and Upper Silesia. However, cities with less than 50,000 inhabitants still accounted for a not inconsiderable 15 % of completed floor space. Thanks to this increase in floor space, per capita shopping centre density rose from 255 m<sup>2</sup> in 2017 to 262 m<sup>2</sup> 2018, bringing it closer to the overall European average of 276 m<sup>2</sup>.

<sup>57</sup> Gross leasable Area (GLA) refers to the amount of floor space available to be rented

With regard to the leading metropolitan areas, Wrocław, Poznań and Tri-City have a comparatively above-average shopping centre density (see chart). In relation to the purchasing power of the individual locations, it becomes apparent that Wrocław and Poznań also both have above-averaging purchasing power.<sup>58</sup> Warsaw, which is generally the most expensive and highest-profile location, has significantly above-average purchasing power, but still offers further market potential in terms of per capita retail space. Łódź, Kraków, Upper Silesia and Szczecin are below average in terms of both purchasing power and retail density. These locations have room to grow in the medium term as the country's economy continues to develop, thereby increasing purchasing power.<sup>59</sup>

### Shopping centre density and purchasing power in selected cities



Source: BNP Paribas, internal research

### Shopping centre GLA under construction

What is more, 269,000 m² of GLA is currently under construction, with roughly 73 % of that space scheduled for completion in 2019. Most of the new shopping centres will also be located in large cities. However, the volume of new space scheduled for completion in 2019 is roughly 40 % lower than in the previous year. This is a clear sign of a mature, saturated market in which the need for shopping centre space will be met through the revitalisation of existing, vacant spaces rather than through new projects. A trend towards consolidation can also be seen, with Lithuania's Maxima Group taking over Emperia, the owners of the retail chain Stokrotka. The acquisition and rebranding of competing stores is another way of increasing floor space.<sup>60</sup>

<sup>58</sup> Average retail density and purchasing power for the Warsaw, Upper Silesia, Tri-City, Poznań, Wrocław, Kraków, Łódź and Szczecin markets as measured by BNP Paribas; as at October 2018

<sup>59</sup> BNP Paribas: Eye on retail in Poland 2018

<sup>60</sup> Jones Lang LaSalle: DNA of real estate – Summary 2018



**Shopping centres face pressure to change**

Shopping centres are facing pressure to change as a result of evolving consumer expectations. Increasingly, shopping centres are positioning themselves as leisure destinations offering services such as dining, entertainment, fitness and even childcare. More and more consumers have come to expect such added services. Retail remains the actual focus of a shopping centre's business activities, and an attractive mix of different stores continues to be essential. However, the overall experience offered by shopping centres is shifting towards social interaction and providing people with a place where they can get together with their friends. The goal is to transform shopping from the mere procurement of goods to a memorable experience so as to keep shopping centres an attractive destination for consumers despite the rise in e-commerce. A lack of leisure and dining options could jeopardise a shopping centre's return on equity overall. As a result, investors and project developers must be open to tenants that provide such services, even though they may not be able to pay the highest rents.<sup>61</sup>

**Shopping streets increasingly attractive**

In well-developed European retail markets, shopping streets offer an alternative to traditional shopping centres. By comparison, Poland's shopping streets are under-represented and in need of development due primarily to the traditionally complex ownership structures of the properties along the country's shopping streets (especially in Warsaw), which has proven to be a hindrance for the retail sector. Shopping streets differ from shopping centres mainly due to the clientele they attract. Both locals and tourists alike tend to visit shopping streets spontaneously, without any prior or predefined intent to buy. This fact is reflected in the significantly lower share of tenants from the apparel sector (clothing, accessories and shoes) than at shopping centres. Instead, shopping streets – such as Warsaw's famed ul. Nowy Swiat and ul. Swietorkrzyska – tend to feature a high percentage of eating and drinking venues (one-third on average), mainly due to the increasing tendency among Polish consumers to eat out. With the shopping centre segment maturing, shopping streets offer an increasingly interesting alternative that can also be used to achieve investment diversification.<sup>62</sup>

**Outlet centres also gaining significance**

Accounting for approximately 250,000 m<sup>2</sup> of GLA, or roughly 2 %, outlet centres are another relatively under-represented segment. However, outlet centres appear poised to continue gaining significance, as consumers increasingly see them as an alternative to shopping centres. Much like with shopping centres, the current stock of outlet centres is in the midst of an adjustment process. Operators are focused on optimising their outlet centre's dining options in addition to their function as retail venues so as to keep consumers there longer and convert the additional time into sales. Typically, outlet centres are located on the outskirts of urban areas, encouraging them to enter into partnerships with transport service providers such as Neinver or Traficar to increase their accessibility.<sup>63</sup>

<sup>61</sup> Savills: Social shopping centers 2017

<sup>62</sup> Knight Frank: High Streets 2015; Jones Lang LaSalle: Warsaw high streets 2019

<sup>63</sup> CBRE: Poland retail market View 2018

## Poland's leading retail markets at a glance (2018)

**Szczecin**

<b>Modern retail stock</b>	
All formats	393,500
Shopping centres	258,500
<b>Retail density (m²/1,000 capita)</b>	
All formats	707
Shopping centres	464
<b>Prime rent (in €/month)</b>	
Shopping Centres	55 €
High streets	-
<b>Vacancy rate</b>	1.50%

**Poznan**

<b>Modern retail stock</b>	
All formats	888,500
Shopping centres	662,500
<b>Retail density (m²/1,000 capita)</b>	
All formats	1082
Shopping centres	807
<b>Prime rent (in €/month)</b>	
Shopping Centres	47 €
High streets	50 €
<b>Vacancy rate</b>	5.10%

**Wroclaw**

<b>Modern retail stock</b>	
All formats	862,000
Shopping centres	532,000
<b>Retail density (m²/1,000 capita)</b>	
All formats	1077
Shopping centres	664
<b>Prime rent (in €/month)</b>	
Shopping Centres	55 €
High streets	40 €
<b>Vacancy rate</b>	3.30%

**Upper Silesia**

<b>Modern retail stock</b>	
All formats	1,509,000
Shopping centres	1,140,500
<b>Retail density (m²/1,000 capita)</b>	
All formats	702
Shopping centres	531
<b>Prime rent (in €/month)</b>	
Shopping Centres	55 €
High streets	45 €
<b>Vacancy rate</b>	3.60%

**Tri-City**

<b>Modern retail stock</b>	
All formats	960,500
Shopping centres	662,000
<b>Retail density (m²/1,000 capita)</b>	
All formats	916
Shopping centres	632
<b>Prime rent (in €/month)</b>	
Shopping Centres	50 €
High streets	-
<b>Vacancy rate</b>	3.60%

**Warsaw**

<b>Modern retail stock</b>	
All formats	1,939,000
Shopping centres	1,338,000
<b>Retail density (m²/1,000 capita)</b>	
All formats	749
Shopping centres	517
<b>Prime rent (in €/month)</b>	
Shopping Centres	130 €
High streets	80 €
<b>Vacancy rate</b>	2.00%

**Lodz**

<b>Modern retail stock</b>	
All formats	697,000
Shopping centres	542,000
<b>Retail density (m²/1,000 capita)</b>	
All formats	744
Shopping centres	579
<b>Prime rent (in €/month)</b>	
Shopping Centres	55 €
High streets	25 €
<b>Vacancy rate</b>	3.70%

**Krakow**

<b>Modern retail stock</b>	
All formats	776,500
Shopping centres	565,500
<b>Retail density (m²/1,000 capita)</b>	
All formats	751
Shopping centres	547
<b>Prime rent (in €/month)</b>	
Shopping Centres	60 €
High streets	75 €
<b>Vacancy rate</b>	3.50%

Source: Cushman &amp; Wakefield, internal research

**Rents relatively stable –  
Warsaw most expensive  
location**

Traditionally, Warsaw has had the highest rents for shops in prime locations and for shopping centres (see chart). The high rents result from Warsaw's excellent reputation and central location. Due to the long waiting lists for tenants, lessors have increasingly been reducing the size of the spaces they rent so as to offer a larger quantity of smaller spaces, thereby increasing rents.<sup>64</sup> Regional prime rents at shopping centres were stable year on year and ranged from € 47 a month in Poznan to € 60 a month in Krakow in 2018. Prime rents along shopping streets ranged from € 25 a month in Lodz to € 75 a month in Krakow. Over the past five years, prime rents along shopping streets have fallen in regional markets (with Upper Silesia recording the highest average decline over the past five years at 4.3 %) and in Warsaw (1.2 %).<sup>65</sup>

**Highest investment volume  
since 2006**

At € 2.5 billion, 2018 saw the highest transaction volume in the retail real estate sector since 2006 (+20 % year on year).<sup>66</sup> Accounting for a share of 34 % of the country's total investment volume, retail real estate was the second most important asset class just behind office real estate (38 %). The sale of a 700,000 m² portfolio by Apollo Rida/AXA/ARES to Chariot Top Group, worth an estimated € 1 billion, was a particular driving force behind the increase in transaction volume.

<sup>64</sup> CBRE: Poland retail market view Q4 2018<sup>65</sup> Cushman & Wakefield: Retail market snapshot 2018<sup>66</sup> JLL: Polish retail market 2019

The largest single sale involved Galeria Katowicka (48,000 m<sup>2</sup>), which changed hands from Meyer Bergman to Malaysia's Employees Provident Fund for a price of € 300 million. This particular transaction highlights the increasing interest among Asian investors in Polish real estate, who are joining established investors from western Europe and the English-speaking world.<sup>67</sup>

### Prime yields down

All retail property segments have seen continued yield compression, resulting in ten-year lows across the board. As a result, yields on shopping centres in Warsaw stood at 4.25 % in the fourth quarter, down from 4.75 % just a year earlier. Prime yields in regional markets were higher than in Warsaw, ranging from 5.15 % to 5.75 %. Retail properties along shopping streets, as well as retail parks and department stores, generated higher yields. On a regional basis, yields on retail real estate along shopping streets stood at 6.75 % in Krakow, Katowice, Poznan, Lodz and Wroclaw, and at 5.75 % in Krakow. At 7 %, retail parks and department stores generated the highest prime yields.<sup>68</sup>

### Prime yields of retail formats over time, compared to 10-year low in %

Location	Q4 2018	Q3 2018	Q4 2017	10 year low
Shopping Centres	in %	in %	in %	in %
Warsaw	4.25	4.50	4.75	4.25
Regional	5.15 - 5.75	-	-	-
High street shops				
Warsaw	5.00	5.25	5.25	5.00
Regional	5.75 - 6.75	5.75 - 6.75	5.75 - 6.75	5.75 - 6.75
Retail parks				
Country prime	7.00	7.00	7.00	7.00

Source: Cushman & Wakefield, internal research

### Outlook

#### Retail real estate

Demand	↗
Supply	↗
Rent in prime locations	→
Retail sales	↗
Investment volume	↗
Prime yield	↘

Investor interest in prime retail real estate remains high. Major metropolitan areas with a population of more than 400,000 are particularly popular, yet even smaller locations with fewer than 100,000 inhabitants are increasingly attracting investors. Modest future completion rates are resulting in the increasing revitalisation of existing spaces. The Polish retail market is increasingly approaching western European standards, resulting in a trend towards consolidation and the continued entry of well-known global brands into the Polish market. In particular, prestigious premium and luxury brands from the apparel or beauty segment, such as Armani Exchange, Bebe and Chanel – all of which made their Polish market debuts in 2018 – could provide a boost to the relatively under-represented shopping street format by raising its overall appeal.<sup>69</sup>

<sup>67</sup> BNP Paribas: Investing in Poland 2019

<sup>68</sup> Cushman & Wakefield: Retail market snapshot 2018

<sup>69</sup> <https://www.property-forum.eu/news/new-retail-formats-gain-popularity-in-poland/2634>

The full impact of the Sunday retail trading ban remains to be seen. Despite most recently having an observably negative effect on sales and consumer numbers,<sup>70</sup> retail sales have grown overall, and the consumer climate remains clearly positive. As indicated by the recent increase in retail sales, private consumption currently appears to be balancing out the negative effects of the ban on Sunday openings. It is not yet possible to say whether the trend will continue following the further tightening of the retail trading ban as planned. The law requiring stores to stay closed therefore generally constitutes a major challenge for the Polish bricks-and-mortar retail sector. The growth of the online retail sector also presents bricks-and-mortar retailers with another main challenge. Although online retail currently accounts for a rather low share of sales volume (2018: 4.5 % of total sales; EU average: 9.5 %)<sup>71</sup>, the sector will gain importance in the long term on account of its current double-digit growth rates.<sup>72</sup> As a result, retail faces pressure to change. The industry is reacting by increasing the appeal of shopping centres through additional recreational offerings and by linking offline and online retail concepts.

In 2018, prime rents were stable year on year for both shopping centres and shopping streets. Warsaw remains the most expensive location. However, shopping streets have come under pressure over the past five years, with prime rents falling in Warsaw and in regional markets. As in 2018, prime rents for shopping centres should see stable development as the year moves on due to a further decrease in rent concessions. By contrast, prices along shopping streets are expected to increase slightly for the first time in years. Prime yields are expected to continue to fall significantly in light of the high demand on the retail investment market.<sup>73</sup>

## 5. Logistics real estate market

### Logistics real estate market developing dynamically

As in previous years, the positive development of the Polish logistics real estate market continued in 2018. Over the past two years, the stock of modern warehousing space has grown by approximately 40 %, <sup>74</sup> even trebling compared to the last ten years.<sup>75</sup> The country's central location has proven advantageous to the Polish logistics property market. Poland connects western and eastern Europe and plays an important role in intra-European freight transport. Moreover, Poland has four important freight ports along the Baltic Sea in Gdansk, Gdynia, Swinoujscie and Szczecin. Thanks in no small part to EU subsidies, the road network currently includes 1,660 kilometres of controlled-access highways and 1,870 kilometres of limited-access highways, figures that are set to grow over the next few years thanks to an additional 92 kilometres of controlled-access highways and 1,050 kilometres of limited-access highways under construction.

Despite the dynamic growth of the logistics market, development costs remain modest compared to western Europe, as both large and inexpensive spaces are available. The New Investment Support Act, which entered into force in 2018, also strengthens the cost advantage (see chapter 2).

<sup>70</sup> Cushman & Wakefield: Retail market snapshot 2018

<sup>71</sup> Jones Lang LaSalle: Polish retail market 2019

<sup>72</sup> BNP Paribas: Eye on retail in Poland 2018

<sup>73</sup> Cushman & Wakefield: Retail market snapshot 2018

<sup>74</sup> BNP Paribas: AAG, industrial & logistics market review, Poland 2018

<sup>75</sup> Jones Lang LaSalle: Industrial market pulse 2018



**Sharp rise in amount of space in Central Poland**

Total logistics space stood at 15.6 million m<sup>2</sup> at the end of 2018. The Warsaw II<sup>76</sup> zone (20.50 % of total stock), Upper Silesia (16.94 %), Central Poland (16.08 %), Poznan (13.10 %) and the Wroclaw/Lower Silesia region (10.90 %) accounted for the lion's share of space.

With 2.2 million m<sup>2</sup> of floor space added, growth was slower in 2018 than in the previous year (2.4 million m<sup>2</sup>), but remained high overall. Central Poland is currently the region with the most dynamic growth, accounting for roughly 35 % of newly created floor space. Silesia and the region in western Poland bordering Germany, located along the S3 expressway, were also popular.<sup>77</sup>

**Vacancy rates down slightly, build-to-suit projects very popular**

Despite the large volume of newly created space, the availability of logistics properties is limited. Last year, the vacancy rate varied between 4 and 5 % before reaching 5.1 % at the end of 2018 – roughly 0.3 percentage points lower year on year. The reason behind the limited availability is the extreme popularity of build-to-suit (BTS) projects, which allows developers and owners to meet the exact needs of the tenants during construction.<sup>78</sup> In addition to BTS, the high level of pre-letting is also reducing the availability of logistics spaces, with warehouses often fully let prior to project completion.<sup>79</sup>

**Space under construction reaches record high, speculative construction activity at one-third**

Developers will continue creating a high volume of logistics space in the future. In 2018, the volume of space in planning rose to a new record high of 1.9 million m<sup>2</sup>, representing a 35 % increase year on year. Most of the construction activity is concentrated in Upper Silesia (488,333 m<sup>2</sup>) and Central Poland (295,000).<sup>80</sup> The largest projects scheduled for completion in the quarters ahead are e-commerce warehouses in Gliwice and Olsztynek. According to estimates from Jones Lang LaSalle, roughly 35 % of the future spaces are speculative in nature, including projects offering more than 100,000 m<sup>2</sup> in logistics space in Warsaw, Upper Silesia and Wroclaw.<sup>81</sup>

**High demand for logistics space**

Take-up stood at 3.7 million m<sup>2</sup> in total in 2018. While slightly below the previous year's record high, the figure reflects continued high demand. Between 2013 and 2016, cumulated annual take-up ranged from just under 2 million m<sup>2</sup> (2013) to roughly 3 million m<sup>2</sup> (2016). In 2018, the regions with the highest demand for logistics space were the Warsaw region, Central Poland, Upper Silesia, Wroclaw and Poznan, accounting for roughly three-quarters of demand (see chart).<sup>82</sup>

The two largest transactions, both exceeding 100,000 m<sup>2</sup> and closed in the first quarter of 2018, were in connection with Leroy Merlin in Piatek (123,600 m<sup>2</sup>) and Zalando in Olsztynek (121,000 m<sup>2</sup>). Over 78 % of contracts involve new agreements and expansions, reflecting the attractiveness of Poland's logistics property market.<sup>83</sup>

<sup>76</sup> Unlike Warsaw I, Warsaw II refers to the extended Warsaw region; Upper Silesia refers to the Katowice region; Central Poland refers to the Lodz region; Lower Silesia refers to the Wroclaw region; see: BNP Paribas AAG 2018

<sup>77</sup> BNP Paribas: AAG, industrial & logistics market review, Poland 2018

<sup>78</sup> <https://logistik-und-immobilien.de/blog/2018/09/13/built-to-suit-bts/>

<sup>79</sup> BNP Paribas: AAG, industrial & logistics market review, Poland 2018

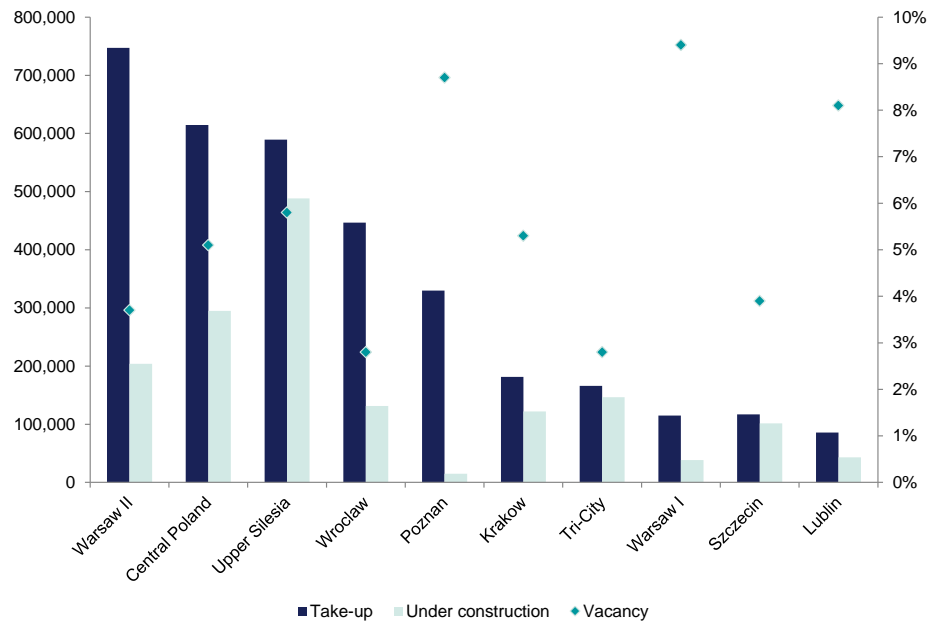
<sup>80</sup> ibid.

<sup>81</sup> Jones Lang LaSalle: Industrial market pulse 2018

<sup>82</sup> ibid.

<sup>83</sup> Jones Lang LaSalle: Industrial market pulse 2018

### Logistics take-up and space under construction in m<sup>2</sup>, as well as vacancy rates at major Polish logistics locations in %



Source: take-up: JLL Industrial Market Pulse 2018; new construction and vacancy: BNP Paribas AAG 2018, internal research

### Modest increase in prime rents, decrease in rent concessions

Prime rents for logistics real estate increased slightly in 2018. In addition, the combination of rising labour and construction costs along with high demand for spaces led lessors to reduce rent concessions.<sup>84</sup> At 12.50 %, the Wrocław/Lower Silesia region saw the steepest rise in prime rents compared to 2017, well over the average of 4.8 % in the regions surveyed. By contrast, prime rents stagnated in the Warsaw region, Łódź/Central Poland and Szczecin. In light of the average growth over the past five years, prime rents have been constant or have risen with the exception of Łódź (Central Poland) and Kraków, placing the average for the regions surveyed at 0.3 %.

### Prime rent trend in selected regions in 2019

Region	Prime rent	Growth in %	
	in € per m <sup>2</sup> /month	1 year	5 years
Warsaw II	3.60	0.00	0.00
Katowice	3.60	9.10	3.7
Łódź	3.60	0.00	-2.6
Poznań	3.50	6.10	0.6
Wrocław	3.60	12.50	0.6
Kraków	3.60	5.90	-2.6
Tri-City	3.50	4.50	1.8
Szczecin	3.50	0.00	1.2

Source: Cushman & Wakefield, internal research

<sup>84</sup> BNP Paribas: AAG, industrial & logistics market review, Poland 2018

## Investment volume in logistics real estate reaches record high, prime yields at 10-year low

2018 was a record year in terms of investments in logistics real estate, continuing the trend of increasing volume that has been in place since 2015. The market recorded an investment volume of € 221 million in 2015, which rose to € 770 million 2016 and € 900 million in 2017, its second-highest level. That former record was doubled in 2018, bringing investment volume up to € 1.84 billion. Portfolio transactions completed in the second half of 2018 were the main reason for this record amount. The Encore (Hillwood) and Prologis portfolios, which were sold by Mapletree for € 320 million and € 260 million, were the largest transactions.<sup>85</sup>

In the fourth quarter of 2018, prime yields fell quarter on quarter and year on year from 6.75 % to 6.50 % in the Warsaw region (Warsaw II), Upper Silesia (Katowice region), Central Poland (Lodz region), Poznan and Lower Silesia (Wroclaw region), bringing prime yields down to a new ten-year low in these regions. Krakow (6.75 %), Tri-City (6.75 %) and Szczecin (7.25 %) each reported higher prime yields in the fourth quarter of 2018, but were also down quarter on quarter and year on year to ten-year lows for their respective regions.

## Outlook

### Logistics real estate market

Demand	→
Supply	→
Vacancy rate	→
Prime rent	↗
Investment volume	→
Prime yield	↘

The Polish logistics real estate market developed dynamically in 2018. With 40 % of the country's newly created logistics space being completed in Central Poland, the region cemented its role as a major logistics hub.<sup>86</sup> Demand for logistics space also developed dynamically, rising to its second-highest level ever. A large portion of the newly concluded contracts were new agreements and expansions, indicating how attractive the logistics real estate market is. Investors' interest in logistics real estate appears poised to remain strong due to factors such as a growing e-commerce sector<sup>87</sup>, suggesting that take-up will probably be able to maintain its high level. The increase in newly created space slowed year on year but remained high compared to previous years.

With roughly 2 million m<sup>2</sup> in logistics space in the pipeline at the end of 2018, it can be assumed that the amount of real estate space on offer will be essentially as high as it was in 2018.<sup>88</sup> The vacancy rate fell slightly year on year although approximately one-third of construction activity was speculative in nature and despite the creation of large new spaces. The popularity of BTS projects prevented a rise in vacancy rates in spite of extensive new construction, meaning that much of the logistics real estate under construction was pre-let prior to completion. Prime rents rose in 2018, especially for state-of-the-art logistics properties in prime locations. A slight rise can also be expected, particularly in sub-markets with a limited amount of space on offer. Effective prime rents (including rent concessions) also appear poised to rise, as landowners and project developers will probably be less willing to make concessions. At double the previous year's level, investment volume set a record high in 2018 and is likely to remain comparable in the near future thanks to keen investor interest, probably due to an increase in individual and portfolio transactions. Prime yields stood at a ten-year low for the locations surveyed in 2018 and will probably be increasingly compromised going forward due to major portfolio transactions and the extreme popularity of long-term BTS properties.

<sup>85</sup> Jones Lang LaSalle: Industrial market pulse 2018

<sup>86</sup> ibid.

<sup>87</sup> Cushman & Wakefield: Industrial market snapshot 2018

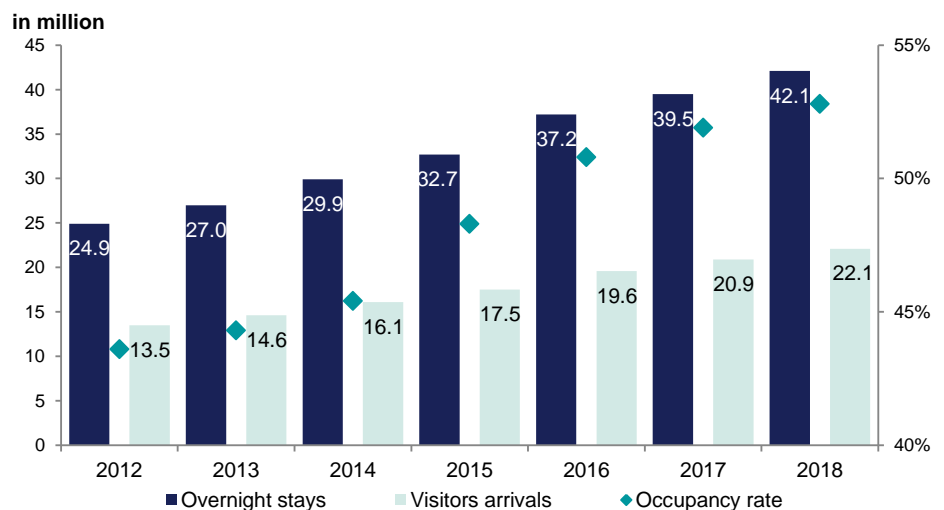
<sup>88</sup> Jones Lang LaSalle: Industrial market pulse 2018

## 6. Hotel real estate market

### Rising visitor numbers accompanied by increase in overnight stays and occupancy rates

The Polish hotel market comprised 2,592 hotels<sup>89</sup> with 136,080 rooms<sup>90</sup> as at the end of 2018. Between 2010 and 2018, the number of hotels in Poland increased by an average of 4.96 % a year.<sup>91</sup> In the past financial year, the country registered 22 million domestic and foreign guests (previous year: 20 million, see chart) and 42 million overnight stays (previous year: 39.4 million). Along with the rise in the number of tourists and overnight stays, the room occupancy rate also increased by one percentage point year on year to 52.8 % in 2018. Development in recent years has been dynamic. The number of foreign visitors increased by 9.2 % a year on average between 2012 and 2018, with overnight stays up 8.6 % and the occupancy rate rising by 3.2 percentage points, underscoring Poland's growing popularity as a year-round tourist destination. Accordingly, Poland moved up one spot in the World Economic Forum's tourism ranking between 2015 and 2017. Ranked 46th, the country is in the top one-third of the 136 surveyed countries<sup>92</sup> and is becoming an increasingly important location for trade fairs and congresses.

### Overnight stays and visitor numbers



Source: Statistics Poland (GUS), internal research

### Poland is the second most visited country in central and eastern Europe

Compared with other central and eastern European countries such as Bulgaria, the Czech Republic, Hungary, Romania and Slovakia, Poland is the second most visited country, with 7.1 million foreign guests (previous year: 6.8 million). Only the Czech Republic recorded more visitors in 2018, with 10.6 million foreign tourists (previous year: 10.2 million). Slovakia brought up the rear in 2018, with 2.2 million foreign tourists.

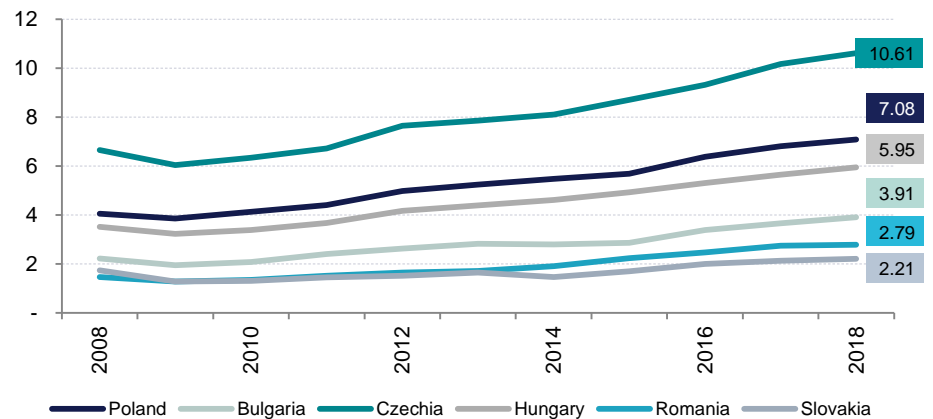
<sup>89</sup> Includes all one- to five-star hotels (excluding hotels undergoing evaluation)

<sup>90</sup> Statistics Poland (GUS)

<sup>91</sup> CAGR, source: ibid.

<sup>92</sup> The index is published once every two years and looks at 14 factors relevant to tourism, such as security and the business environment. It is one of the most comprehensive tourism rankings.



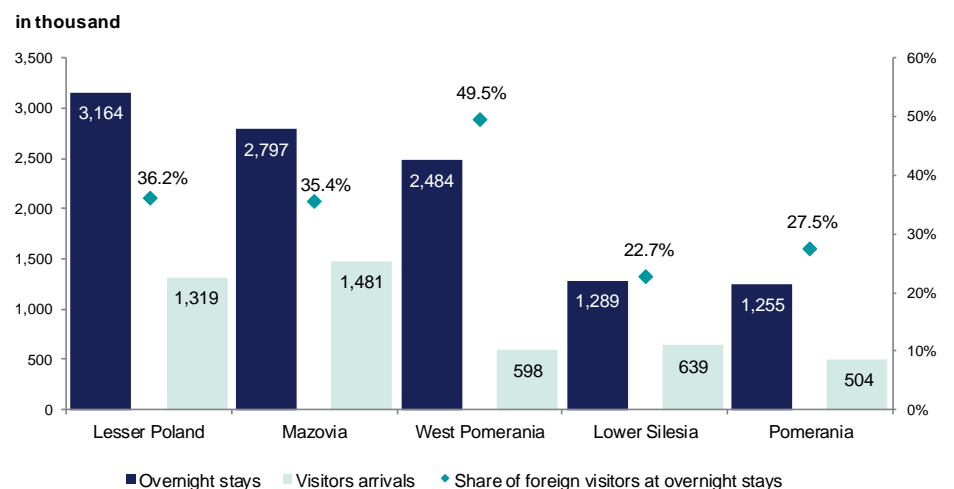
**Number of foreign tourists  
in million from 2008 to 2018**

Source: Statistics Poland (GUS), internal research

**Krakow and Warsaw the  
most popular destinations  
for foreign tourists**

Based on the number of overnight stays by foreign guests, Lesser Poland was the most popular region with tourists in 2018, accounting for some 3.1 million overnight stays by foreign tourists. Krakow, the capital of Lesser Poland, accounted for the lion's share at roughly 3 million of those overnight stays. Lesser Poland was followed by Mazovia and its capital, Warsaw. Mazovia recorded approximately 2.8 million overnight stays by foreign guests, with Warsaw accounting for 2.6 million. At 2.5 million, West Pomerania saw the third-highest number of overnight stays, mostly attributable to the region's capital, Szczecin (0.35 million), and Kolobrzeg (1.2 million). Lower Silesia and Pomerania each recorded some 1.3 million overnight stays by foreign tourists, with their capitals – Wrocław (0.7 million) and Gdańsk (1 million) – also accounting for the lion's share.<sup>93</sup>

It is worth noting that the share of foreign tourists in the most popular tourist regions, with the exception of West Pomerania, is comparatively low. Half of all tourists in West Pomerania come from abroad. However, that share decreases to one-third in Lesser Poland and Mazovia and just one-quarter in Lower Silesia and Pomerania. This suggests that Poland still holds further potential in store in terms of international tourism.

**Poland's five most popular  
voivodeships in 2019:  
overnight stays, tourist  
arrivals and percentage of  
foreign guests**

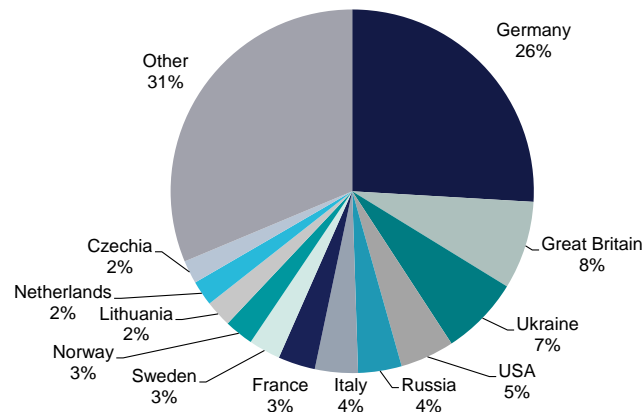
Source: Statistics Poland (GUS), internal research

<sup>93</sup> Statistics Poland (GUS)

### Germany ahead of United Kingdom as leading country of origin for foreign tourists

Germany, the United Kingdom, Ukraine and the United States were the leading countries of origin for foreign tourists in 2018 (see chart). At roughly 81 %, the lion's share of tourists come from other EU countries.<sup>94</sup> The breakdown of countries of origin remained largely unchanged year on year, with only German and Ukrainian visitor numbers rising by 0.7 percentage points each. The percentage of visitors from other EU countries also remained relatively constant year on year at 81.6 %.

### Poland: foreign tourists' countries of origin



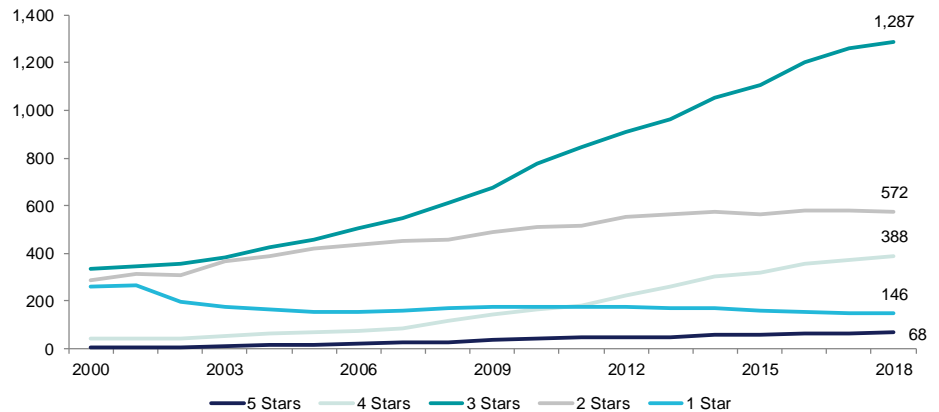
Source: Central Statistical Office Poland (GUS), internal research

### Four-star segment sees strongest growth

In terms of categories, the hotel market features a remarkable number of two- and three-star hotels, accounting for 75 % of Poland's total hotel stock. Moreover, the absolute number of three-star hotels has risen sharply in recent years (see chart), with the number of three-star hotels increasing by 28 to 1,287 between 2017 and 2018. While the number of four- and five-star hotels also increased by 14 and 3 respectively, the number of two- and one-star hotels fell by 10 and 3 respectively. A glance at the average growth rates over the past five years underscores the increasing interest in three- to five-star hotels and the declining popularity of one-star hotels. At 6.38 %, the number of four-star hotels saw the steepest rise on average over the past five years, followed by five-star hotels (up 5.45 %) and three-star hotels (up 5.07 %). Having decreased slightly in absolute terms in the recent past, the average growth rate of two-star hotels stagnated at 0 %. One-star hotels saw the most marked average decline, their ranks dwindling by an average of 3.03 %. The Polish hotel market is therefore increasingly maturing. Mid-range and luxury hotels are posting substantial gains in market share, whereas one- and two-star hotels are losing ground, even though the absolute number of two-star hotels still accounts for 23 % of the overall Polish hotel market.<sup>95</sup>

<sup>94</sup> ibid.

<sup>95</sup> Statistics Poland

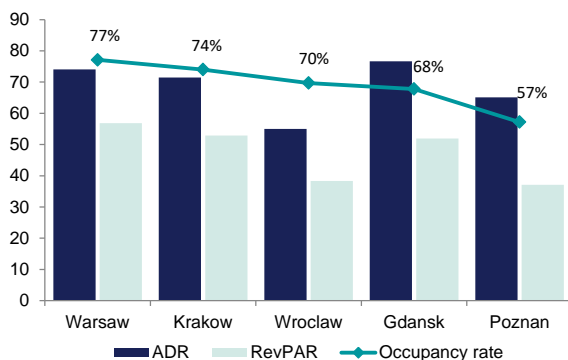
**Poland: hotel development  
by category**

Source: Statistics Poland (GUS), internal research

**Hotel performance highest  
in Warsaw and Gdansk and  
in 4- and 5-star segment**

With an average daily rate (ADR) of € 77,<sup>96</sup> Gdansk is the most expensive city of the five hotel locations investigated by Christie & Co, followed by Warsaw (€ 74), Krakow (€ 71) and Poznan (€ 65, see chart). When it comes to average revenue per available room (RevPAR), however, Warsaw leads the pack at € 57, followed by Krakow (€ 53) and Gdansk (€ 52). The capital also has the highest occupancy rate. In July 2017, 77 % of Warsaw's hotels were occupied, followed by Krakow and Wroclaw. Wroclaw stood out for having the lowest ADR (€ 55) and the second-lowest RevPAR (€ 38) despite having a relatively high occupancy rate of 70 %.

By hotel category, five-star hotels had the highest ADR (€ 102) and the highest average RevPAR (€ 80)<sup>97</sup>, as expected (see chart). RevPAR and ADR were significantly lower for four-star hotels, at € 38 and € 64 respectively. At 58.5 % and 67.3 %, four- and five-star hotels reported the highest occupancy rates, suggesting that the Polish hotel market is maturing. As a result, premium and luxury hotels are increasingly popular and well booked.

**Hotel performance at top 5 tourist destinations in  
2017 (in €)**

Source: Christie &amp; Co, internal research

**Average hotel performance by category in 2017  
(for Poland as a whole)**

Category	ADR (EUR)	RevPAR (EUR)	Occupancy rate
1 star	-	-	54.1%
2 stars	-	-	43.8%
3 stars	41	23	49.1%
4 stars	64	38	58.5%
5 stars	102	80	67.3%

Source: Emmerson, Statistics Poland (GUS)

<sup>96</sup> The most recent ADR and RevPAR data for Warsaw, Krakow, Wroclaw, Gdansk and Poznan was available in zloty for July 2017 and was converted into euros at the exchange rate on 31 July 2017 (1 zloty = € 0.23502).

<sup>97</sup> The latest RevPAR and ADR figures for hotels by category were available in zloty for the end of 2017. Hotel performance was converted at the exchange rate on 31 December 2017 (1 zloty = € 0.22722). No data was available for one- and two-star hotels.

### Investment volume down significantly in 2018, increase expected in years ahead

The volume of investments in hotel real estate stood at € 118.8 million at the end of 2018 and was therefore down 65 % year on year. However, this drastic decline does not necessarily mean that the hotel market is in poor shape overall. The drop in investment volume can instead be attributed to growing geopolitical risks and a lack of high-volume core products – in the form of portfolios, for example – that are new on the market.<sup>98</sup> Hotel investment volume is expected to rise sharply in the years ahead, with the number of beds in Warsaw set to increase by roughly 35 %, for example. Moreover, mixed-use properties, which may include hotel functions, are currently being built in Warsaw and in regional markets. The rising number of consolidated hotel portfolios with a value exceeding € 100 million is increasingly attractive from an investor perspective. They are particularly appealing to major foreign investors that may not be interested in acquiring individual hotel properties.<sup>99</sup>

### Outlook

#### Hotel real estate market

Tourist demand	↗
Number of hotel rooms	↗
RevPAR	↗
ADR	↗
Occupancy rate	↗
Investment volume	↗

The trend towards increasing tourist arrivals and overnight stays by domestic and foreign guests will continue in the years ahead. The positive economic situation with regard to domestic consumption, good employment figures and rising wages are also boosting domestic tourism. The number of hotels rooms is also set to continue rising, with a total of roughly 15,000 new rooms forecast for Poland between now and 2020. Most of those rooms will be created in the Gdansk area (2,614 rooms), Warsaw (3,357 rooms) and the coastal region surrounding Kolobrzeg (1,433 rooms).<sup>100</sup>

Generally speaking, the hotel market is shifting towards the premium and luxury segment, with a growing number of four- and five-star hotels offering fine dining, 24-hour front desk services and conference rooms. ADR and RevPAR also appear set to increase as the number of high-end hotels grows. In light of an improving quality standard in the market and a populace that is increasingly able to afford such accommodation, room occupancy rates are additionally poised to rise and remain high in the years ahead. Despite a recent decrease in hotel real estate investments, volume is expected to rise significantly in 2019 thanks to mixed-use properties and the combination of portfolios, which is likely to attract new major investors. Condo hotels are also increasingly popular, allowing investors to purchase individual rooms within a property, unlike with combined portfolios. Although guests cannot notice any difference between a condo hotel and a regular hotel, condo investments make it possible to invest smaller amounts and quickly back out of investments if needed.<sup>101</sup>

## 7. Outlook

The Polish economy developed very dynamically in 2018. Positive economic development can be expected this year and in 2020, albeit at a somewhat more moderate rate. As a result, the Polish real estate market will be able to continue expanding with few limitations while further increasing its appeal. Only weaker international trade or an increase in concerns regarding the independence of Poland's justice system could have a negative impact on economic development.

<sup>98</sup> Cushman & Wakefield: Hotel investment scene in CEE

<sup>99</sup> BNP Paribas: Investment Market in Poland

<sup>100</sup> Emmerson Hotel and Condo Market in Poland

<sup>101</sup> ibid.

**Outlook for Poland's  
real estate market**

Demographic development	↗
Real GDP growth	↗
Unemployment rate	↘
Number of employees	↗
Retail sales	→
Tourist demand	↗
Demand for logistics real estate	↗
Household demand	↗

Thanks to the favourable economic conditions, demand on the office real estate market is likely to remain high as the year continues. The market has recently seen a decrease in vacancy rates in connection with excess demand and modest completion rates. Vacancy rates are expected to rise temporarily as a result of the anticipated high completion rates over the remaining course of the year and in 2020 before resuming their decline in subsequent years.

Office floor space is expected to continue expanding in Warsaw and in regional markets, which are benefiting from the growing trend towards geographic diversification. The country's special position as an outsourcing location for companies from western Europe will continue to result in growth potential for the Polish office market going forward. Factors such as Brexit could help Poland to grow even more attractive as a nearshoring and outsourcing destination.

Thanks to rising wages and salaries, the Polish retail real estate market should continue benefiting from brisk private consumption and the associated increase in retail sales in the years ahead. A trend towards consolidation, the introduction of a ban on Sunday trading and the constant entry of well-known global brands into the market – particularly in the luxury segment – indicate that the retail market is increasingly adapting to western European standards. The increase in the number of global brands could help to boost the relatively under-represented shopping street format. The share of sales volume accounted for by online retail is currently still low but will continue to rise in future, placing the retail sector under pressure to change. More and more Polish shopping centres are attempting to respond to this development through multichannel concepts and by offering leisure activities and services designed to increase customer engagement.

The Polish logistics real estate market has developed rather dynamically in recent years and has seen a marked increase in the stock of modern warehousing space. High demand on the rental and investment markets is expected to continue over the remaining course of the year. Going forward, the country is likely to continue benefiting from the increase in intra-European freight transport in light of the current programmes to expand infrastructure, especially the road network. The growth in e-commerce also offers additional opportunities for Poland's logistics real estate market.

Poland's popularity as a tourist destination and as a location for trade fairs and congresses is growing. The hotel market is expanding thanks to a rise in overnight stays by domestic and foreign guests. Thanks to rising tourism demand, further expansion of the hotel market can be expected in the years ahead. The hotel market is shifting towards the premium and luxury segment, which the market will probably be able to easily absorb due to the population's rising purchasing power and a further increase in business tourism. Investor interest should rise due in particular to the growing share of condo hotels.

Although the current real estate cycle has been in place for some time now, a downturn in the Polish real estate market is not on the horizon.



**Contacts at the NORD/LB Group****Deutsche Hypo**

Deutsche Hypothekbank is a Pfandbriefbank specialising in the financing of commercial real estate. It is a member company of the NORD/LB Group in which it forms the centre of competence for the core business field of Commercial Real Estate Financing. Founded in 1872, Deutsche Hypo operates in Germany, the United Kingdom, France, the Benelux countries, Spain and Poland. The bank has its headquarters in Hanover, with locations in Berlin, Hamburg, Frankfurt, Düsseldorf and Munich, as well as in Amsterdam, London, Paris, Madrid and Warsaw. With around 400 employees and total assets of € 21.1 billion, Deutsche Hypo is among the major German real estate financing institutes. For more information, visit [www.deutsche-hypo.de](http://www.deutsche-hypo.de).

**Contact:**

<b>Ralf Vogel</b>	Head of Domestic Property Finance	+49 (511) 3045-790	<a href="mailto:ralf.vogel@deutsche-hypo.de">ralf.vogel@deutsche-hypo.de</a>
<b>Ingo Martin</b>	Head of Real Estate Structured Finance and International Property Finance	+49 (511) 3045-742	<a href="mailto:ingo.martin@deutsche-hypo.de">ingo.martin@deutsche-hypo.de</a>
<b>Thomas Staats</b>	Head of International Acquisition and London Branch	+49 (511) 3045-163	<a href="mailto:thomas.staats@deutsche-hypo.de">thomas.staats@deutsche-hypo.de</a>
<b>Dieter Koch</b>	Head of Real Estate Investment Banking	+49 (511) 3045-871	<a href="mailto:dieter.koch@deutsche-hypo.de">dieter.koch@deutsche-hypo.de</a>
<b>Beata Latoszek</b>	Head of Warsaw Office	+48 (22) 828 02 53	<a href="mailto:beata.latoszek@deutsche-hypo.de">beata.latoszek@deutsche-hypo.de</a>

**NORD/LB**

NORD/LB is the leading universal bank in the north of Germany. As the Landesbank of Lower Saxony and Saxony-Anhalt, it supports the public sector in municipal financing and assumes the responsibilities of a central bank for the savings banks in these two states as well as Mecklenburg-Western Pomerania. For over 20 years, NORD/LB has been successful as an adviser, financier and partner of residential housing associations and is one of the top 10 financiers in the industry in Germany today. Thanks to detailed market knowledge and many years of expertise in the analysis of housing associations, the bank is capable of developing customised and innovative financial solutions for its customers. For more information, visit [www.nordlb.de](http://www.nordlb.de).

**Contact:**

<b>Cnut Siebert</b>	Head of Valuation Management	+49 (511) 361-8790	<a href="mailto:cnut.siebert@nordlb.de">cnut.siebert@nordlb.de</a>
<b>Mike Kattner</b>	Head of Corporate Customers Housing	+49 (511) 361-1539	<a href="mailto:mike.kattner@nordlb.de">mike.kattner@nordlb.de</a>
<b>Dr Martina Noß</b>	Head of Research/Economy	+49 (511) 361-8701	<a href="mailto:martina.noss@nordlb.de">martina.noss@nordlb.de</a>

## Disclaimer / Additional Information

This research study (hereinafter the „Material“) was drawn up by NORDDEUTSCHE LANDESBANK GIROZENTRALE („NORD/LB“). The supervisory authorities in charge of NORD/LB are the European Central Bank („ECB“), Sonnemannstraße 20, D-60314 Frankfurt am Main, and the Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht* - „BaFin“), Graurheindorfer Str. 108, D-53117 Bonn, and Marie-Curie-Str. 24-28, D-60439 Frankfurt am Main. Details about the extent of NORD/LB's regulation by the respective authorities are available on request. Generally, this Material or the products or services described therein have not been reviewed or approved by the competent supervisory authority.

This Material is addressed exclusively to recipients in Australia, Austria, Belgium, Canada, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Indonesia, Ireland, Italy, Japan, Korea, Luxembourg, the Netherlands, New Zealand, Poland, Portugal, Singapore, Spain, Sweden, Switzerland, the Republic of China (Taiwan), Thailand, the United Kingdom and Vietnam (hereinafter the „Relevant Persons“ or „Recipients“). The contents of this Material are disclosed to the Recipients on a strictly confidential basis and, by accepting this Material, the Recipients agree that they will not forward to third parties, copy and/or reproduce this Material without NORD/LB's prior written consent. This Material is only addressed to the Relevant Persons and any persons other than the Relevant Persons must not rely on the information in this Material. In particular, neither this Material nor any copy thereof must be forwarded or transmitted to Japan or the United States of America or its territories or possessions or distributed to any employees or affiliates of Recipients resident in these jurisdictions.

This Material is not an investment recommendation/investment strategy recommendation, but promotional material solely intended for general information purposes. For this reason, this Material has not been drawn up in consideration of all statutory requirements with regard to the impartiality of investment recommendations/ investment strategy recommendations. Furthermore, this Material is not subject to the prohibition of trading before the publication of investment recommendations/ investment strategy recommendations.

This Material and the information contained herein have been compiled and are provided exclusively for information purposes. This Material is not intended as an investment incentive. It is provided for the Recipient's personal information, subject to the express understanding, which is acknowledged by the Recipient, that it does not constitute any direct or indirect offer, recommendation, solicitation to purchase, hold or sell or to subscribe for or acquire any securities or other financial instruments nor any measure by which financial instruments might be offered or sold.

All actual details, information and statements contained herein were derived from sources considered reliable by NORD/LB. For the preparation of this Material NORD/LB uses issuer-specific financial data providers, own estimates, company information and public media. However, since these sources are not verified independently, NORD/LB cannot give any assurance as to or assume responsibility for the accuracy and completeness of the information contained herein. The opinions and prognoses given herein on the basis of these sources constitute a non-binding evaluation of NORD/LB. Any changes in the underlying premises may have a material impact on the developments described herein. Neither NORD/LB nor its governing bodies or employees can give any assurance as to or assume any responsibility or liability for the accuracy, adequacy and completeness of this Material or any loss of return, any indirect, consequential or other damage which may be suffered by persons relying on the information or any statements or opinions set forth in this Material (irrespective of whether such losses are incurred due to any negligence on the part of these persons or otherwise).

Past performances are not a reliable indicator of future performances. Exchange rates, price fluctuations of the financial instruments and similar factors may have a negative impact on the value and price of and return on the financial instruments referred to herein or any instruments linked thereto. In connection with securities (purchase, sell, custody) fees and commissions apply, which reduce the return on investment. An evaluation made on the basis of the historical performance of any security does not necessarily give an indication of its future performance.

This Material neither constitutes any investment, legal, accounting or tax advice nor any representation that an investment or strategy is suitable or appropriate in the light of the Recipient's individual circumstances, and nothing in this Material constitutes a personal recommendation to the Recipient thereof. The securities or other financial instruments referred to herein may not be suitable for the Recipient's personal investment strategies and objectives, financial situation or individual needs.

Also this Material as a whole or any part thereof is not a sales or other prospectus. Correspondingly, the information contained herein merely constitutes an overview and does not form the basis for an investor's potential decision to buy or sell. A full description of the details relating to the financial instruments or transactions which may relate to the subject matter of this Material is set forth in the relevant (financing) documentation. To the extent that the financial instruments described herein are NORD/LB's own issues and subject to the requirement to publish a prospectus, the conditions of issue applicable to any individual financial instrument and the relevant prospectus published with respect thereto as well NORD/LB's relevant registration form, all of which are available for downloading at [www.nordlb.de](http://www.nordlb.de) and may be obtained, free of charge, from NORD/LB, Georgsplatz 1, 30159 Hanover, shall be solely binding. Any potential investment decision should at any rate be made exclusively on the basis of such (financing) documentation. This Material cannot replace personal advice. Before making an investment decision, each Recipient should consult an independent investment adviser for individual investment advice with respect to the appropriateness of an investment in financial instruments or investment strategies as contemplated herein as well as for other and more recent information on certain investment opportunities.

Each of the financial instruments referred to herein may involve substantial risks, including capital, interest, index, currency and credit risks, political, fair value, commodity and market risks. The financial instruments could experience a sudden substantial deterioration in value, including a total loss of the capital invested. Each transaction should only be entered into on the basis of the relevant investor's assessment of its individual financial situation as well as of the suitability and risks of the investment.

NORD/LB and its affiliates may, for their own account or for the account of third parties, participate in transactions involving the financial instruments described herein or any underlying assets, issue further financial instruments having terms that are the same as or similar to those governing the financial instruments referred to herein as well as enter into transactions to hedge positions. Such actions may affect the price of the financial instruments described in this Material.

To the extent the financial instruments referred to herein are derivatives, they may involve an initial negative market value from the customer's point of view, depending on the terms and conditions prevailing as of the transaction date. Furthermore, NORD/LB reserves the right to pass on its economic risk from any derivative transaction it has entered into to third parties in the market by way of a mirror image counter-transaction.

Further information on any fees which may be included in the sales price is set forth in the brochure „Customer Information Relating to Securities Transactions“ which is available at [www.nordlb.de](http://www.nordlb.de).

The information set forth in this Material shall supersede all previous versions of any relevant Material and refer exclusively to the date as of which this Material has been drawn up. Any future versions of this Material shall supersede this present version. NORD/LB shall not be under any obligation to update and/or review this Material at regular intervals. Therefore, no assurance can be given as to its currentness and continued accuracy.

By making use of this Material, the Recipient shall accept the foregoing terms and conditions.

NORD/LB is a member of the protection scheme of Deutsche Sparkassen-Finanzgruppe. Further information for the Recipient is set forth in clause 28 of the General Terms and Conditions of NORD/LB or at [www.dsgv.de/sicherungssystem](http://www.dsgv.de/sicherungssystem).

#### **Additional information for recipients in Australia**

*NORD/LB IS NOT A BANK OR AN AUTHORISED DEPOSIT TAKING INSTITUTION AUTHORISED UNDER THE BANKING ACT 1959 OF AUSTRALIA. IT IS NOT REGULATED BY THE AUSTRALIAN PRUDENTIAL REGULATION AUTHORITY.*

NORD/LB is not providing personal advice with this Material, and has not considered one or more of the recipient's objectives, financial situation and need (other than for anti-money laundering purposes).

#### **Additional information for recipients in Austria**

None of the information contained in this Material constitutes a solicitation or offer by NORD/LB or its affiliates to buy or sell any securities, futures, options or other financial instruments or to participate in any other strategy. Only the published prospectus pursuant to the Austrian Capital Market Act should be the basis for any investment decision of the Recipient.

For regulatory reasons, products mentioned in this Material may not being offered into Austria and are not available to investors in Austria. Therefore, NORD/LB might not be able to sell or issue these products, nor shall it accept any request to sell or issues these products, to investors located in Austria or to intermediaries acting on behalf of any such investors.

#### **Additional information for recipients in Belgium**

Evaluations of individual financial instruments on the basis of past performance are not necessarily indicative of future results. It should be noted that the reported figures relate to past years.

#### **Additional information for recipients in Canada**

This Material is a general discussion of the merits and risks of a security or securities only, and is not in any way meant to be tailored to the needs and circumstances of any Recipient.

#### **Additional information for recipients in Cyprus**

This Material constitutes an analysis within the meaning of the definition section of the Cyprus Directive D1444-2007-01(No 426/07). Furthermore, this material is provided for informational and advertising purposes only and does not constitute an invitation or offer to sell or buy or subscribe any investment product.

#### **Additional information for recipients in Czech Republic**

There is no guarantee to get back the invested amount. Past performance is no guarantee of future results. The value of investments could go up and down.

The information contained in this Material is provided on a non-reliance basis and its author does not accept any responsibility for its content in terms of correctness, accuracy or otherwise.

#### **Additional information for recipients in Denmark**

This Material does not constitute a prospectus under Danish securities law and consequently is not required to be nor has been filed with or approved by the Danish Financial Supervisory Authority as this Material either (i) has not been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market within the meaning of the Danish Securities Trading Act or any executive orders issued pursuant thereto, or (ii) has been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market in reliance on one or more of the exemptions from the requirement to prepare and publish a prospectus in the Danish Securities Trading Act or any executive orders issued pursuant thereto.

#### **Additional information for recipients in Estonia**

It is advisable to examine all the terms and conditions of the services provided by NORD/LB. If necessary, Recipient of this Material should consult with an expert.

#### **Additional information for recipients in Finland**

The financial products described in this Material may not be offered or sold, directly or indirectly, to any resident of the Republic of Finland or in the Republic of Finland, except pursuant to applicable Finnish laws and regulations. Specifically, in the case of shares, those shares may not be offered or sold, directly or indirectly, to the public in the Republic of Finland as defined in the Finnish Securities Market Act (746/2012, as amended). The value of investments may go up or down. There is no guarantee to get back the invested amount. Past performance is no guarantee of future results.

#### **Additional information for recipients in France**

NORD/LB is partially regulated by the Autorité des Marchés Financiers for the conduct of French business. Details about the extent of our regulation by the respective authorities are available from us on request.

This Material constitutes an analysis within the meaning of Article 24(1) Directive 2006/73/EC, Article L.544-1 and R.621-30-1 of the French Monetary and Financial Code and does qualify as recommendation under Directive 2003/6/EC and Directive 2003/125/EC.

#### **Additional information for recipients in Greece**

The information herein contained describes the view of the author at the time of its publication and it must not be used by its Recipient unless having first confirmed that it remains accurate and up to date at the time of its use.

Past performance, simulations or forecasts are therefore not a reliable indicator of future results. Mutual funds have no guaranteed performance and past returns do not guarantee future performance.

**Additional information for recipients in Indonesia**

This Material contains generic information and has not been tailored to certain Recipient's specific circumstances. This Material is part of NORD/LB's marketing materials.

**Additional information for recipients in Ireland**

This Material has not been prepared in accordance with Directive 2003/71/EC, as amended, on prospectuses (the "Prospectus Directive") or any measures made under the Prospectus Directive or the laws of any Member State or EEA treaty adherent state that implement the Prospectus Directive or those measures and therefore may not contain all the information required where a document is prepared pursuant to the Prospectus Directive or those laws.

**Additional information for recipients in Japan**

This Material is provided for information purposes only and it is not intended to solicit any orders for securities transactions or commodities futures contracts. While we believe that the data and information contained in this Material is obtained from reliable sources, we do not guarantee the accuracy or completeness of the data and information.

**Additional information for recipients in Korea**

This Material has been provided to you without charge for your convenience only. All information contained in this Material is factual information and does not reflect any opinion or judgement of NORD/LB. The information contained in this Material should not be construed as an offer, marketing, solicitation or investment advice with respect to financial investment products in this Material.

**Additional information for recipients in Luxembourg**

Under no circumstances shall this Material constitute an offer to sell, or issue or the solicitation of an offer to buy or subscribe for Products or Services in Luxembourg.

**Additional information for recipients in New Zealand**

NORD/LB is not a registered Bank in New Zealand. This Material is general information only. It does not take into account your financial situation or goals and is not a personalized financial adviser service under the Financial Advisers Act 2008.

**Additional information for recipients in Netherlands**

The value of your investments may fluctuate. Results achieved in the past do not offer any guarantee for the future (De waarde van uw belegging kan fluctueren. In het verleden behaalde resultaten bieden geen garantie voor de toekomst).

**Additional information for recipients in Poland**

This Material does not constitute a recommendation within the meaning of the Regulation of the Polish Minister of Finance Regarding Information Constituting Recommendations Concerning Financial Instruments or Issuers thereof dated 19 October 2005.

**Additional information for recipients in Portugal**

This Material is intended only for institutional clients and may not be (i) used by, (ii) copied by any means or (iii) distributed to any other kind of investor, in particular not to retail clients. This Material does not constitute or form part of an offer to buy or sell any of the securities covered by the report nor can be understood as a request to buy or sell securities where that practice may be deemed unlawful. This Material is based on information obtained from sources which we believe to be reliable, but is not guaranteed as to accuracy or completeness. Unless otherwise stated, all views herein contained are solely expression of our research and analysis and subject to change without notice.

**Additional information for recipients in Singapore**

This Analysis is intended only for Accredited Investors or Institutional Investors as defined under the Securities and Futures Act in Singapore. If you have any queries, please contact your respective financial adviser in Singapore.

This Analysis is intended for general circulation only. It does not constitute investment recommendation and does not take into account the specific investment objectives, financial situation or particular needs of the Recipient. Advice should be sought from a financial adviser regarding the suitability of the investment product, taking into account the specific investment objectives, financial situation or particular needs of the Recipient, before the Recipient makes a commitment to purchase the investment product.

**Additional information for recipients in Sweden**

This Material does not constitute or form part of, and should not be construed as a prospectus or offering memorandum or an offer or invitation to acquire, sell, subscribe for or otherwise trade in shares, subscription rights or other securities nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever. This Material has not been approved by any regulatory authority. Any offer of securities will only be made pursuant to an applicable prospectus exemption under EC Prospectus Directive, and no offer of securities is being directed to any person or investor in any jurisdiction where such action is wholly or partially subject to legal restrictions or where such action would require additional prospectuses, other offer documentation, registrations or other actions.

**Additional information for recipients in Switzerland**

This Material has not been approved by the Federal Banking Commission (merged into the Swiss Financial Market Supervisory Authority "FINMA" on 1 January 2009).

NORD/LB will comply with the Directives of the Swiss Bankers Association on the Independence of Financial Research, as amended.

This Material does not constitute an issuing prospectus pursuant to article 652a or article 1156 of the Swiss Code of Obligations. This Material is published solely for the purpose of information on the products mentioned in this advertisement. The products do not qualify as units of a collective investment scheme pursuant to the Federal Act on Collective Investment Schemes (CISA) and are therefore not subject to the supervision by the Swiss Financial Market Supervisory Authority (FINMA).

**Additional information for recipients in the Republic of China (Taiwan)**

This Material is provided for general information only and does not take into account any investor's particular needs, financial status, or investment objectives. Nothing in this Material should be construed as a recommendation or advice for you to subscribe to a particular investment product. You should not rely solely on the Material provided when making your investment decisions. When considering any investment, you should endeavour to make your own independent assessment and determination on whether the investment is suitable for your needs and seek your own professional financial and legal advice.

NORD/LB has taken all reasonable care in producing this Material and trusts that the information is reliable and suitable for your situation at the date of publication or delivery, but no representation or warranty of accuracy or completeness is given. To the extent that NORD/LB has exercised the due care of a good administrator, we accept no responsibility for any errors, omissions, or misstatements in this Material. NORD/LB does not guarantee any investment results and does not guarantee that the strategies employed will improve investment performance or achieve your investment objectives.

**Additional information for recipients in the UK**

NORD/LB is subject to limited regulation by the Financial Conduct Authority ("FCA") and the Prudential Regulation Authority ("PRA"). Details about the extent of our regulation by the FCA and PRA are available from NORD/LB on request.

This Material is a financial promotion. Relevant Persons in the UK should contact NORD/LB's London Branch, Investment Banking Department, Telephone: 0044 / 2079725400 with any queries.

Investing in financial instruments referred to in this Material may expose an investor to a significant risk of losing all of the amount invested.

### Time of going to press

5 July 2019 11:00h (CET)