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MAIN REGIONAL REAL ESTATE MARKETS IN GERMANY 2020

Dynamic development in the
office markets – retail sector
marked by changes

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PREFACE

Dear readers,

As one of the leading real estate banks in Germany, we regularly analyse the markets we actively cover. With available commercial properties and commercial floorspace becoming increasingly rare – especially at the top locations, Germany's seven largest cities by population – regional real estate markets are gaining in importance for investors. To better assess opportunities and risks in these markets, we regularly publish a study analysing the main regional real estate markets for office and retail properties in the twelve regional centres of Germany: Augsburg, Bremen, Darmstadt, Dresden, Essen, Hanover, Karlsruhe, Leipzig, Mannheim, Mainz, Munster and Nuremberg. The developments there are compared with the seven top locations.

Office properties, the biggest market segment, maintained their uptrend despite the economic slowdown. The market is being shaped by an increasingly short supply of floorspace, given rapidly diminishing vacancies. There are noticeable differences in rent dynamics across the locations analysed, from strong increases in Dresden (up by close to 10 per cent) to market stagnation in Darmstadt. Whilst the metropolitan areas benefit from top rent levels in absolute terms, the regional real estate markets offer attractions in the form of more homogeneous development as well as higher achievable initial yields. The number of completed new office buildings is set to rise in 2020; moreover, the increase in employment is expected to slow down. It is thus fair to expect the momentum of rent increases to weaken as well. The environment for high-street retailers remains challenging. Demand for inner-city locations generally remains strong; however, traditional fashion and electronics retailers are under pressure, reducing their sales areas. As a consequence, top rents have been stagnating since 2016; last year they showed a slight decline on average – a trend that is set to prevail for the foreseeable future.

This report on “Regional Real Estate Markets 2020” – the eleventh in this series – supplements “The German Real Estate Market” – our series of specialist publications published in the autumn of each year. In addition, we analyse the commercial real estate markets in individual German federal states: a report on Bavaria will be published in May, followed by a report on Hesse, Rhineland-Palatinate and the Saarland in August. An overview of DZ HYP's real estate market reports to date is available on our website <https://www.dzhyp.de/en/about-us/market-research/>.

Yours sincerely,

DZ HYP

March 2020

OFFICE CONSTRUCTION PICKING UP, RETAIL RENTS DOWN AGAIN

Interest rates fell again in 2019 instead of changing direction. Yields on ten-year Bunds have been consistently negative since May 2019. The level of interest from many institutional investors in commercial real estate therefore remains high. True, initial rental yields have also fallen. However, yields of just under 3 per cent can still be generated from first-class office and retail properties. Initial rental yields of 4 per cent in the regional centres show an even greater divergence from the Bund yield. Thanks to this advantage, investment reached a historic peak of just over EUR 70 billion in 2019 despite a shortage of available properties. Office premises are in particular in demand, and account for more than 50 per cent of investment volume. Retail properties follow in second position. However, their proportion has halved to less than 20 per cent as a result of the boom in online shopping.

Investor interest in commercial real estate led to record investment volume in 2019

The general climate for commercial real estate has deteriorated somewhat as macro-economic growth has slowed. The export-driven manufacturing industry in particular is struggling against a headwind. If any one of a number of international crisis scenarios escalates, this could have a further negative impact. Conversely, the domestic economy remains buoyant. Private households are benefiting from continuing low unemployment and strong income growth. However, retail rents are likely to fall again slightly as the advance of online shopping continues. In contrast, the upward trend in office rents is likely to persist. After years of scaling back the number of vacant properties, many office markets are strained. However, as in the housing market, accelerating construction activity and high rent levels are slowing the upward trend in office rents.

Supply shortage drives office rents up, retail rents fall as demand for space weakens

The main focus of the commercial real estate market is the top locations, in other words the seven most densely populated German cities, with their high economic power and large, liquid property markets. However, there is also potential in the **regional centres**, some of which are only slightly smaller. They are also reaping the benefits of higher rental yields. However, market transparency in these locations could be better. This 11th edition of our market report aims to supplement the information available on **regional property centres**. As before, in addition to **12 regional centres** throughout Germany, the **7 top locations** are also included.

The 11th edition of the “Regional property centres” market report provides information on the office and retail market segments in 12 regional centres and 7 top locations

OVERVIEW OF LOCATIONS

12 Regional Centres (Index: Regional 12)				7 Top Locations (Index: Top 7)	
City	Federal state	City	Federal State	City	Federal State
Augsburg	Bavaria	Leipzig	Saxony	Berlin	Berlin
Bremen	Bremen	Dresden	Saxony	Cologne	North Rhine-Westphalia
Darmstadt	Hesse	Mainz	Rhineland- Palatinate	Düsseldorf	North Rhine-Westphalia
Essen	North Rhine-Westphalia	Mannheim	Baden-Württemb.	Frankfurt	Hesse
Hannover	Lower Saxony	Münster	North Rhine-Westphalia	Hamburg	Hamburg
Karlsruhe	Baden-Württemb.	Nuremberg	Bavaria	Munich	Bavaria
				Stuttgart	Baden-Württemb.

In the next chapter we analyse the office market for the 19 locations included. Starting on page 13 we then provide a market overview of the retail sector. Starting on page 21 we review individual locations in alphabetical order. Tables showing the most important market data can be found on pages 71 to 73.

Office property: space shortage drives rents up

Last year was more than good for owners of office properties. Given that less space was available, and with a solid trend in employment, office rents were likely to rise, but the extent of the increase was still surprising. The pace of economic growth did slow visibly over the year as a result of weak exports. A number of international crisis scenarios also weighed on company sentiment.

However, rent trends in individual office locations diverged, ranging from stagnation to boom. The latter was mainly evident in east German locations, where economic development is positive. Berlin clearly topped even the strong rent growth in Dresden and Leipzig. However, overall rent growth in the top locations – apart from Düsseldorf – was also more marked than in regional centres, despite significantly higher prime rents.

Despite economic weakness, dynamic growth in office rents continued in 2019

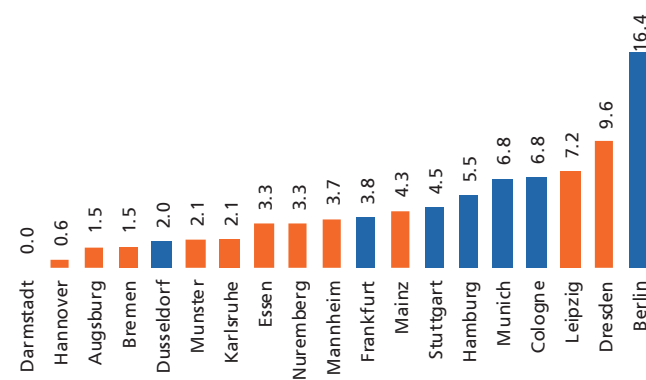
East German locations showed the strongest rent growth in 2019

PRIME OFFICE RENTS INCREASED SHARPLY IN 2019
PRIME OFFICE RENTS IN EUR PER M²



Source: bulwiengesa

RATES OF RENT GROWTH DIVERGE WIDELY
PRIME OFFICE RENTS IN 2019 IN PER CENT VS. PREVIOUS YEAR



Source: bulwiengesa

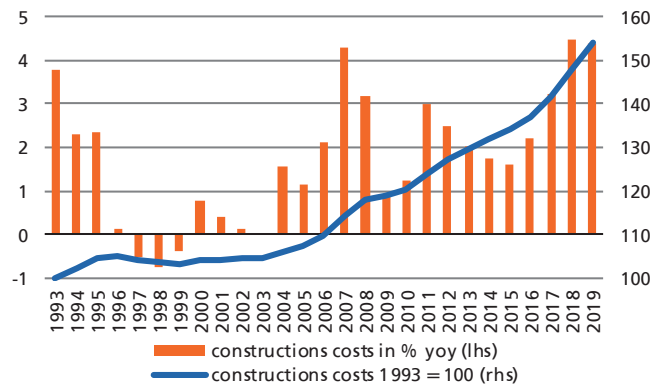
The shortage of available office space has already long been evident. While in the past, after reunification and during the dotcom boom, the volume of office space exceeded demand, after the international financial crisis virtually no new office property was developed. However, employment growth has also led to a further decline in vacant space. Potential tenants have found it increasingly difficult to find suitable office space from the existing stock.

There is no sign of the tense market conditions easing any time soon. True, the project pipeline has filled up significantly. However, given the overall level of construction activity for office and administration buildings, the supply of space is unlikely to improve visibly in the short term. One positive factor is the clear increase in the number of building approvals for office space. Volume of just over 4 million m² is nevertheless much lower than, for example, in the 1990s. As in the housing market, the number of completions lags behind the volume of building projects approved. Since the construction sector is largely operating at full capacity, construction volume is not expected to increase significantly.

Similar to the housing market, the volume of available office space is also much too low

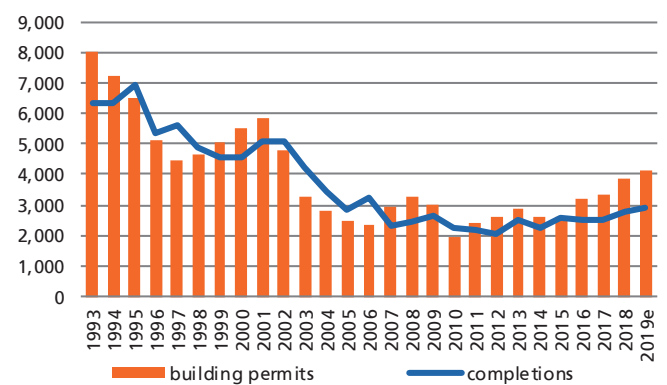
Office completions lag behind projects approved

OFFICE CONSTRUCTION MUCH MORE EXPENSIVE RECENTLY BUILDING COSTS FOR OFFICE BUILDINGS (CONSTRUCTION) EXCL. SALES TAX



Source: German Federal Statistical Office

VOLUME OF APPROVED SPACE FOR OFFICE AND ADMINISTRATIVE BUILDINGS RISING FASTER THAN COMPLETED SPACE FLOOR SPACE IN 1,000 M² (THROUGHOUT GERMANY)



Source: German Federal Statistical Office, DZ BANK forecast

Higher building costs could also be an obstacle to growth in office construction. In addition to pure building costs, which increased by about 4.5 per cent in both 2018 and 2019, land prices have risen sharply in some places, particularly in the major cities. Rent growth of this magnitude can only be achieved in some office locations, and office projects are thus becoming less profitable. The expansion of new office construction could also accelerate growth in building costs and land prices further, but will dampen rent growth.

Rapid growth in building costs could hamper office construction

The growing shortage of space is good news for coworking providers. If companies and public administrators find it increasingly difficult to rent the space they need for their employees, they will be more prepared to rent comparatively expensive, but flexible coworking space. Providers of coworking space were therefore actively seeking new space last year. True, large providers such as WeWork, Design Office, rent25 and Regus mainly let office space in the top locations, as in the past. However, large office locations among the regional centres, such as Bonn and Essen, were also on their “shopping lists” in 2019.

Coworking boom continues

Market conditions in the office market

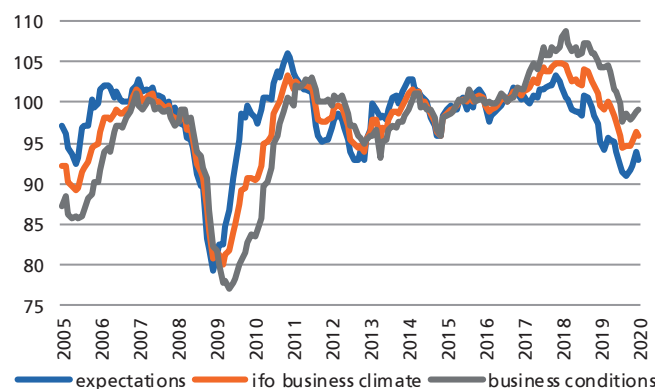
The economic basis of the office markets has deteriorated. However, thanks to strong growth in private consumption and the construction sector, the situation was not quite as bad as had at times been feared, and a recession was narrowly avoided. Macroeconomic growth was nonetheless weak at 0.6 per cent, with exports and lower levels of investment the main braking factors. In industry as a whole, and in the important automotive sector, clear signs of a slowdown are evident. One positive factor is that the prospects are already looking slightly brighter again. We expect macroeconomic growth of 1 per cent in 2020. However, this is based on hopes that the global economy will stabilise and that political risks such as the China-USA trade dispute, Brexit, and the crisis in the Middle East will not escalate.

German economy narrowly avoided recession in 2019

The more positive assessment of conditions is also clear from surveys of experts carried by the ifo Institute and ZEW. Index levels for both the business climate (ifo) and the economy (ZEW) have improved again visibly after previously falling sharply. This applies to both assessments of current conditions as well as expectations. The ifo and ZEW indices are already at much higher levels than in autumn 2019.

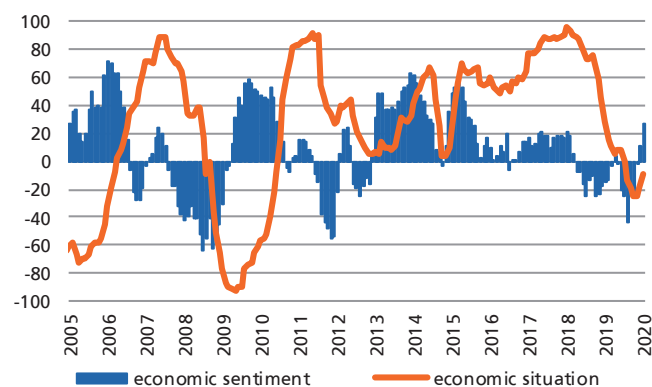
Companies and analysts slightly more upbeat about the economic outlook again

IFO INSTITUTE BUSINESS CLIMATE IMPROVES AGAIN SLIGHTLY



Source: ifo Institute

ECONOMIC EXPERTS SURVEYED BY ZEW SLIGHTLY MORE UPBEAT ABOUT PROSPECTS

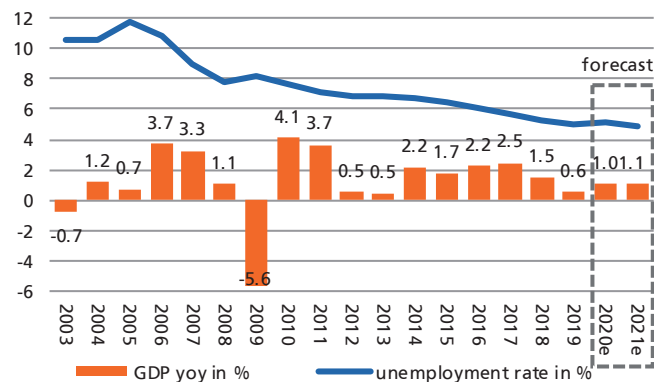


Source: ZEW

The economic slowdown has left its mark on the labour market. Within a year, the number of job vacancies fell by around 100,000 to 710,000 in December 2019. Many large companies such as Audi, Bayer, Bosch, Commerzbank, Daimler, Deutsche Bank, Ford, Opel and Siemens are also shedding a significant number of jobs. Short-time working has also increased to its highest level since 2013. Viewed overall, labour market conditions nevertheless remain good. The number of people in work is at a record level of more than 45 million, and despite rising to 5.3 per cent (January 2020), the unemployment rate is low and demand for skilled workers is high. In this climate, negotiated wages increased by more than 3 per cent in 2019.

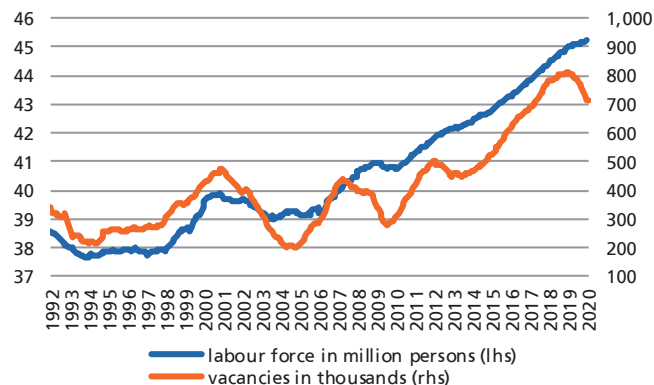
**Labour market conditions
deteriorate, but remain
generally good**

FAIRLY GOOD CHANCE OF GERMANY AVOIDING RECESSION



Source: Eurostat, DZ BANK forecast

BUT SLOWER ECONOMIC PACE IMPACTS LABOUR MARKET

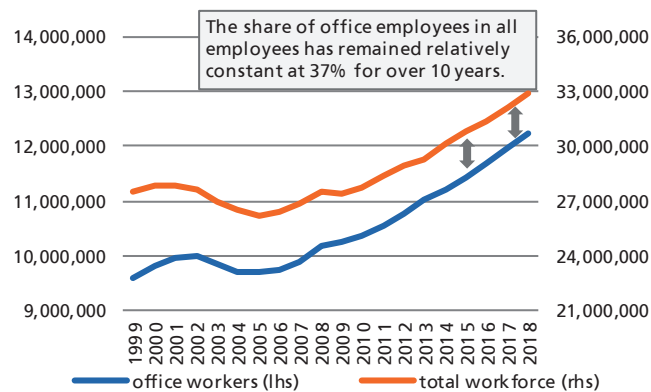


Source: German Federal Employment Agency

If, as we expect, moderate economic growth is realised, there will be no risk of a decline in employment. However, growth will not match the strong levels of previous years. But how will the situation develop in major cities where the population and employment have previously grown strongly? The braking effect is reflected here in a slowing of population growth. Contributory factors are the housing shortage in many places and steep rent growth. Nor is there any sign of a fundamental shift in the strained conditions in housing markets. This is unlikely to make it any easier for companies and institutions to hire skilled workers.

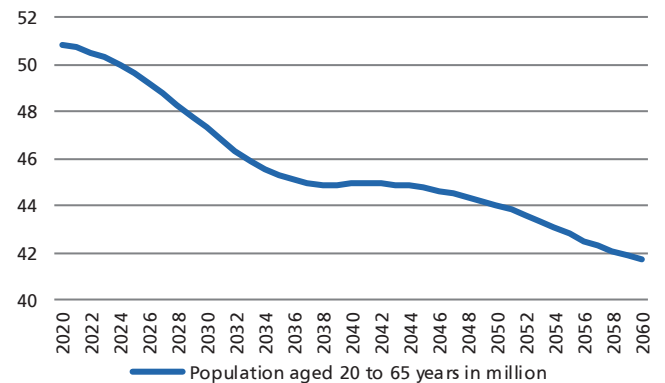
**Employment likely to stabilise
at a high level**

OFFICE EMPLOYMENT LARGELY GROWING IN LINE WITH OVERALL TREND IN EMPLOYMENT



Source: bulwiengesa database of employees paying social security contributions

POTENTIAL LABOUR POOL LIKELY TO CONTRACT VISIBLY IN NEXT 15 YEARS



Source: German Federal Statistical Office

Demand for office space could potentially weaken irrespective of the economic outlook. Baby boomers – the demographic cohort born in the 1950s and 1960s, when the number of births was well in excess of 1 million in some years – will start to retire from about 2020. The number of people aged 20 to 65 will therefore shrink from currently 51 million to 45 million by the middle of the next decade – a 12 per cent decline. This could also lead to a sharp fall in the number of people in work from currently just over 45 million, and in the number of employees paying social security contributions – around 33 million.

When baby boomers retire, the potential labour pool will shrink...

The proportion of office workers relative to employees paying social security contributions has remained fairly stable in recent years at 37 per cent. Given that ratios of older workers and women are already fairly high, the reserves which could stabilise the size of the workforce have been largely exhausted. Although the importance of “white-collar” work will probably increase further, in order to offset a decline in office employment the proportion of office jobs to total employment would have to increase sharply.

... and probably also the number of office workers

Demand for office space could also decline if existing space were used more efficiently. Offices contain many empty desks at the moment because employees are on business trips, working from home, on holiday, on sick leave or are working part-time. Some companies are already therefore using organisational models where employees no longer have their own fixed desk, but are allocated a free desk when they start work. The flexible rental of coworking space, which various providers are actively promoting in the office market, is also part of this shift. However, companies could also let unused office space temporarily to outsiders or freelancers, in order to improve space utilisation.

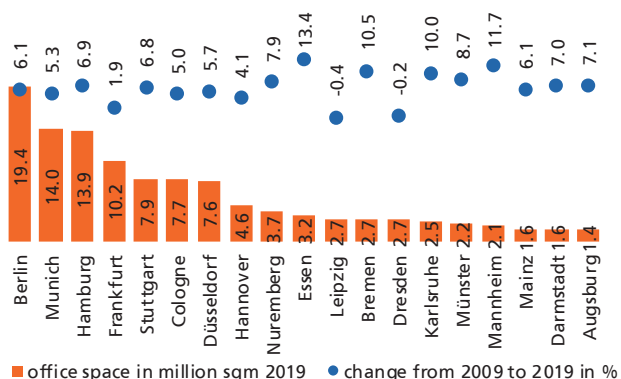
More efficient use of existing space would lead to a decline in demand for office premises

Office: market trend in the locations covered

Just over ten years consideration was being given in many cities as to how vacant office space might be repurposed. To improve the housing supply, a whole series of outdated office properties were converted into attractive apartments and micro-apartments. Today both housing and office space is in short supply, which may create problems for the future economic development of locations where property markets are under particular pressure.

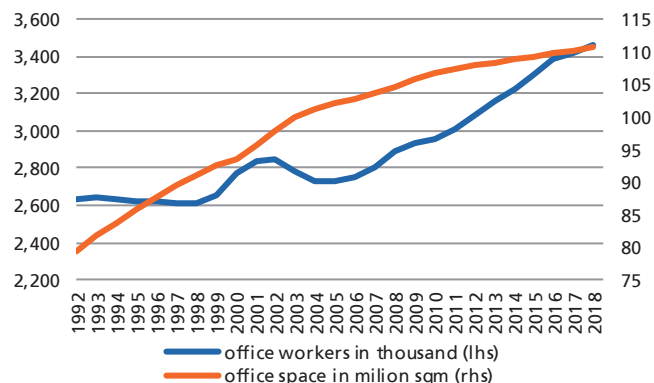
Shortage of offices and homes may hamper the economic development of a location

FROM SMALL TO LARGE – OUR MARKET REPORT COVERS THE RANGE OF GERMAN OFFICE LOCATIONS



Source: bulwiengesha

OFFICE EMPLOYMENT WAS GROWING MUCH FASTER THAN OFFICE SPACE FOR A LONG TIME



Source: bulwiengesha (cumulated over 12 regional centres and 7 top locations)

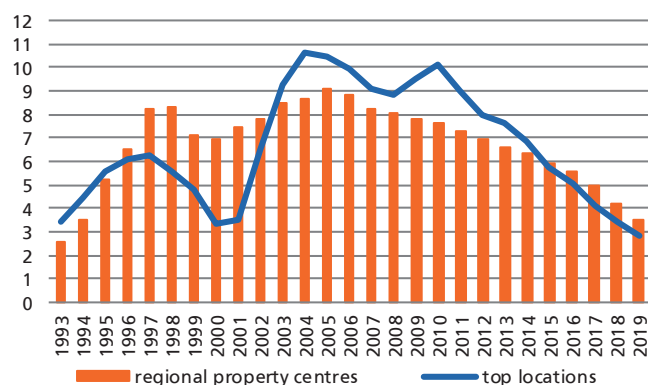
The 19 locations covered in this market report have office space of 112 million m², or approximately 30 per cent of office space available for rent in Germany. The lion's share (81 million m²) relates to the seven top locations, where available space extends from just under 8 million m² in Düsseldorf to more than 19 million m² in Berlin. The 12 regional centres contribute 31 million m² of office space. The size of locations ranges from 1.4 million m² in Augsburg up to 4.5 million m² in Hannover.

Market report covers around 30 per cent of German office space

Cumulative office space has grown by only 6 per cent since 2009, despite continuing high demand. Project development activity has only picked up visibly in the recent past. The initially subdued level of office construction is partly attributable to the previously much larger volume of vacant properties. In 2009, 9.5 million m² of space in the 19 locations, around 9 per cent of the available space, was unlet. Today the figure is only 3.4 million m², or 3 per cent of existing space.

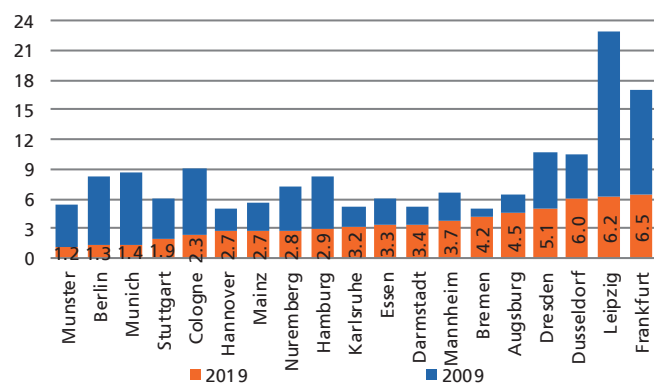
Office space has only grown slowly since 2009

VACANT OFFICE SPACE HAS BEEN DECLINING FOR A LONG TIME VACANCY RATE IN PER CENT



Source: bulwiengesha

VACANCY RATE DOWN EVERYWHERE SINCE 2009 VACANCY RATE IN PER CENT



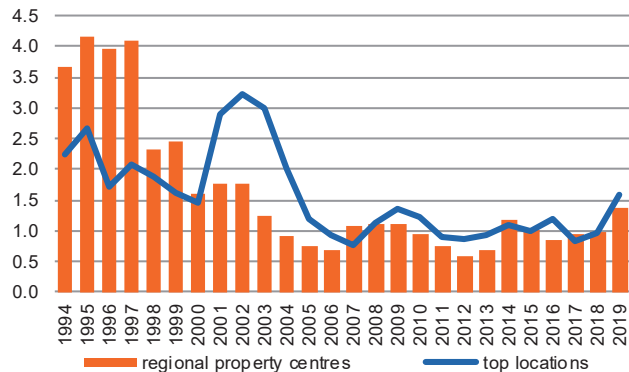
Source: bulwiengesha

Nine locations show vacancy rates of less than 3 per cent, and four of less than 2 per cent. Since the available space is spread over all office locations and various office properties, the functioning of the office markets is correspondingly restricted. Added to this, some of the vacant space is not marketable due to the quality of properties or the location. Higher value office space which is particularly sought-after is also therefore in short supply in locations with comparatively high vacancy rates.

Functioning of office markets restricted to some extent

OFFICE SPACE GREW SLIGHTLY MORE STRONGLY IN 2019 AFTER A LONG PERIOD

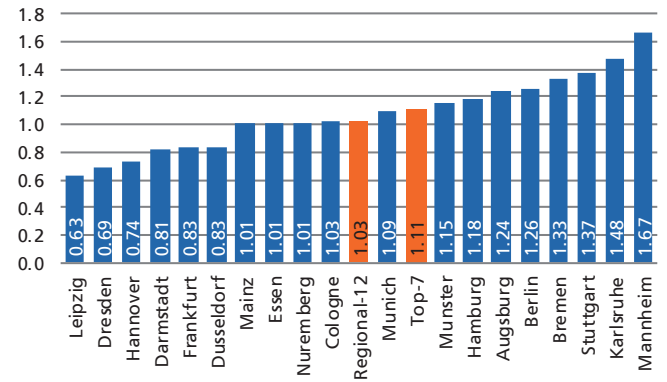
NEW OFFICE SPACE IN PER CENT OF OFFICE SPACE STOCK



Source: bulwiengesa

STRONGER GROWTH IN SPACE IN ONLY A FEW LOCATIONS

NEW OFFICE SPACE IN PER CENT OF OFFICE STOCK (ANNUAL AVERAGE FROM 2015 TO 2019)



Source: bulwiengesa

The main reasons for the shortage of space are weak levels of new office construction in Germany over a period of many years, combined with growth in the number of office jobs. The same applies to the top locations and regional centres we have reviewed. For many years, the annual growth in new space averaged only about 1 per cent – despite high demand for space and rent growth. The volume of new space increased only slightly last year. The shortage of space which arose over many years cannot therefore be remedied. However, on a positive note, the supply of space is gradually improving as a result of growth in new build activity.

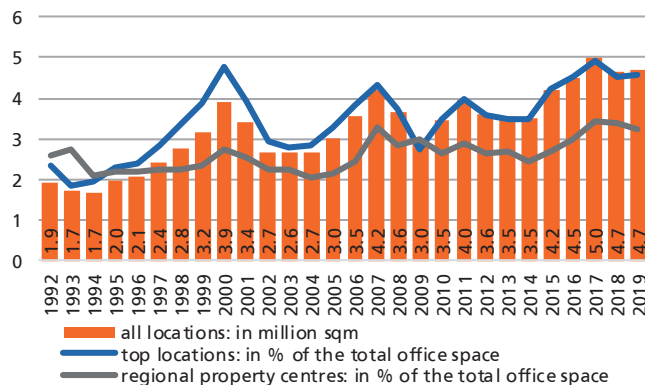
Office space grew slightly more strongly again in 2019 for first time in many years

Despite the low volume of existing office space available, take-up was high again last year. Since 2015 the figure in the 19 locations under review has consistently exceeded 4 million m². In 2019, the second highest figure so far - 4.7 million m² - was recorded, a level exceeded only in 2017. Take-up relative to available office space was just over 3 per cent, compared to 4.6 per cent in the top locations. However, it was striking that the five office markets with the highest relative market activity included the three top locations (Berlin, Düsseldorf and Frankfurt) as well as two regional centres (Essen and Leipzig).

Office take-up at its third highest level to date in the 19 locations in 2019

SUPPLY SHORTAGE RESTRICTS OFFICE TAKE-UP

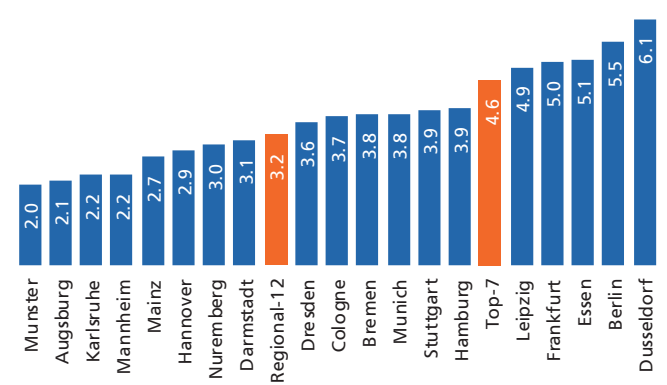
OFFICE TAKE-UP IN M² / PER CENT



Source: bulwiengesa

TAKE-UP IS HIGH IN SOME REGIONAL CENTRES

2019 TAKE-UP AS PER CENT OF OFFICE SPACE



Source: bulwiengesa

The high level of take-up was only possible because an increasing number of rental contracts have been concluded for project developments. This was also reflected in

Growing number of rental contracts for project developments

rental agreements in individual locations. Rental agreements in major contracts also related predominantly to office space which still has to be built. However, this is likely to change in the years ahead. When users move into their new space, the supply of large-scale existing space is likely to increase again as the corresponding space becomes vacant.

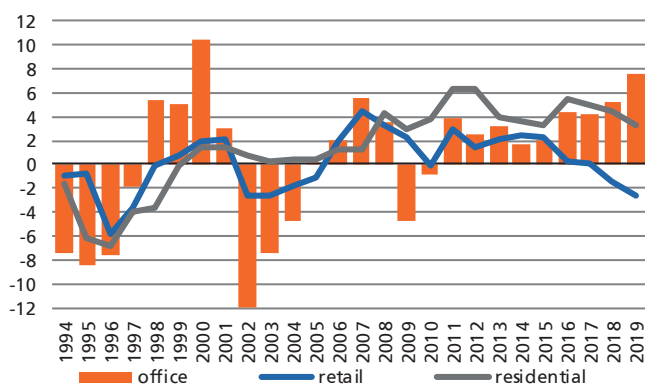
Rents in office markets have been rising consistently for many years. Growth has also recently been stronger than in the housing market and in the retail sector in particular. Rent growth in the housing market has slowed and retail rents have even been falling faster. Conversely, rent growth in the office market has accelerated, probably due to the large proportion of higher rents in new build projects. Across all the 19 locations reviewed, prime office rents increased more steeply last year than at any time since 2000.

Rent growth in office market has accelerated

However, as at that time, the high rent growth is mainly attributable to a sharp increase in the top locations. Here average prime rents have picked up by more than 8 per cent to EUR 33.40 per m². Prime office rents in the top locations have increased by just over 3 per cent to EUR 15.10 per m². Rents have therefore largely regained their levels of the beginning of the 1990s. The same applies to the vacancy level, which at that time was even slightly lower than now. As in the past, rent trends in the regional centres are more stable, and high rent growth is as rare here as years when levels declined. In contrast, the top locations are more volatile. However, the strong rent growth in some places comes at the cost of steeper declines in rents.

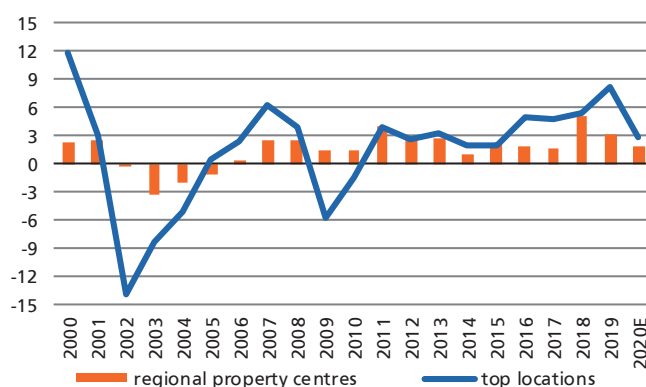
Office rents regain their levels of the early 1990s

STRONG UPWARD TREND: OFFICE RENTS RISING FASTER THAN FOR RETAIL AND HOUSING
RENTS VS. PREVIOUS YEAR IN PER CENT (ALL LOCATIONS)



Source: bulwiengesa

ADVANTAGE OF TOP LOCATIONS: OFFICE RENTS IN LARGE CITIES RISING FASTER THAN IN REGIONAL CENTRES SINCE 2016
PRIME OFFICE RENTS COMPARED TO PREVIOUS YEAR IN PER CENT

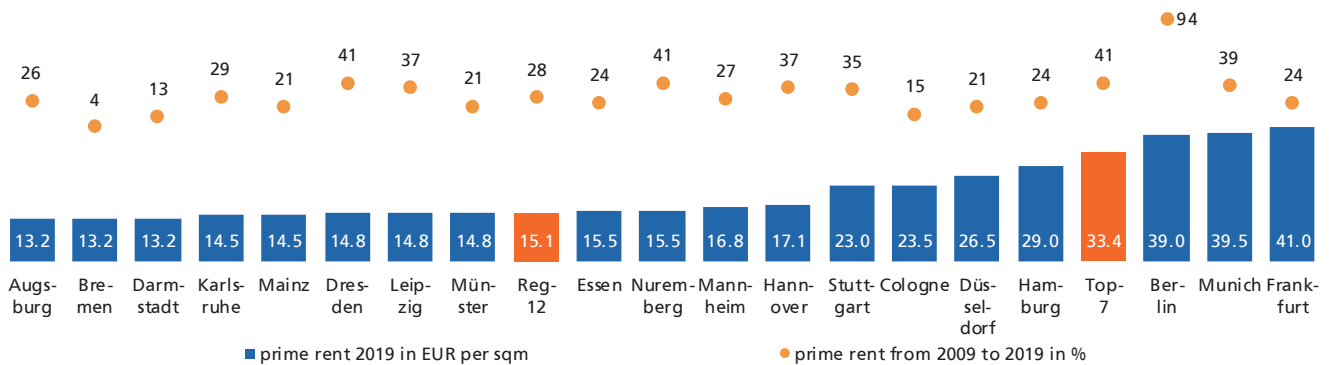


Source: bulwiengesa, DZ BANK forecast

Overall, rent levels in the regional centres are more homogenous, with prime rents ranging from around EUR 13 to 17 per m². This represents a ratio of 1.3. The ratio for the top locations is much higher at 1.8, and prime rents range from EUR 23 to 41 per m². After Frankfurt, Berlin and Munich are also likely to be in the "40 euro class" in the foreseeable future. However, while Frankfurt and Munich have been enjoying a high rent level for some time now, Berlin has managed to climb the ladder in a short time.

Prime rents in regional centres range from EUR 13 to 17 per m²

PRIME OFFICE RENTS: TEN-YEAR RENT TREND RANGES FROM STAGNATION IN BREMEN TO A DOUBLING IN BERLIN



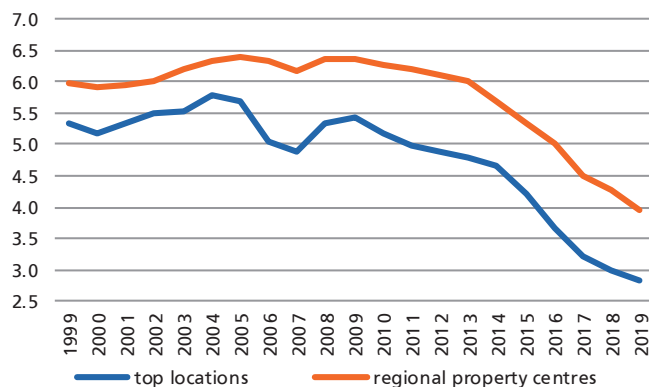
Source: bulwiengesa

Investors have not been slow to cash in on the positive trend in the office market. Last year more than half of total real estate investment of more than EUR 70 billion was in office property. Rental yields weakened again as a result of high demand. On average in the top locations, it fell by 20 basis points in city centre office locations, thus undercutting 3 per cent for the first time. The range extends from 2.6 per cent in Berlin to 3.2 per cent in Cologne. Rental yields in the top locations have halved since 2005. Compared to the average yield of 2.8 per cent in the Top 7, the corresponding figure for regional centres is significantly higher at 4.0 per cent. However, this figure showed a steeper decline of more than 30 basis points last year. The cumulative decline in the yield since 2005 is around 60 per cent. Yields in the regional centres range from 3.7 per cent in Mainz and Nuremberg to 4.5 per cent in Bremen.

Rental yield for office space fell again in 2019

DOWNWARD TREND IN OFFICE YIELDS HAS CONTINUED

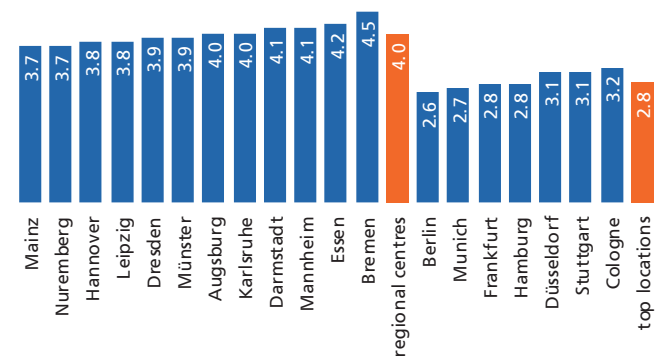
OFFICES CENTRAL LOCATIONS: INITIAL RENTAL YIELD IN PER CENT



Source: bulwiengesa

MEAGRE PROFITS: MUCH MORE THAN 4 PER CENT IS NOT POSSIBLE

OFFICES CENTRAL LOCATIONS: INITIAL RENTAL YIELD IN PER CENT 2019



Source: bulwiengesa

Summary office market and forecasts

The office markets are strained, and it is becoming increasingly difficult to rent space. Office rents have consequently increased sharply, while vacancy rates continue to fall. However, the pace of rent growth is likely to slacken this year, because employment growth has weakened and more office space is being completed. This is also slowing the reduction in vacant space. From 2021, the vacancy rate could increase again slightly due to growth in office construction. There is nevertheless no sign of oversupply given the low vacancy level. However, growth in rents could continue to slow.

The longer-term trend in the office market is much more uncertain. There is a particular question mark over future demand for space, which could be especially affected by a shrinking labour force as baby boomers retire. Office work is also likely to undergo a transformation. It seems unlikely that the majority of office workers will still be sitting at their own desks in an office of two or three people in ten years' time as mobile and flexible working structures gain the upper hand. The technical potential exists for this to happen. And for younger workers, mobile working with a smartphone, tablet and laptop are the norm.

Rent growth likely to weaken in 2020

Office world could be radically transformed in longer term

OFFICE – FORECASTS OF PRIME RENTS AND VACANCY RATES

	2018	2019	2020e
12 regional centres			
Prime rents in EUR/m ² (vs. previous year in %)	14.6 (+5.0)	15.1 (+3.2)	15.4 (+1.9)
Vacancy rate in % (vs. previous year in % points)	4.2 (-0.7)	3.5 (-0.7)	3.4 (-0.1)
7 top locations			
Prime rents in EUR/m ² (vs. previous year in %)	30.8 (+5.3)	33.4 (+8.3)	34.3 (+2.8)
Vacancy rate in % (vs. previous year in % points)	3.4 (-0.7)	2.8 (-0.6)	2.8 (-0.0)

Source: bulwiengesa, DZ BANK forecast

all averages are space-weighted

Prime rents represent the average of the top 3 to 5 per cent of market rentals, and the stated figure does not therefore correspond to the absolute top rent.

Retail property: prime rents fell again in 2019

According to figures from German Retail Federation (HDE), retail sales grew strongly by more than 3 per cent in 2019 compared to the previous year. However, city centres have benefited less from this than local suppliers and online retailers. For customers prefer to shop online for products which are important for city centre retail such as clothing, shoes and electronic products. Retailers are adapting by streamlining their branch networks, reducing the size of their sales floors and demanding more flexible rental contracts. This trend is likely to continue. According to press reports in recent weeks, C&A and Deutsche Telekom plan to close 100 branches each, and Media-Saturn is to downsize its electronics stores, while the Depot home-ware chain wants to reduce the amount of rent it pays.

Strong growth in consumption of little benefit to city centre businesses

Market conditions for the retail sector

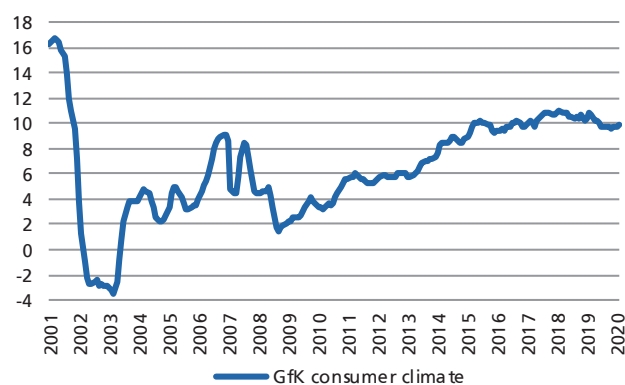
The slowdown in the German economy has not yet had any negative impact on the retail sector. On the contrary, the labour market is in excellent condition with high employment levels, low unemployment and high wage growth. In addition to wages, which showed high nominal growth of around 3 per cent in 2019, there is also a positive trend in pensions. After growing by more than three per cent in the two previous years, they could even increase by 5 per cent in 2020 as a result of an adjustment to the formula used to calculate pensions. Thanks to moderate inflation, private households are also enjoying significant real income growth.

Higher incomes pave the way for retail sales growth

The continuing high level of consumer confidence – which has so far remained virtually unscathed by the various international crisis scenarios – is another positive predictor that consumer demand will remain buoyant. Private consumption is being braked at most by a strong inclination to save. Although an increasing number of credit institutions are imposing negative interest rates on investors, the savings ratio is high at 11 per cent.

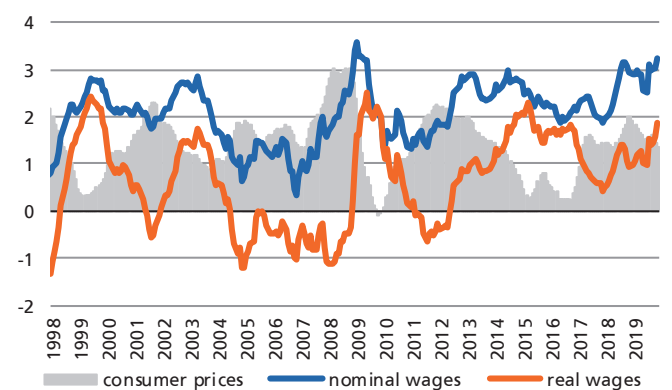
Consumer confidence falters slightly at a high level

CONSUMER CLIMATE DETERIORATES SLIGHTLY, BUT STILL AT A HIGH LEVEL



Source: GfK

MODERATE INFLATION LEADS TO STRONG WAGE GROWTH, BOTH NOMINALLY AND IN REAL TERMS



Source: German Federal Statistical Office, Refinitiv

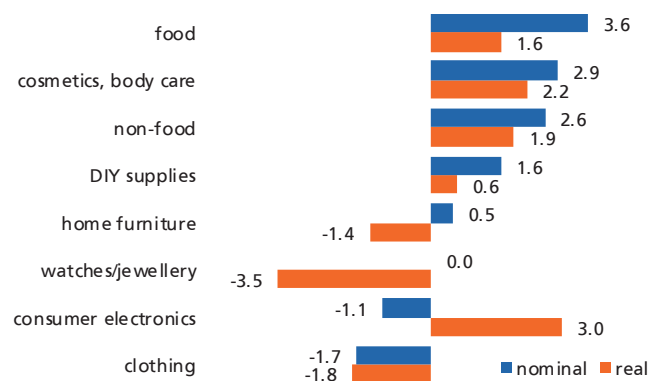
Based on figures from the HDE, retail sales increased again in Germany in 2019 to more than EUR 540 billion. Since 2015, sales in the retail sector have shown strong average annual growth of 3.5 per cent. Conversely, only a few years ago, retail sales stagnated for about a decade. The upward trend has only been in evidence since 2009, thanks to the economic upturn. Since then, retail sales have increased by EUR 125 billion, or around 30 per cent.

Retail sales grow by 30 per cent within ten years

However, the positive impact of the strong sales growth is overshadowed for retail stores by the fact that one third comes from the rapid advance of online shopping. The proportion of sales generated by online retail has now increased to nearly 11 per cent, while in-store retail sales have fallen to EUR 486 billion. True, growth of 21 per cent here since 2009 is also reasonable. However, after deducting the 15 per cent increase in consumer prices, in real terms growth at shop tills has been very modest. The result is even more dismal over an extended period. Adjusted for inflation, in-store retail sales have fallen by around 20 per cent since the millennium.

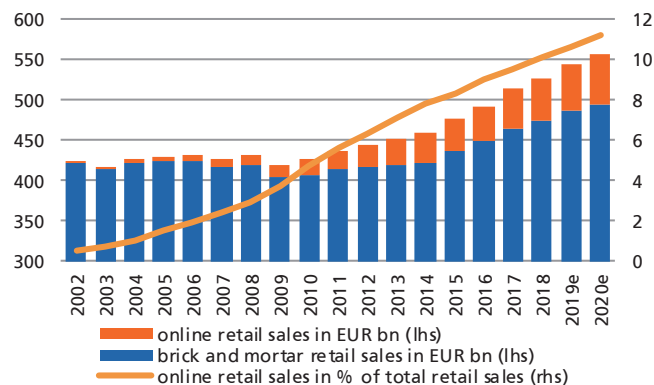
Online shopping grows to nearly 11 per cent of retail sales

MAIN RETAIL GROWTH IS OUTSIDE CITY CENTRES
2018 RETAIL SALES AS PER CENT COMPARED TO PREVIOUS YEAR



Source: HDE/ German Federal Statistical Office, DZ BANK forecast

STORES MUST SHARE RETAIL SALES GROWTH WITH ONLINE SHOPPING



Source: HDE

The situation is even worse for city centre retail, because sales in the various sectors represented there – fashion, shoes, electronics and jewellery – show below-average growth. This could be because private households have reached a certain saturation point after several years of strong growth. Consumers also prefer to order fashion and electronics articles from the internet. City centre sales are also weakening because fashion chains also have a presence in popular outlet centres. However, out-of-town retail parks are also responsible for declining sales in city centres. Conditions are comparatively good for locations where shrinking sales can be absorbed by growth in the population and in tourism.

City centre product mix a cause of concern for the retail sector

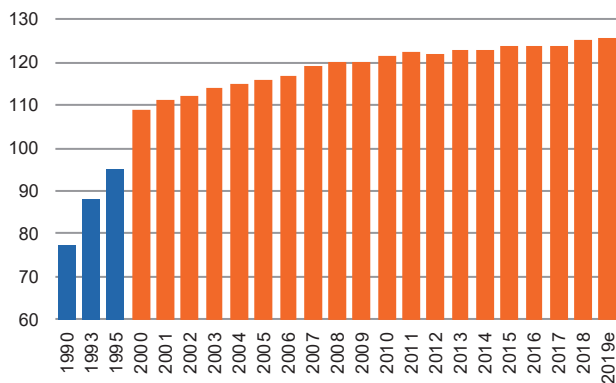
The shift in shopping habits is clearly reflected in space productivity – measured as sales per m². Based on calculations from bulwiengesa, sales productivity for in-store retail improved by just over 1 per cent overall between 2014 and 2018, although major differences were evident between individual retail segments. The main beneficiaries of strong growth in sales productivity were local shops (+7 per cent) and drugstores (+3 per cent). Conversely, electronics stores (-4 per cent), department stores (-5 per cent) and fashion outlets (-13 per cent) lost considerable ground. Sales space has nevertheless been expanded.

Declining space productivity for fashion, department stores and electronics

City centre shopping trips remain popular – despite the fact that less is being purchased there. People enjoy spending time in shopping streets and shopping centres, which have often been updated as a result of project and urban development. The range of food and drink on offer has also been extended to enhance the quality of stay. However, footfall in city centres is generally declining. Away from the leading shopping locations, the consequences are already clear today. Prime locations are contracting at the edges, and vacant properties and discount stores are becoming more numerous. In order to prevent a continuing downward spiral of falling customer numbers and business closures, the HDE has just presented an 11-point plan to create attractive city centres.

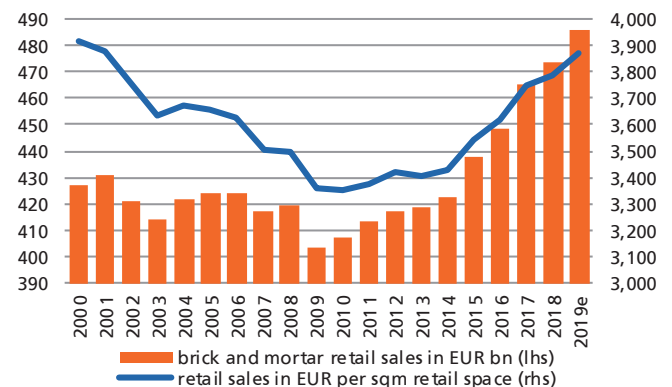
City centre shopping trips still popular – but footfall generally declining

THE SALES SPACE CONTINUES TO GROW, BUT ONLY SLOWLY
SALES SPACE IN GERMANY IN MILLION M²



Source: HDE, DZ BANK

CALCULATED OVER ALL GERMAN SALES SPACE, SALES PRODUCTIVITY IS PICKING UP AGAIN



Source: HDE, DZ BANK

City centre locations are still nevertheless generally in demand. However, alternatives to fashion and electronics stores will become more important in future. For example, these might include supermarkets, drugstores, and bars and restaurants - particularly franchises. Although hybrid sales concepts – consisting of a high street store plus an online shop – are thinning out the networks of chain stores, concepts previously focused solely on online retail are now seeking to establish a high street presence. Leisure and experience-orientated concepts such as fitness studios, indoor play areas and providers of virtual reality events are also featuring. City centre space is also interesting for coworking offices. Plus points are easy accessibility, shopping opportunities and the proximity of bars and restaurants.

City centre space likely to remain in demand

Online shopping and economic weakness are not the only challenges faced by in-store retail. Rising housing costs mean a smaller proportion of disposable income. A housing shortage is hampering migration to expensive large cities. The proportion of pensioners with lower incomes in retirement is also increasing as the population ages. This trend could be intensified by growing levels of poverty in old age. Shopping habits may also change as older people become less mobile. On the other hand, pensioners have more leisure time for shopping.

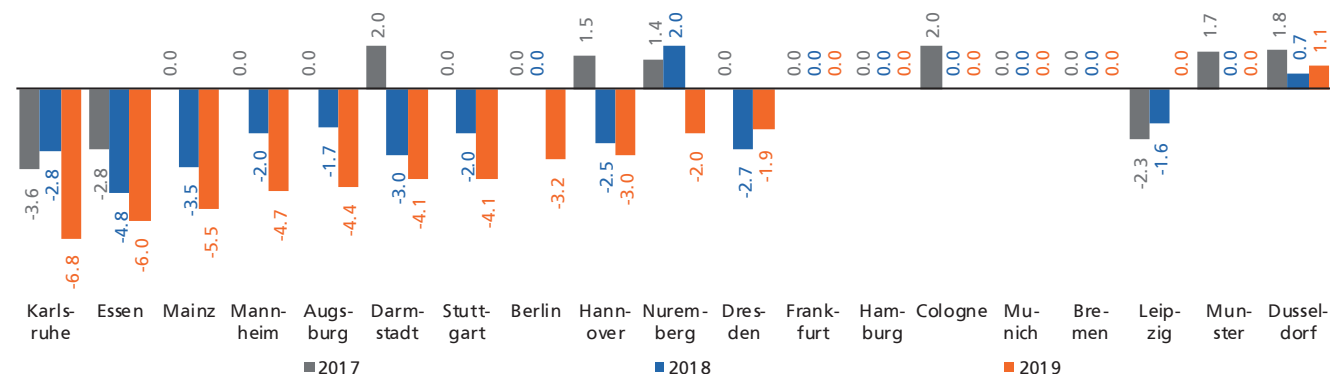
Rising housing costs and an ageing population could dampen retail demand

Retail: Market trend in the locations reviewed

For more than ten years, prime rents in the locations reviewed in our report increased sharply. However, this trend came to a halt in 2016. As retailers adjusted to a changing environment and associated weaker demand for sales space, prime rents began to fall in 2017. Initially locations where prime rents were declining were offset by those where rents were growing. However, the downward trend became more widespread in 2018, and rents remained virtually static. The downtrend accelerated again last year. Regional centres were worst affected by falling rents. Conversely, the top locations managed to largely maintain their much higher rent levels.

Regional centres particularly affected by the rent decline which started in 2017

DOWNTREND: RENTS FALL IN A GROWING NUMBER OF RETAIL LOCATIONS PRIME RENTS IN PER CENT COMPARED TO THE PREVIOUS YEAR



Source: bulwiengesha

Prime rents in the regional centres have fallen by a cumulative 4 per cent in the last three years to an average of around EUR 129 per m² recently. Conversely, the decline in rents in the top locations was much weaker at only 1 per cent, although the average prime rent there is more than twice as high at EUR 294. The steepest declines in rent occurred in three locations: prime rents in Mainz are down by 9 per cent since 2016, and by 13 per cent respectively in Essen und Karlsruhe.

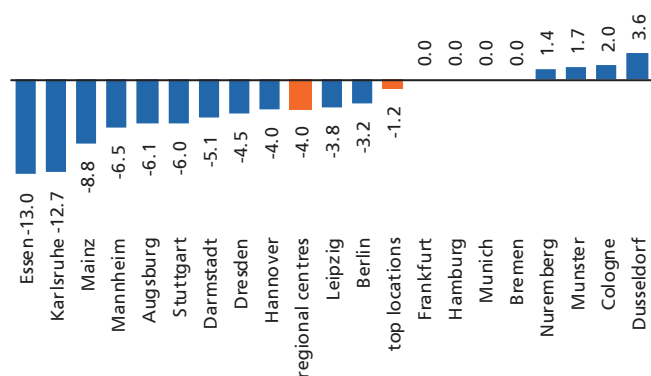
Prime rents in two regional centres show double-digit percentage decline since 2016

What has caused rent trends to diverge so markedly since 2016? The period of time is too short for wide variations in economic conditions. The labour market trend has also been consistently positive. In most of the locations reviewed the unemployment rate fell by 1 to 2 percentage points. One important aspect is the major importance of the top locations for retailers as a result of their market size and internationality. Regional centres are not generally so well placed. They are also more numerous and thus more interchangeable. This explains both the significantly higher prime rents in top locations and also their more stable rent trends in the current market climate. Other factors are the supply of space, purchasing power, and the trend in customer potential due to population growth and tourism.

Why have rent trends diverged so widely within a short period?

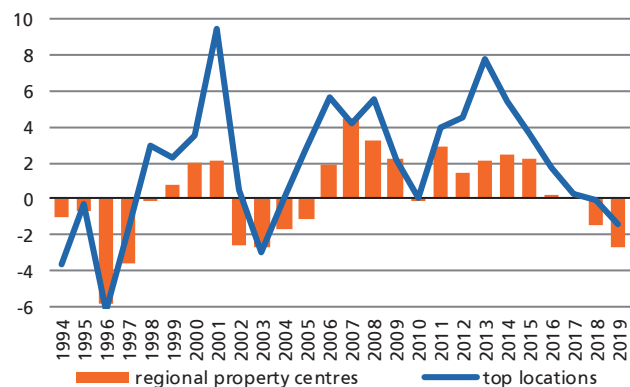
Regional centres more interchangeable as shopping locations

RETAIL RENTS DOWN SHARPLY IN SOME REGIONAL CENTRES PRIME RENTS FROM 2016 TO 2019 IN PER CENT



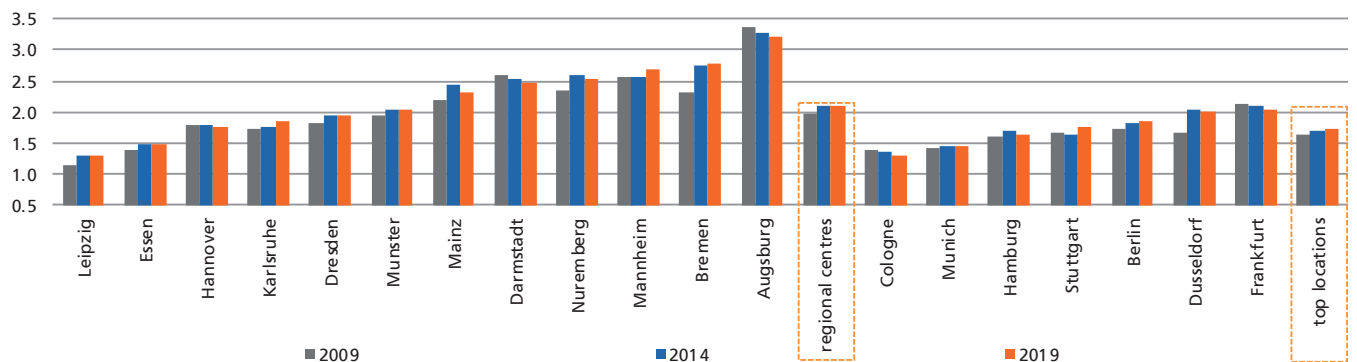
Source: bulwiengesha

RETAIL RENTS FELL IN REGIONAL CENTRES AND THE TOP 7 IN 2019 PRIME RENTS COMPARED TO PREVIOUS YEAR IN PER CENT



Source: bulwiengesha

AVERAGE SALES SPACE IN REGIONAL CENTRES IS RELATIVELY LARGER SALES SPACE PER CAPITA IN M²



Source: Scope

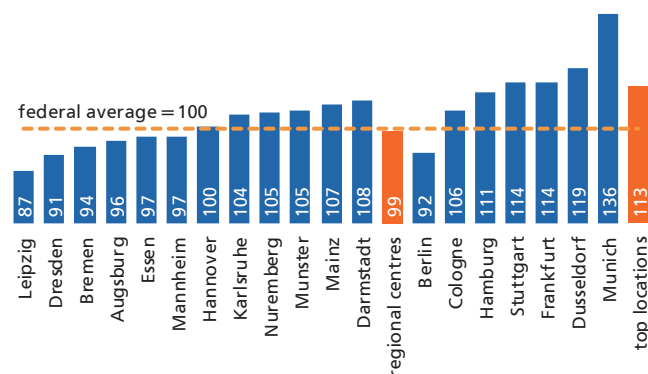
The total volume of sales space in all areas of the cities in the 19 locations has remained virtually unchanged in the last five years. This is illustrated in the diagram above which shows sales space relative to population size. In some instances, sales space per capita has also fallen slightly due to demographic growth. No general divergences are evident between top locations and regional centres in terms of the trend in sales space. However, on average and per capita, regional centres have a larger volume of sales space than the top locations. Slackening demand for space could therefore be reflected more strongly in rents in the regional centres.

Sales space per capita larger in regional centres

The top locations score with their good purchasing power, which leads to high consumer demand. Only Berlin has purchasing power which is below the German national average. Conversely, the purchasing power of the other six top locations begins at roughly the same level as the regional centres with the highest purchasing power. In six regional centres, purchasing power is below the German national average. On the other hand, differences in centrality between the regional centres and the top locations are relatively small.

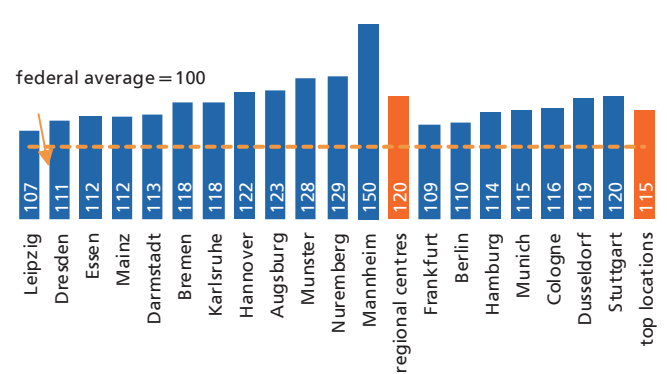
Six top locations score with high purchasing power

TOP LOCATIONS WELL AHEAD IN TERMS OF PURCHASING POWER PURCHASING POWER FIGURES IN POINTS



Source: bulwiengesa

NO MAJOR DIFFERENCES IN CENTRALITY CENTRALITY FIGURES IN POINTS



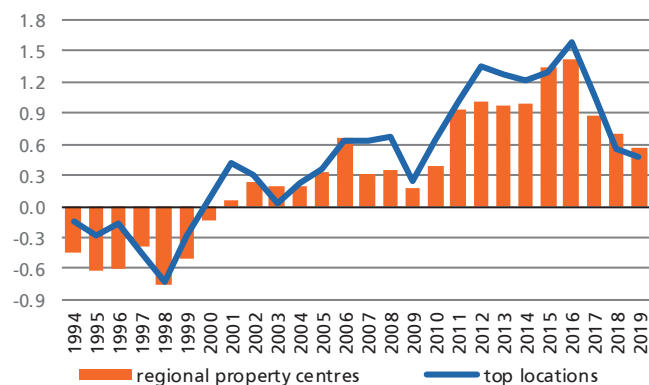
Source: bulwiengesa

A growing population also creates greater customer potential, and helps to mitigate the decline in sales driven by online shopping. However, there has been no major divergence in population trends in regional centres and top locations in the recent past. Overall population growth has in any case slowed visibly. However, it may well

Virtually no difference between demographic trends in regional centres and top locations

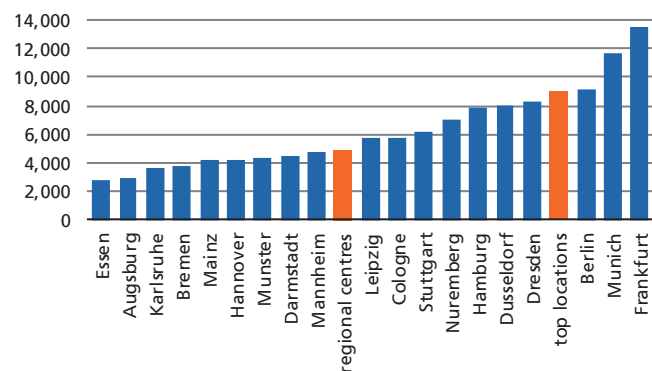
be that top locations are expected to have better long-term growth prospects, and that this is reflected in current rent trends. In addition to demographic growth, tourism can also generate substantial volumes of retail sales. The top locations are particularly attractive to visitors, and have nearly twice the level of overnight stays per 1,000 inhabitants.

VIRTUALLY NO DIFFERENCE IN POPULATION TRENDS POPULATION GROWTH IN PER CENT YEAR-ON-YEAR



Source: Scope

TOP LOCATIONS BENEFIT FROM HIGH VISITOR NUMBERS OVERNIGHT STAYS PER 1,000 INHABITANTS IN 2018

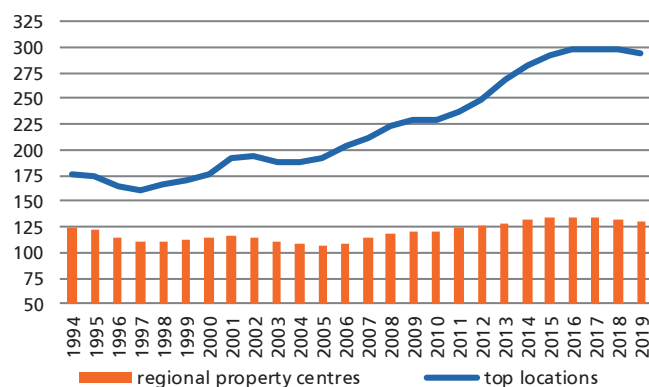


Source: bulwiengesa

The downward trend in prime rents is having a greater impact on the regional centres, not only because the percentage decline is larger, but also because rent growth was also weaker in the past. Average prime rents in the regional centres have thus largely returned to their levels of the beginning of the 1990s – albeit with wide divergences between individual locations. While prime rents in Essen and Karlsruhe have fallen visibly since 1994, they have increased by 30 to 40 per cent in Dresden, Hannover, Leipzig, Mannheim and Münster. Rent levels in Augsburg, Bremen, Darmstadt, Mainz and Nuremberg have remained largely unchanged. Conversely, prime rents in all the top locations have increased sharply. The rent growth over a 25-year period ranges from just over 40 per cent in Stuttgart to nearly 80 per cent in Munich.

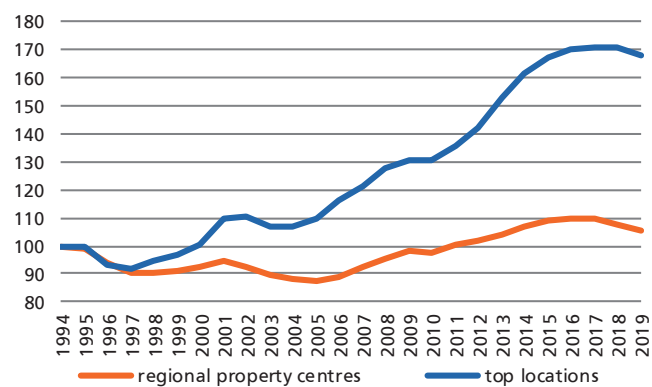
Back to the drawing board: prime rents in regional centres virtually unchanged on average in 25 years

PRIME RETAIL RENTS IN REGIONAL CENTRES CURRENTLY ONLY SLIGHTLY HIGHER THAN 25 YEARS AGO PRIME RETAIL RENTS IN EUR PER M²



Source: bulwiengesa

ONLY TOP LOCATIONS SHOW LONG-TERM GROWTH IN PRIME RENTS PRIME RETAIL RENTS 1994 = 100

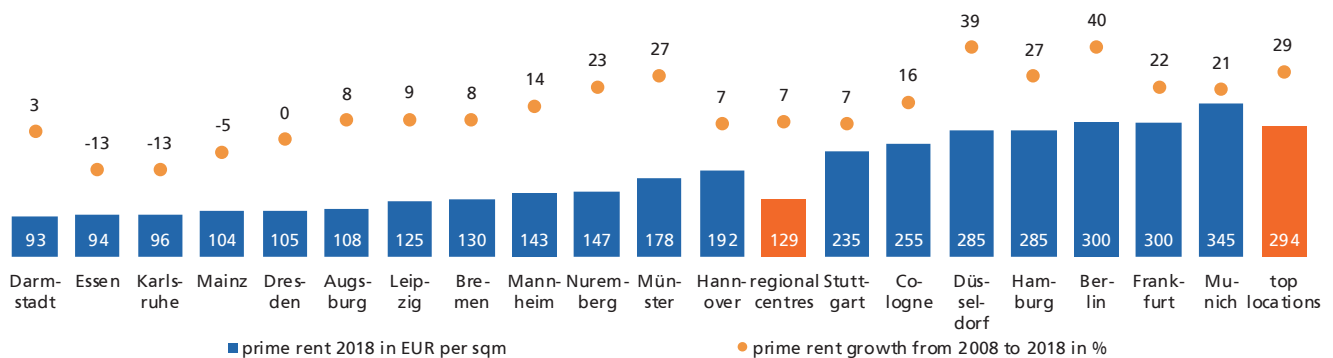


Source: bulwiengesa

In contrast to the office market, prime retail rents in the top locations are comparatively homogenous, whereas there is a broad range in the regional centres. Here, prime rents range from EUR 93 per m² in Darmstadt to EUR 192 per m² in Hannover. The cheapest top locations are Stuttgart and Cologne with prime rents of EUR 235 and EUR 255 respectively per m². Düsseldorf and Hamburg are at EUR 285 per m², and Berlin and Frankfurt EUR 300 per m². The most expensive retail location is Munich where prime rents are EUR 345 per m². Prime rents in the top locations have increased by nearly 30 per cent within ten years, and by less than 10 per cent in the regional centres.

Three locations have prime rents of less than EUR 100 per m², in 2015 triple-digits were recorded everywhere

PRIME RETAIL RENTS HAVE FALLEN IN 3 OF THE 19 CITIES SINCE 2009

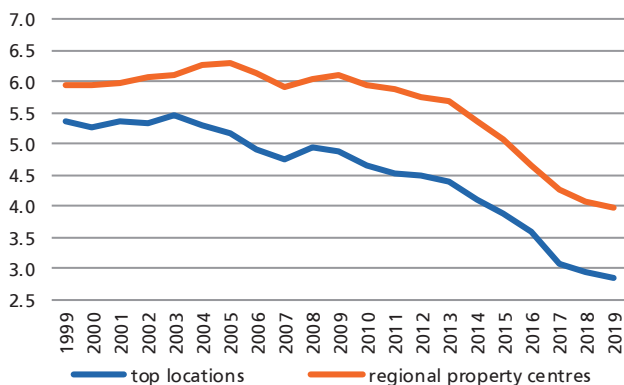


Source: bulwiengesa

Weaker demand for retail space and pressure on prime rents have made investors more reluctant to invest in retail properties. However, this has not led to a reversal of the trend in initial rental yields, which continued to fall in 2019. However, the decline is small, at 10 basis points for both regional centres and top locations. The average initial rental yield for city centre locations in regional centres has fallen to 4.0 per cent. The range extends from 3.4 per cent in Münster to 4.5 per cent in Darmstadt and Essen. The initial rental yield for top locations has contracted to 2.8 per cent. It ranged from 2.6 per cent for the most expensive location – Munich – to 3.2 per cent in Stuttgart.

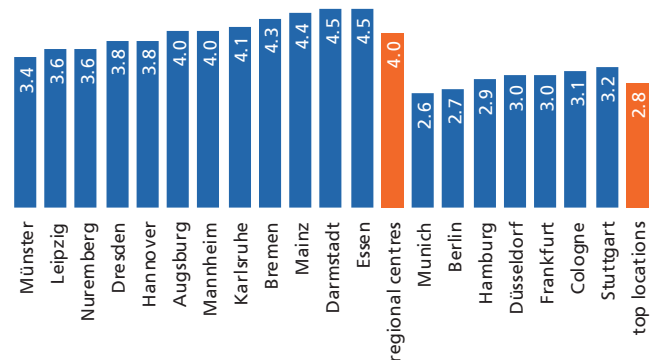
Despite falling rents, initial rental yields contracted again in 2019

YIELDS CONTINUE TO DECLINE DESPITE FALLING RENT LEVELS CITY CENTRE RETAIL LOCATIONS: INITIAL RENTAL YIELD IN PER CENT



Source: bulwiengesa

MÜNSTER AND MUNICH THE MOST EXPENSIVE CITY CENTRE RETAIL LOCATIONS: INITIAL RENTAL YIELD IN PER CENT



Source: bulwiengesa

Summary retail properties and forecasts

In the early years of the new millennium, retail rents were declining on a broad front, similar to today. The trigger was the economic crisis which followed the bursting of the dot-com bubble and the 9/11 attacks. Retail rents recovered again in the subsequent economic upturn. However, it remains uncertain whether the current downward trend in rents will be followed by a recovery. In contrast to a temporary economic downturn, the shift in consumer behaviour caused by digitalisation is likely to be permanent. Online shopping, which is currently particularly successful for fashion and electronics items, will presumably also grow strongly in other product groups.

Landlords and retailers alike face major challenges as a result of this transformation. Adapting to the new consumer era is likely to be of crucial importance to success in renting properties and in the retail business. Retailers will continue to expand hybrid sales channels. This could lead to a further thinning out of branch networks and growing pressure on landlords. Flexible rental contracts for shorter periods and sales-related rents could become the norm given continuing high requirements for the quality of properties.

One positive factor for landlords is the potentially broad user spectrum for city centre locations. In addition to retail, and food and drink outlets, other options would be leisure services, packaging stations and coworking offices. Properties used for these purposes are likely to have a lower vacancy risk. Concepts may also be adapted. In future we could be reporting here on "city centre properties" rather than "retail", while retail properties would be linked to local supply.

The process of adjustment for city centre retail we have described is likely to continue this year. We expect the rent trend evident last year to broadly continue, with prime rents declining slightly or at best remaining stable, depending on the location. Top locations are more likely to be among the cities with stable rent trends, while rents in regional centres are more likely to decline. The rate of decline could however be weaker.

RETAIL – FORECASTS FOR PRIME RENTS

	2018	2019	2020e
12 regional centres			
Prime rents in EUR/m ² (vs. prev. yr. in %)	133 (-1.4)	129 (-2.6)	127 (-1.8)
7 top locations			
Prime rents in EUR/m ² (vs. prev. yr. in %)	298 (0.0)	294 (-1.4)	293 (-0.5)

Source: bulwiengesa, DZ BANK forecast

all averages are space-weighted

Prime rents represent the average of the top 3 to 5 per cent of market rentals, and the stated figure does not therefore correspond to the absolute top rent.

Current decline in rents unlikely to be followed by a rapid recovery

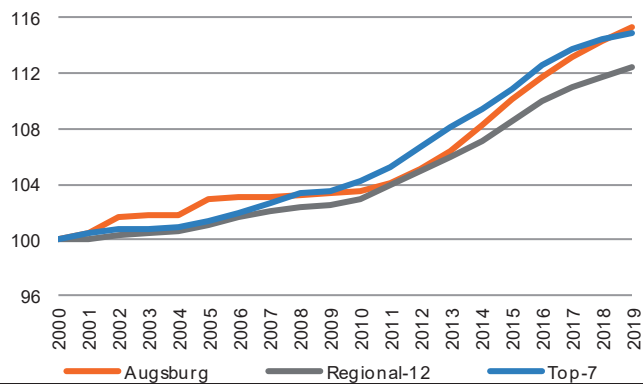
Digitised retail poses major challenges for landlords and retailers

One positive factor for landlords is that city centre locations are attractive to various users

Forecast: last year's slight downward rent trend will continue in 2020

AUGSBURG

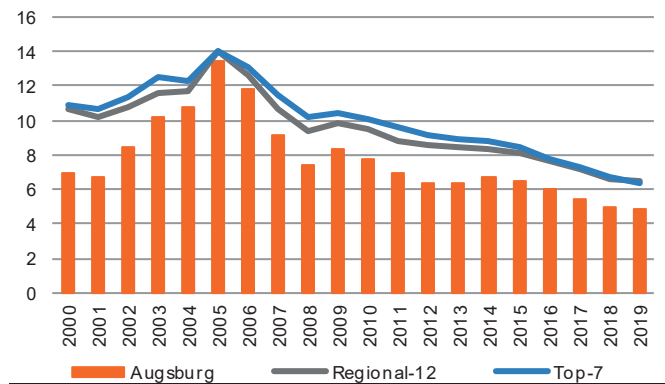
POPULATION GROWTH



Source: Scope

Index 2000 = 100

UNEMPLOYMENT RATE IN PER CENT



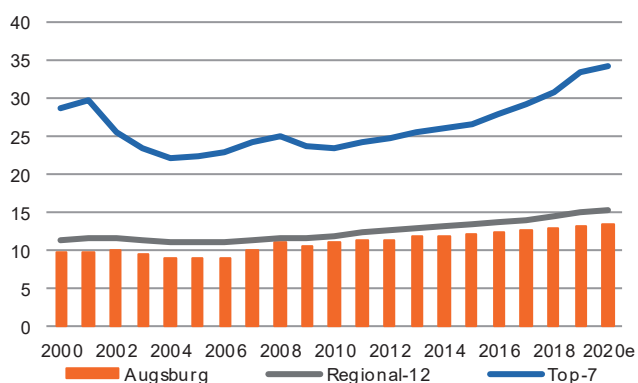
Source: bulwiengesa, BA, DZ BANK forecast

Augsburg, which was established by the Romans, and is famous for its City Hall, Goldener Saal, and the Fuggerei alms houses, is the third most densely populated city in Bavaria. Ten years ago the population began to grow rapidly, and has increased by 11 per cent to nearly 300,000 people since 2009. One important factor is the city's good transport links with Greater Munich 60 kilometres away and the international airport via Autobahn A8 and an Intercity Express (ICE) route. While the Bavarian state capital is "bursting at the seams", Augsburg has reserves of space on former industrial and military sites. However, Augsburg is also growing again in its own right. The structural change which followed the decline of the textile industry, the withdrawal of American forces, and major cases of insolvency, has been largely absorbed. Important sectors are fibre composite technology, environmental technology, IT, mechatronic aerospace technology, and the cultural and creative industries. The unemployment rate is relatively low at 5.4 per cent (January 2020). However it could increase since around 4,000 jobs will be at risk in the years head from the closure of the Ledvance and Fujitsu factories and job losses at robot producer Kuka, MT Aerospace and Premium Aerotec. The founding of the university in 1970 with more than 26,000 students has had a positive impact on the city's development. The planned reconstruction of the university clinic in 2020 will create growth in the scientific sector. Augsburg's infrastructure is being updated as part of the "Augsburg City" project.

Augsburg benefits from proximity to Munich

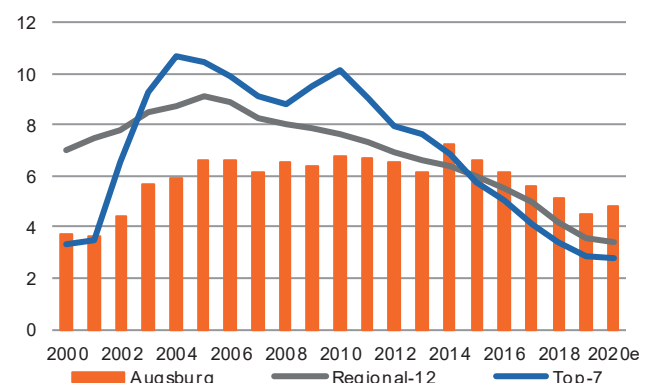
Office space in Augsburg

PRIME RENTS FOR OFFICE SPACE IN EUR PER M²



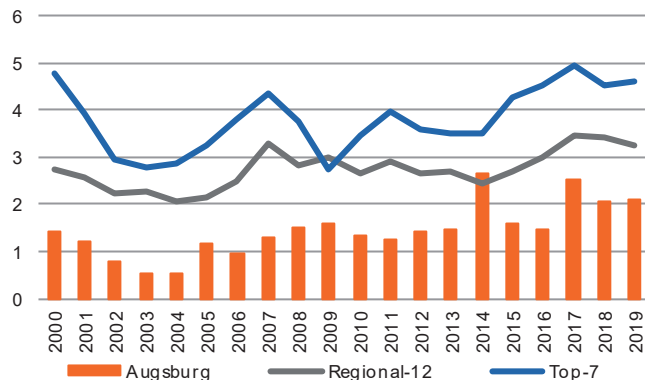
Source: bulwiengesa, DZ BANK forecast

VACANCY RATE IN PER CENT



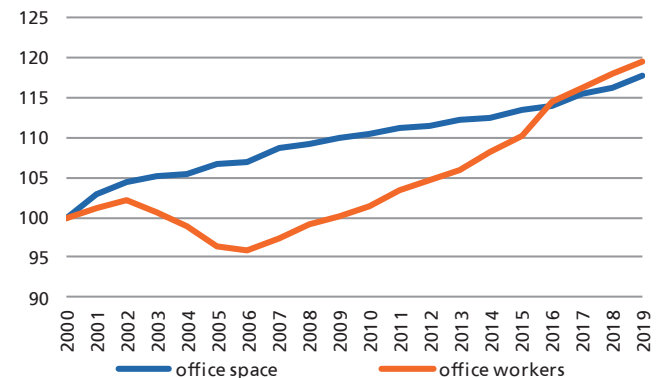
Source: bulwiengesa, DZ BANK forecast

TAKE-UP AS PER CENT OF OFFICE SPACE



Source: bulwiengesa

TREND IN OFFICE SPACE AND NO. OF OFFICE WORKERS



Source: Scope, bulwiengesa

Index 2000 = 100

Augsburg has a fairly small office market with 1.4 million m² of office space. This is attributable on the one hand to the large proportion taken up by the manufacturing industry. On the other hand, renting office space has proved fairly difficult as a result of structural change. Up to 2006, prime rents per m² were still in single-digit Euros, but have since increased to EUR 13.20 per m². Augsburg thus remains one of the cheapest office locations we cover in this report. Demand for office space is essentially determined by regional factors. Office take-up has however increased visibly to around 30,000 m² per year since 2017. In the ten previous years, only about 20,000 m² was let each year. Augsburg may now be benefiting more than in the past from its proximity to Munich. However, the space supply has also grown slightly more strongly in recent years. The vacancy rate did nevertheless shrink to 4.5 per cent by 2019. This is about 1 percentage point above average for the regional centres reviewed. Rental demand is mainly focused on new-build projects, predominantly in the Lechhausen commercial district, the Innovation Park and the Technology Park. In 2019, eight of the ten largest rental contracts were for planned new-build projects. The largest rental agreement was 5,500 m² for Fujitsu. Prime rents could increase further as a result of the preference for renting newly built space. We regard an increase of 2.5 to 3 per cent as realistic this year. Growth in the supply of space could also lead to a slight increase in the vacancy rate.

Office: a whole series of new build projects are being planned and constructed in the relatively small office market

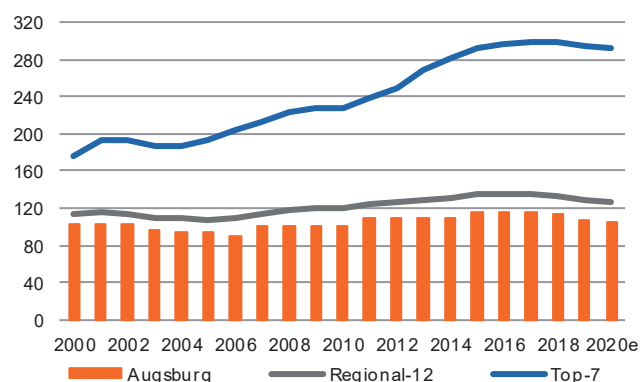
OFFICE FORECASTS

		2017	2018	2019	2020e
Demand					
GDP	% yoy	2.9	3.3	3.5	2.9
Per capita GDP	in EUR	47,327	48,366	49,658	50,724
No. of office workers	in '000	54.7	55.5	56.2	57.0
No. of office workers	% yoy	1.5	1.5	1.4	1.3
Supply					
Total office space	in m ² '000	1,394	1,404	1,421	1,435
Total office space	% yoy	1.4	0.7	1.2	1.0
Vacancy rate	%	5.6	5.1	4.5	4.8
Office rents					
Prime/secondary location	EUR/m ²	12.8 / 5.5	13.0 / 6.0	13.2 / 6.5	13.4 / 6.5
Prime/secondary location	% yoy	2.4 / 7.8	1.6 / 9.1	1.5 / 8.3	1.8 / 3.1

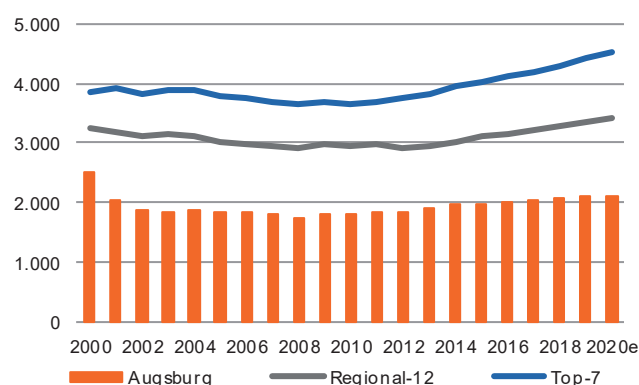
Source: Scope, bulwiengesa, DZ BANK forecast

yoy= year-on-year

Retail space in Augsburg

PRIME RETAIL RENTS IN EUR PER M²

Source: bulwiengesa, DZ BANK forecast

RETAIL SALES IN EUR PER M²

Source: Scope

Thanks to its supply function for a catchment area of around 600,000 people, Augsburg has high sales space per capita of more than 3 m², mainly because there is no similarly important shopping location close to the city which is situated halfway between Munich and Ulm. Augsburg's centrality value is correspondingly good at 123 points. Purchasing power is slightly below-average at 96 points, partly due to the large number of students. One positive factor for retail demand is annual population growth of more than 3,000 people. Tourism is also growing, but fairly slowly and from a low level. Retail activity in the attractive and recently renovated Augsburger City is not functioning very well. This is borne out by vacant sales space in the prime location of Annastraße, which was used for pop-up stores at the end of the year. A solution is still needed for the Woolworth building which has been lying empty for years. A project development by Peek & Cloppenburg is one option. Conversely, the P&C store in Bahnhofstraße has been revamped. The City was upgraded in 2018 when the former Fuggerstadt Centre close to the station reopened as "Helio" and with the renovation of the former K&L building in Bürgermeister-Fischer-Straße. The City-Galerie with around 34,000 m² of shopping space to the East of the City competes with city centre retail. Prime rents, which reached their highest level to date in 2015 at EUR 115 m², have since fallen to EUR 108 m². Given the existing vacant space, prime rents could fall again slightly this year.

Retail: the recently renovated City centre is an attractive shopping destination, but vacant properties remain

RETAIL FORECASTS

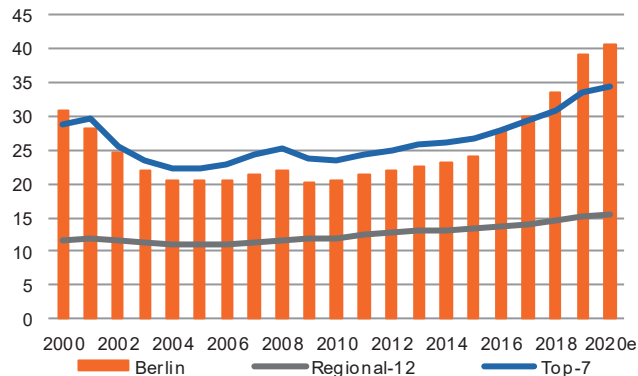
		2017	2018	2019	2020e
Demand					
Per cap. disposable income	EUR/month	1,899	1,927	1,968	2,002
Unemployment rate	%	5.4	5.0	4.9	5.2
Retail sales	EUR m/% yoy	1,915 / 1.9	1,956 / 2.2	2,005 / 2.5	2,044 / 1.9
Retail sales	EUR/m ² sales space	2,036	2,069	2,102	2,127
Supply					
Retail space	in m ² '000	940	945	954	961
Retail space	per capita in m ²	3.23	3.22	3.22	3.22
Retail rent					
Prime/secondary location	EUR/m ²	115 / 9.0	113 / 9.5	108 / 9.5	106 / 9.5
Prime/secondary location	% yoy	0.0 / 12.5	-1.7 / 5.6	-4.4 / 0.0	-1.9 / -5.3

Source: Scope, bulwiengesa, DZ BANK forecast

yoy = year-on-year

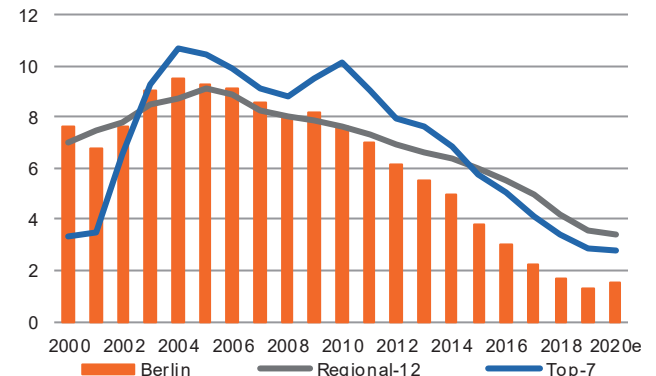
BERLIN

Office space in Berlin

PRIME RENTS FOR OFFICE SPACE IN EUR PER M²

Source: bulwiengesa, DZ BANK forecast

VACANCY RATE IN PER CENT



Source: bulwiengesa, DZ BANK forecast

Prime rents in Berlin could increase to EUR 40 per m² this year, which would be nearly double their level of ten years ago. The highest growth – of more than 60 per cent to recently EUR 39 per m² – has been in the last four years. This makes Berlin the third most expensive German office market by a narrow margin after Munich. Employment growth has also reduced unemployment to a marked extent. The unemployment rate has more than halved to 8.2 per cent (January 2020) since 2005. Both developments reflect the dynamism of the economic upturn and office market activity. Since IT and e-commerce start-ups initially discovered the formerly languishing federal capital, Berlin has now become a sought-after destination for established companies. One example is Siemens which plans to invest EUR 600m in “Siemensstadt 2.0”. As a result of high demand for office space, the high vacancy rate of several years ago has now been almost completely reduced to 1.3 per cent. Large, interconnecting office space is now virtually impossible to find, and many rental contracts are now for planned new buildings. Thanks to rental contracts within project developments, office take-up reached a new record of nearly 1.1 million m² in 2019. Will the upturn in the Berlin office market continue? The advantages of a good supply of low-cost office space and apartments have ultimately receded. A large number of office projects are also being developed, thus reducing the demand overhang. However, prime rents should continue to rise for the time being on the back of a continuing low vacancy rate.

Office: Berlin now the third most expensive German office market

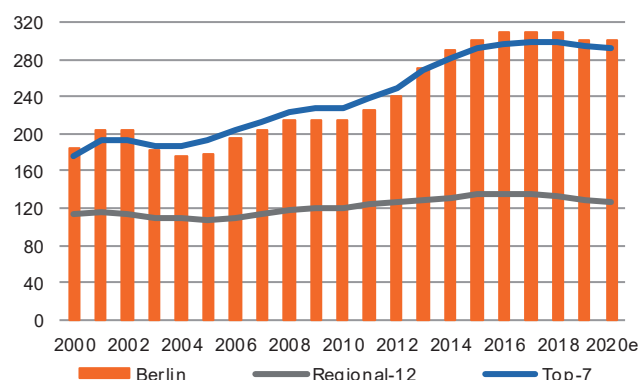
OFFICE FORECASTS

		2017	2018	2019	2020e
Demand					
GDP	% yoy	2.6	3.1	3.5	2.8
Per capita GDP	in EUR	34,376	35,107	36,091	36,913
No. of office workers	in '000	576.5	584.7	592.8	601.0
No. of office workers	% yoy	1.4	1.4	1.4	1.4
Supply					
Total office space	in m ² '000	18,949	19,132	19,399	19,730
Total office space	% yoy	0.1	1.0	1.4	1.7
Vacancy rate	%	2.2	1.7	1.3	1.5
Office rents					
Prime/secondary location	EUR/m ²	30.0 / 12.0	33.5 / 14.0	39.0 / 16.0	40.5 / 16.0
Prime/secondary location	% yoy	7.1 / 9.1	11.7 / 16.7	16.4 / 14.3	3.8 / 6.3

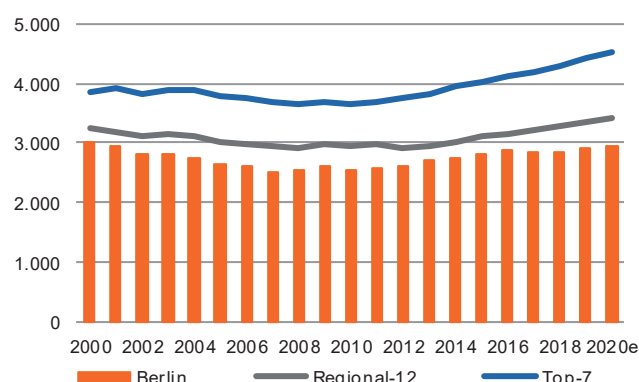
Source: Scope, bulwiengesa, DZ BANK forecast

yoy = year-on-year

Retail space in Berlin

PRIME RETAIL RENTS IN EUR PER M²

Source: bulwiengesa, DZ BANK forecast

RETAIL SALES IN EUR PER M²

Source: Scope

The upturn in the Berlin retail sector started even before the office market. The city has the advantage of a catchment area of more than 5 million people and strong population growth of 400,000 within ten years. Other plus points are its trendsetting function and tourism with 33 million overnight stays each year. Economic conditions have also improved considerably. The number of people in work is growing strongly, leading to a visible decline in unemployment. However, purchasing power of 92 points remains well below the average of 100 points throughout Germany. Apart from the advantages mentioned above, Berlin is attractive for retailers thanks to its market size and internationality. Foreign retail concepts in particular are often tested in Berlin before being rolled out in the German market. One special feature is that, because the city was previously divided, Berlin has several prime locations in different geographic areas with different characteristics. These include Ku'damm and Tauentzienstraße which have the highest prime rents, Alexanderplatz with its high footfall, and Friedrichstraße. The trendy Hackescher Markt is also well placed. As well as shopping streets, there are around 70 shopping centres in the city area, including the Mall of Berlin which is very large for a city centre shopping centre. The Schultheiss Quartier – the first shopping centre in the Moabit district – and the East Side Mall were added in 2018. The broad range of shopping on offer, combined with growth in online shopping, is increasing competition among the retail locations. This is evident for example from the vacant properties on Friedrichstraße. Prime rents, which fell to EUR 300 per m² in 2019, could however remain stable given the location's many advantages.

Retail: saturated supply with nearly 70 shopping centres

RETAIL FORECASTS

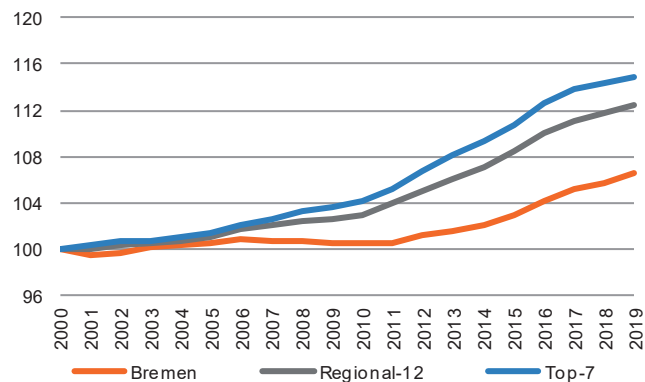
		2017	2018	2019	2020e
Demand					
Per cap. disposable income	EUR/month	1,930	1,969	2,019	2,060
Unemployment rate	%	9.0	8.1	7.8	8.0
Retail sales	EUR m/% yoy	18,626 / 2.5	19,173 / 2.9	19,793 / 3.2	20,323 / 2.7
Retail sales	EUR/m ² sales space	2,843	2,863	2,920	2,960
Supply					
Retail space	in m ² '000	6,551	6,696	6,778	6,866
Retail space	per capita in m ²	1.82	1.85	1.86	1.87
Retail rent					
Prime/secondary location	EUR/m ²	310 / 15.5	310 / 16.0	300 / 16.5	300 / 16.5
Prime/secondary location	% yoy	0.0 / 6.9	0.0 / 3.2	-3.2 / 3.1	0.0 / 0.0

Source: Scope, bulwiengesa, DZ BANK forecast

yoy = year-on-year

BREMEN

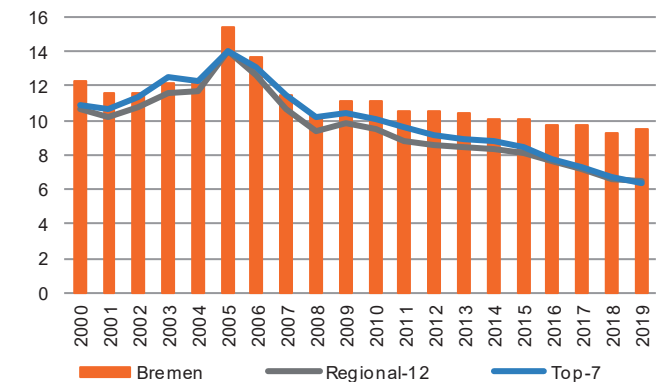
POPULATION GROWTH



Source: Scope

Index 2000 = 100

UNEMPLOYMENT RATE IN PER CENT

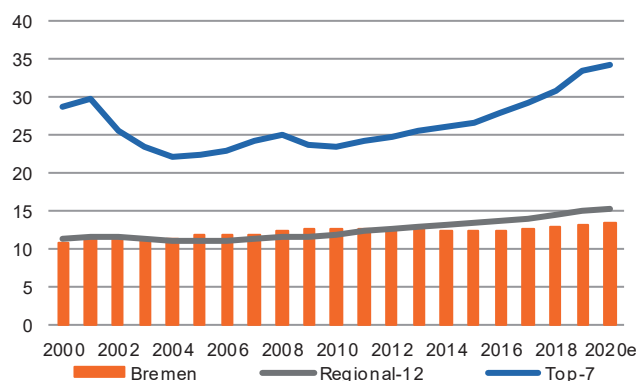


Source: bulwiengesa, BA, DZ BANK forecast

Bremen, the capital of the smallest federal state with a population of 570,000, is the eleventh most densely populated city in Germany. Its population is growing, but at a rate of 6 per cent in ten years, not as dynamically as in most other cities covered in this market report. Weaker labour market conditions are likely to be having a braking effect. Despite a solid industrial base and an important port, the unemployment rate is 9.7 per cent (January 2019), which is well above average for Germany. The after-effects of structural change in the crisis-stricken shipbuilding and heavy industries are still being felt. The main areas of economic success are the vehicle construction, aerospace, food and drink, and biotechnology sectors. The shift to a services and technology location is supported by the university which was founded in 1971. A total of 35,000 students attend higher education colleges in Bremen. The maritime economy and logistics are of major importance. Good road and rail transport links, and the seaport and the airport have a positive impact. Tourism is also becoming increasingly important, with 2 million overnight stays per year, and is benefiting from the inclusion of the Town Hall and the statue of Roland in the list of UNESCO World Heritage sites in 2004. There will be extensive development connected with diverse projects in the property location in the years ahead, with around EUR 1 billion set to be invested in Bremen city centre. Other projects are planned for sites formerly occupied by Hachéz, Kellogg and Reemtsma.

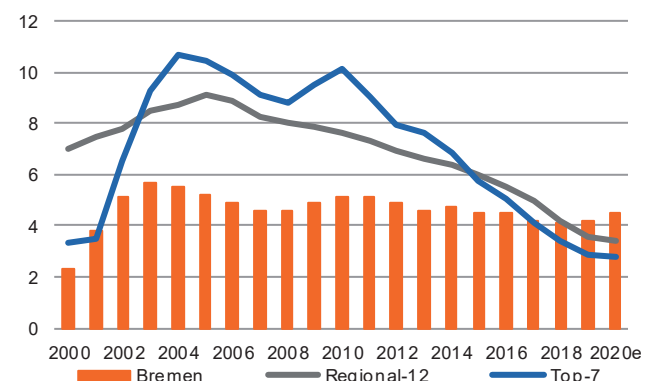
**Despite economic successes,
unemployment remains high**

Office space in Bremen

PRIME RENTS FOR OFFICE SPACE IN EUR PER M²

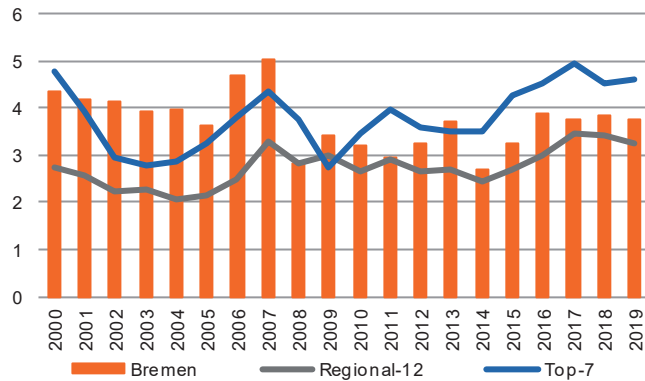
Source: bulwiengesa, DZ BANK forecast

VACANCY RATE IN PER CENT



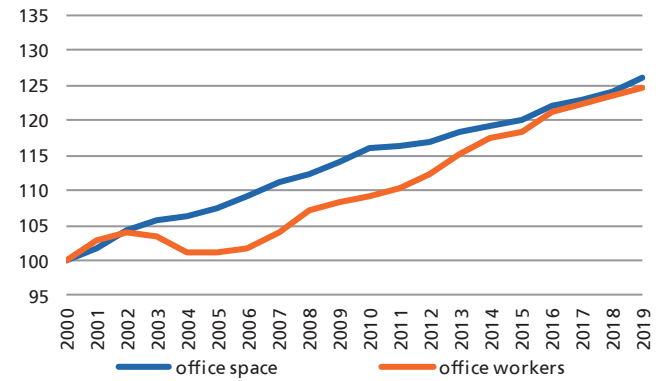
Source: bulwiengesa, DZ BANK forecast

TAKE-UP AS PER CENT OF OFFICE SPACE



Source: bulwiengesa

TREND IN OFFICE SPACE AND NO. OF OFFICE WORKERS



Source: Scope, bulwiengesa

Index 2000 = 100

Bremen's office market has 2.7 million m² of space and has grown by a substantial 10 per cent in ten years. Various office properties have been built, mainly in out-of-town locations such as the Airport City, the Technology Park and the Übersee-stadt. This modernisation has benefited the office market, with many city centre office buildings now outdated. This is one of the reasons why the highest office rents are achieved not in the city centre, but in the Überseestadt. The number of office jobs has increased by 15 per cent within ten years, at a faster rate than office space, causing the vacancy rate to fall slightly to just over 4 per cent. However, this is slower than in many other regional centres. While the vacancy rate was low in the past, today it is slightly above average. Combined with a relatively low prime rent of EUR 13.20 per m² which has risen only moderately, this is an indicator of a largely balanced ratio of space supply and demand. The upward trend in office rents caused by a shortage of space, has largely failed to materialise in Bremen. Rental business is nevertheless gratifyingly lively. Office take-up has been at a consistently high level of around 100,000 m² per year since 2006. As was the case in 2018 with Sparkasse Bremen, a major, five-digit rental agreement was also concluded last year. The "Europahafenkopf" project of 18.500 m² developed by the Zech Group will house the company's new headquarters. The fairly high volume of more than 50,000 m² of new space per year which looks set to become available from 2019 to 2021 could lead to an increase in the vacancy rate. However, prime rents could pick up slightly due to the marketing of attractive office projects.

Office: since 2016, 100,000m² has consistently been let each year

OFFICE FORECASTS

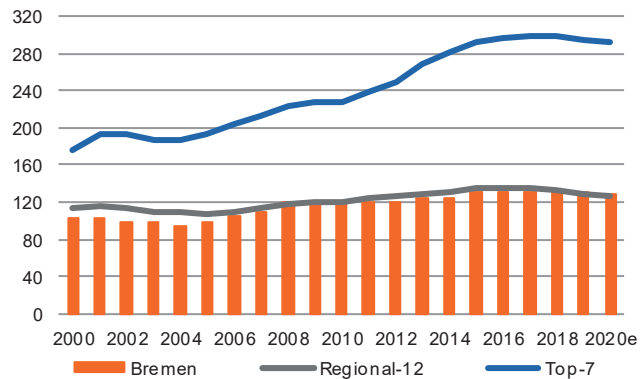
		2017	2018	2019	2020e
Demand					
GDP	% yoy	2.9	3.4	3.8	3.1
Per capita GDP	in EUR	50,861	52,278	53,881	55,300
No. of office workers	in '000	105.0	106.0	107.0	108.1
No. of office workers	% yoy	1.0	1.0	1.0	1.0
Supply					
Total office space	in m ² '000	2,638	2,660	2,707	2,750
Total office space	% yoy	0.7	0.8	1.8	1.6
Vacancy rate	%	4.2	4.1	4.2	4.5
Office rents					
Prime/secondary location	EUR/m ²	12.8 / 7.0	13.0 / 7.1	13.2 / 7.1	13.4 / 7.1
Prime/secondary location	% yoy	2.4 / 4.5	1.6 / 1.4	1.5 / 0.0	1.5 / 1.4

Source: Scope, bulwiengesa, DZ BANK forecast

yoy = year-on-year

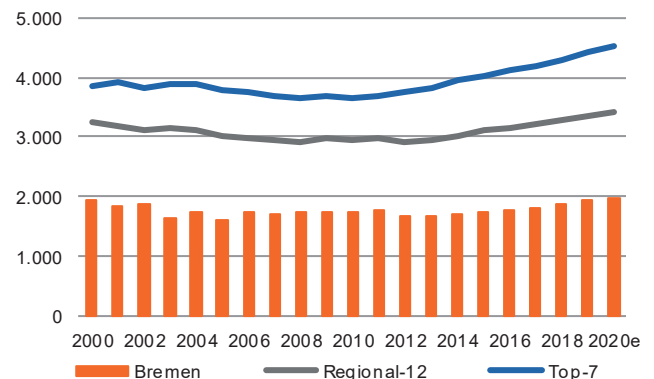
Retail in space Bremen

PRIME RETAIL RENTS IN EUR PER M²



Source: bulwiengesa, DZ BANK forecast

RETAIL SALES IN EUR PER M²



Source: Scope

Given its attractive city centre and Bremen's major importance to the North West, its retail sector has shown fairly muted development. The shopping location benefits from a large catchment area of more than one million people. However, purchasing power is well below average at 94 points. Tourism is developing well, but could still be improved with 3,800 overnight stays per 1,000 inhabitants. Below the line, prime rents have increased by nearly 10 per cent within ten years to EUR 130 per m² recently. Obstacles are essentially "homemade". Competition from large out-of-town retail parks such as Waterfront, Roland-Center and the Weserpark is the main contributory factor. Conversely, the volume of city centre sales space is relatively small. Bremen's city centre should not nevertheless be underestimated as a retail location. In contrast to the declining rents in many shopping locations, rents have remained stable here. After planned projects to improve retail conditions failed to materialise in the past, massive efforts are now under way to renovate the city centre, with its prime locations in Hutfilterstraße, Obernstraße and Sögestraße. Key projects are the renovation of the Lloydhof, the modernisation of the Bremer Carrée, the reconstruction of the Johann Jacob House, and the "City Galerie" which will be created on the site of the Parkhaus Mitte and will include branches of Karstadt and Kaufhof. However, before the city centre emerges in all its new glory, the retail sector will have to live with a major building site, which could have a dampening effect on prime rents.

Retail: Bremen's city centre will be revived in the coming years

RETAIL FORECASTS

		2017	2018	2019	2020e
Demand					
Per cap. disposable income	EUR/month	2,081	2,129	2,164	2,196
Unemployment rate	%	9.7	9.3	9.5	9.7
Retail sales	EUR m/% yoy	2,853 / 3.2	2,955 / 3.6	3,071 / 3.9	3,175 / 3.4
Retail sales	EUR/m ² sales space	1,823	1,878	1,936	1,986
Supply					
Retail space	in m ² '000	1,565	1,573	1,586	1,599
Retail space	per capita in m ²	2.76	2.76	2.76	2.77
Retail rent					
Prime/secondary location	EUR/m ²	130 / 10.0	130 / 10.0	130 / 10.0	128 / 10.0
Prime/secondary location	% yoy	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0	-1.5 / 0.0

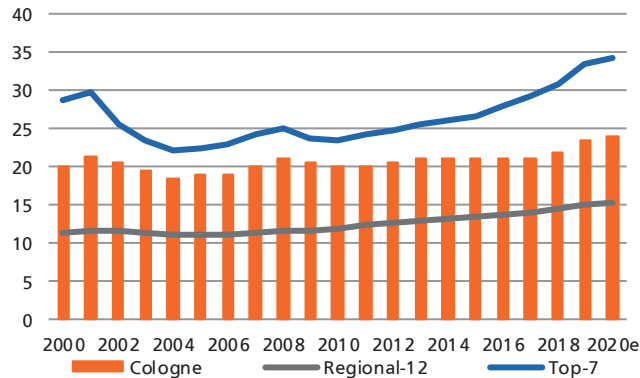
Source: Scope, bulwiengesa, DZ BANK forecast

yoy = year-on-year

COLOGNE

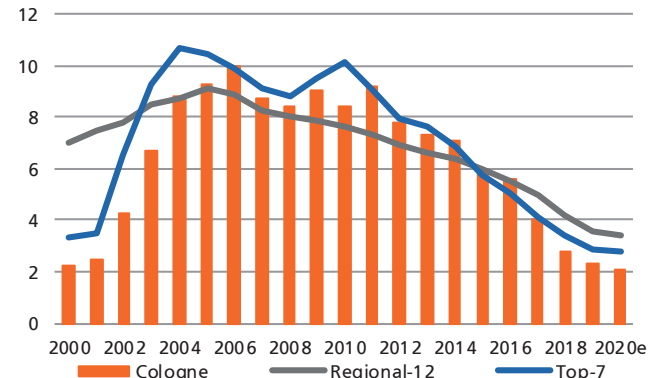
Office space in Cologne

PRIME RENT FOR OFFICE SPACE IN EUR PER M²



Source: bulwiengesa, DZ BANK forecasts

VACANCY RATE IN PER CENT



Source: bulwiengesa, DZ BANK forecasts

At 285,000 m², take-up in the Cologne office market in 2019 was at its lowest level since 2015. The market was slowed down less by weak demand than by the fact that supply has virtually dried up. The high level of vacant office space of a few years ago has been largely whittled down. At the end of 2019, only 175,000 m² was still available. The vacancy rate has fallen from 10 per cent in 2006 to 2.3 per cent most recently. Larger spaces, above in all in sought-after city locations are now more or less impossible to find. As in other office locations with a shortage of space, projects under development accounted for the bulk of the larger letting transactions. The same is also true for the only five-digit deal – Sparkasse Köln-Bonn has leased 16,000 m² for a new head office. The choice of a more peripheral location in Cologne-Ossendorf is likely to have been motivated not least by limited development options in the city centre. The second largest transaction at just a shade under 10,000 m² involves the head office of the German Aerospace Center (DLR). Coworking is still an important factor in demand for office space in Cologne. WeWork was behind two deals among the top 10 transactions, amounting to a total of 12,000 m². This year, we expect a largely unchanged trend in the Cologne office market in spite of a slight upturn in construction activity. The bulk of the space is earmarked for owner-occupiers or forward commitment deals and is therefore not available in the market. The prime rent rose to EUR 23.50 in 2019 and is likely to rise further in light of the scarcity of space.

Lack of supply slowing down the office market

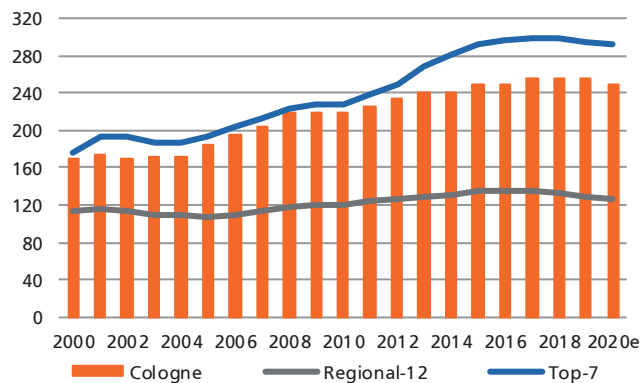
OFFICE FORECASTS

		2017			2018			2019			2020e		
Demand													
GDP	% yoy	2.4			3.0			3.5			2.9		
Per capita GDP	in EUR	55,791			57,220			58,960			60,407		
No. of office workers	in '000	243.8			246.6			249.6			252.6		
No. of office workers	% yoy	1.2			1.2			1.2			1.2		
Supply													
Total office space	in m² '000	7,638			7,647			7,744			7,840		
Total office space	% yoy	0.5			0.1			1.3			1.2		
Vacancy rate	%	4.0			2.8			2.3			2.1		
Office rents													
Prime/secondary location	EUR/m²	21.0	/	8.3	22.0	/	8.8	23.5	/	8.9	24.0	/	8.9
Prime/secondary location	% yoy	0.0	/	0.0	4.8	/	6.0	6.8	/	1.1	2.1	/	1.1

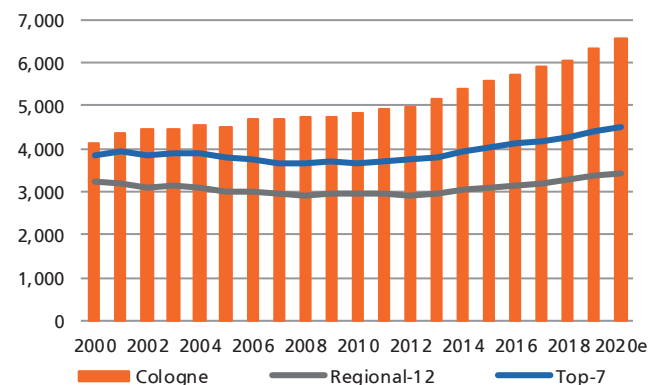
Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

Retail space in Cologne

PRIME RETAIL RENT IN EUR PER M²

Source: bulwiengesa, DZ BANK forecasts

RETAIL SALES IN EUR PER M²

Source: Scope

The million-strong city of Cologne is one of two top shopping destinations in west Germany along with Düsseldorf, hence a certain amount of competition between the two cities. Cologne is attractive for retailers in view of a huge shopper potential from a 2.4 million-strong catchment area, many shoppers from the Benelux countries and a lively tourism business with over 6 million overnight stays per year. However, at 106 points, purchasing power in Cologne is slightly weaker than in other top locations. Unlike Düsseldorf which is more strongly represented at the luxury end of the retail sector, Cologne's city centre focuses on the mass market. Contributory factors include a three-kilometre long shopping circuit which invites shoppers to stroll through Cologne's prime shopping locations, and promotes a high footfall. This applies mainly to the Schildergasse which is 90 per cent given over to high-street chains. The Hohe Straße also enjoys a high footfall, although not quite on a par with the Schildergasse. Cologne also has more trendy shopping streets such as the Ehrenstraße. A smaller luxury segment has become established around the Domkloster/Wallraffplatz which could benefit additionally from the rebuilding of the Dom Hotel. Cologne has hardly seen any major development in the last few years. One more recent project was the revamp of the building which previously housed the long-established Jacobi store on Hohe Straße. No new development, but rather a re-alignment has just been carried out at the DuMont-Carré which is now called Quincy, aimed at attracting a younger shopper. In view of a relatively good supply of retail space in Cologne's city centre, the trend in the prime rent has been relatively weak in the last few years. In addition, vacant stores are a recurrent feature. The prime rent should remain stable at best, although it is more likely to come down slightly.

Strong mass-market shopping location with high footfall in some areas

RETAIL FORECASTS

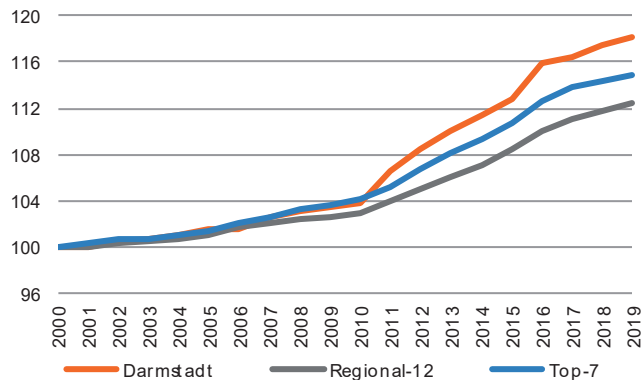
		2017	2018	2019	2020e
Demand					
Per cap. disposable income	EUR/month	2,118	2,163	2,213	2,252
Unemployment rate	%	8.4	7.9	7.8	8.0
Retail sales	EUR m/% yoy	8,306 / 2.8	8,584 / 3.3	8,911 / 3.8	9,202 / 3.3
Retail sales	EUR/m² sales space	5,906	6,075	6,320	6,549
Supply					
Retail space	in m² '000	1,406	1,413	1,410	1,405
Retail space	m²/inhabitant	1.31	1.31	1.30	1.29
Retail rent					
Prime/secondary location	EUR/m²	255 / 15.0	255 / 15.0	255 / 15.0	250 / 15.0
Prime/secondary location	% yoy	2.0 / 0.0	0.0 / 0.0	0.0 / 0.0	-2.0 / 0.0

Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

DARMSTADT

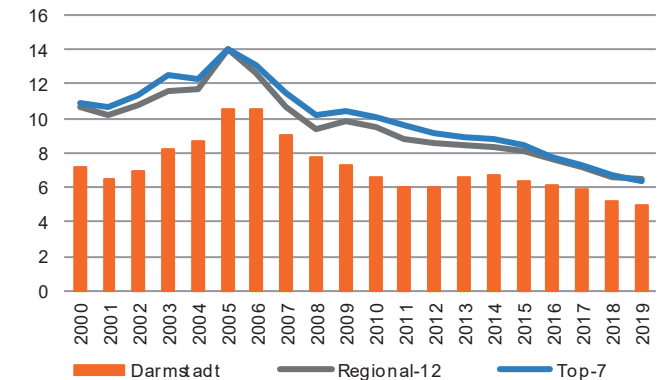
POPULATION GROWTH



Source: Scope

Index 2000 = 100

UNEMPLOYMENT RATE IN PER CENT



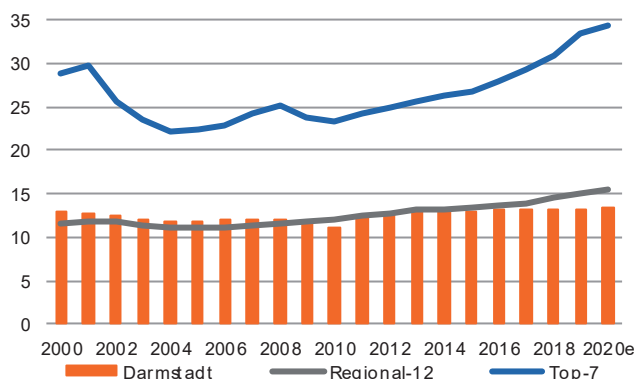
Source: bulwiengesa, BA, DZ BANK forecast

With 160,000 inhabitants, Darmstadt is the smallest city in this market report, but one of the fastest growing German cities, whose population has increased by 14 per cent in ten years. Thanks to its favourable location at the southern edge of the Rhine-Main region, Darmstadt is a sought after property location, and since the withdrawal of the American armed forces, has 120 hectares of converted space which offers various options for urban development. One current project is the building of 1,400 apartments on the site of the Cambrai Fritsch Barracks. The growth potential of the "city of science" is derived from its role as an important and successful research and economic location with a workforce of more than 130,000. In city rankings produced by the German Economic Institute, Darmstadt is placed eleventh among large German cities, but occupies the top position in the "Future Index". Core sectors are IT, chemicals/pharmaceuticals/biotech, mechanical engineering, space technology and cosmetics. Important companies are the Merck chemicals and pharmaceuticals group, the mechanical engineering company Carl Schenck, the specialty chemicals company Evonik/Röhm, and the cosmetics companies Goldwell/Kao and Wella. Many start-ups are based at the Technology and Innovation Centre of the Technical University. There are more than 41,000 students at the TU and other higher education colleges. Prominent among research institutions are the European Space Operations Centre (ESOC) and the "FAIR" particle accelerator facility currently under construction. The unemployment rate was only 5.4 per cent in January 2020.

"City of Science" a rapidly growing economic and research location

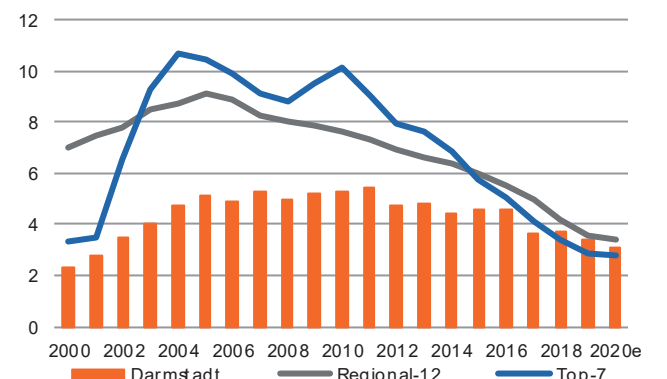
Office space in Darmstadt

PRIME RENTS FOR OFFICE SPACE IN EUR PER M²



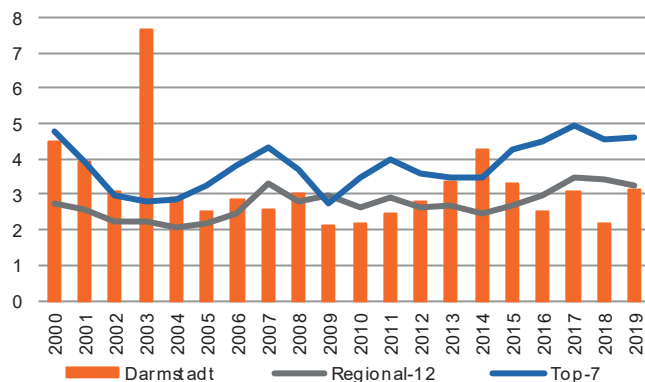
Source: bulwiengesa, DZ BANK forecast

VACANCY RATE IN PER CENT



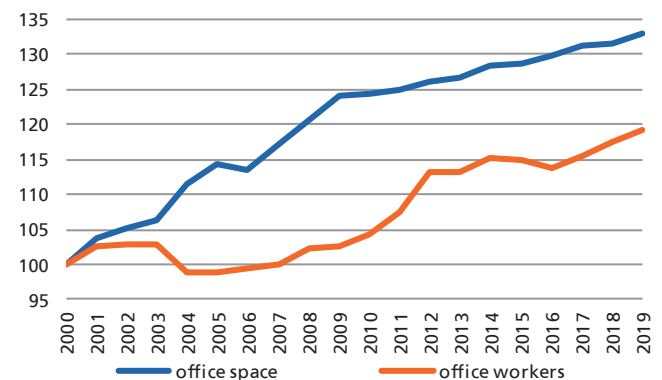
Source: bulwiengesa, DZ BANK forecast

TAKE-UP AS PER CENT OF OFFICE SPACE



Source: bulwiengesa

TREND IN OFFICE SPACE AND NO. OF OFFICE WORKERS



Source: Scope, bulwiengesa

Index 2000 = 100

The city's economic importance and many scientific institutions justify office space of 1.6 million m². Augsburg and Mainz have office markets of a similar size for example, but much larger populations. The high volume of office space has not resulted in excess supply, as reflected in the low vacancy rate of 3.4 per cent. With growth of 7 per cent in ten years, the expansion of office space has lagged behind an increase of more than twice that level in the number of office jobs. Market activity in Frankfurt has little impact on the office market in Darmstadt. In the last ten years, growth in prime rents here (+13 per cent) has been roughly half the level recorded in the nearby top location. At EUR 13.20 m² it represents approximately a third of the corresponding figure in Frankfurt. Prime rents are at the lower end of the range for regional centres, compared to office market heavyweights such as Essen, Hannover and Nuremberg. The fact that prime rents have remained largely stable since 2013 suggests that supply and demand have remained more or less in balance in recent years. Take-up reached a relatively high level for Darmstadt of 51,000 m² in 2019, although more than 30,000 m² of this related to only three rental agreements for the Röhm group, the Klett group and Akasol. Based on the manageable volume of new space in recent years and the decline in the vacancy rate, prime rents could pick up again slightly this year. Space reserves of around 14 hectares are still available for commercial use.

Office: relatively large office market with low vacancy rate and stable rent trend

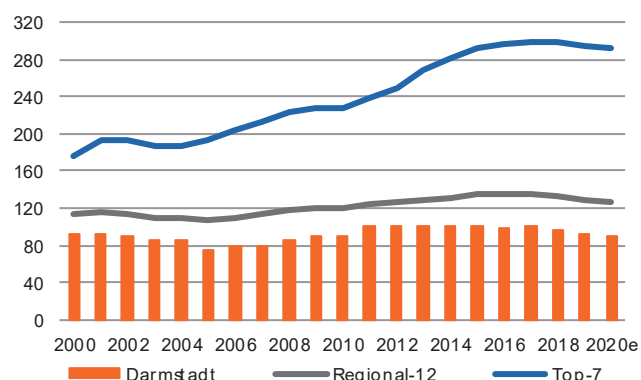
OFFICE FORECASTS

		2017	2018	2019	2020e
Demand					
GDP	% yoy	2.6	3.0	3.4	2.7
Per capita GDP	in EUR	61,262	62,564	64,325	65,715
No. of office workers	in '000	50.4	51.2	52.0	52.8
No. of office workers	% yoy	1.5	1.6	1.6	1.6
Supply					
Total office space	in m ² '000	1,611	1,617	1,632	1,645
Total office space	% yoy	1.0	0.4	0.9	0.8
Vacancy rate	%	3.6	3.7	3.4	3.1
Office rents					
Prime/secondary location	EUR/m ²	13.1 / 7.6	13.2 / 7.8	13.2 / 8.0	13.4 / 8.0
Prime/secondary location	% yoy	0.0 / 1.3	0.8 / 2.6	0.0 / 2.6	1.5 / 0.0

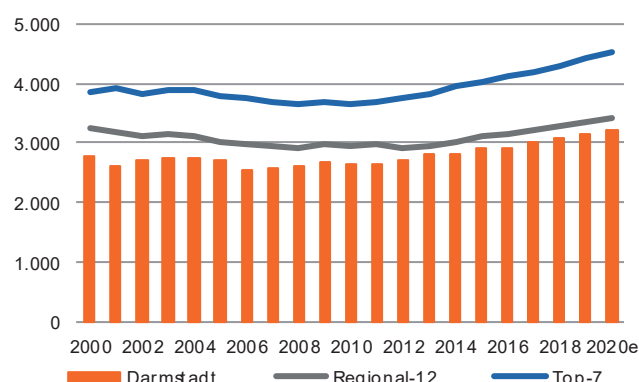
Source: Scope, bulwiengesa, DZ BANK forecast

yoy = year-on-year

Retail space in Darmstadt

PRIME RETAIL RENTS IN EUR PER M²

Source: bulwiengesa, DZ BANK forecast

RETAIL SALES IN EUR PER M²

Source: Scope

Conditions for the retail sector in Darmstadt are generally good: these include strong demographic growth, high employment levels, and high purchasing power of 108 points for a university city. With more than 4,000 overnight stays per 1,000 inhabitants, the number of visitors is also solid. There is also a large catchment area of around 650,000 people south of Darmstadt. However, the centrality figure of 113 points is not overly high due to competition between shopping locations. These are specifically Frankfurt, which is only 30 kilometres away, and neighbouring Weiterstadt with its specialist stores and Loop 5 shopping centre. However, the well-established city centre of Darmstadt can easily hold its own against the Loop 5 centre which is now ten years old. Investment of EUR 50 million is planned in leisure activities – a rollercoaster is to be built on the roof – to make Loop 5 more attractive and boost footfall. Darmstadt city centre has the advantage of a broad product range, a good selection of bars and restaurants, and short distances. The prime locations of Schuchardstraße and Ernst-Ludwig-Straße are flanked by two city centre shopping centres, the Luisen-Center and the Carree, as well as the smaller Markthalle. Despite the positive environment, prime rents, which remained stable at EUR 100 per m² for a long time, are now falling; the figure declined again – by 4 per cent – in 2019 to EUR 93 per m². We believe that e-commerce and competition between locations could potentially trigger a moderate decline in rents. A “digital shop window” is currently being developed to strengthen retail activity. This will facilitate regional online shopping.

Retail: rents in Darmstadt have been falling since 2018

RETAIL FORECASTS

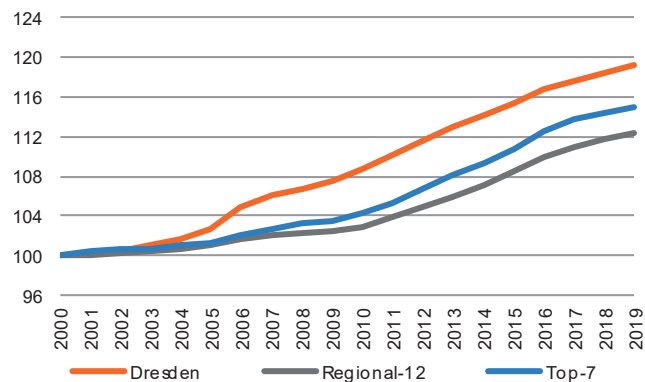
		2017	2018	2019	2020e
Demand					
Per cap. disposable income	EUR/month	2,163	2,200	2,250	2,289
Unemployment rate	%	5.9	5.2	5.0	5.2
Retail sales	EUR m/% yoy	1,175 / 2.4	1,205 / 2.6	1,239 / 2.8	1,267 / 2.3
Retail sales	EUR/m ² sales space	3,005	3,082	3,158	3,217
Supply					
Retail space	in m ² '000	391	391	392	394
Retail space	per capita in m ²	2.49	2.47	2.46	2.46
Retail rent					
Prime/secondary location	EUR/m ²	100 / 11.0	97 / 11.0	93 / 11.0	91 / 11.0
Prime/secondary location	% yoy	2.0 / 4.8	-3.0 / 0.0	-4.1 / 0.0	-2.2 / -2.7

Source: Scope, bulwiengesa, DZ BANK forecast

yoy = year-on-year

DRESDEN

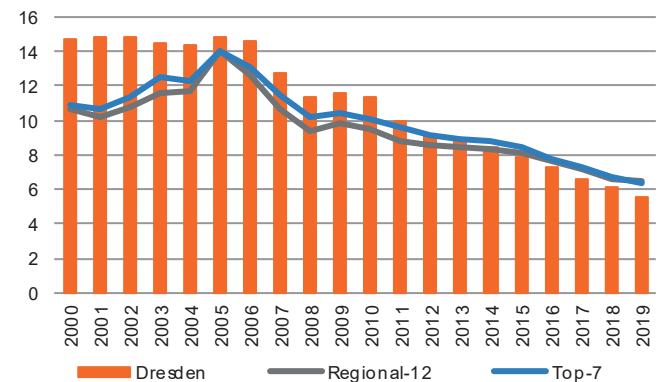
POPULATION GROWTH



Source: Scope

Index 2000 = 100

UNEMPLOYMENT RATE IN PER CENT

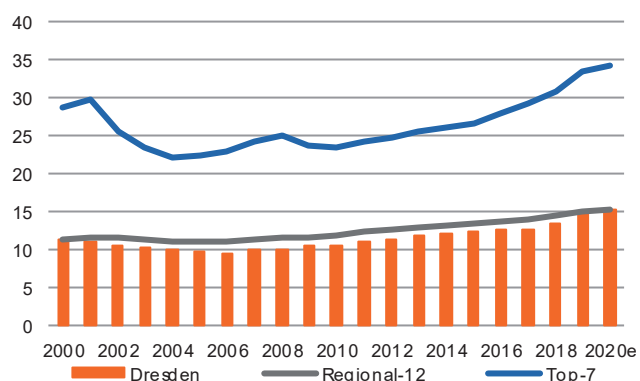


Source: bulwiengesa, BA, DZ BANK forecast

With a population of more than 550,000, Dresden is the third largest city in east Germany. The state capital of Saxony ranks number 12 throughout Germany. Population growth is strong, up by 11 per cent within ten years. Continuing migration is being driven by a high standard of living and the sustained economic success of this attractive city. Dresden has overcome the high unemployment which was a feature of east Germany in the past, with a current jobless rate of 5.7 per cent (January 2020). However, the upturn has also eroded the advantage of a favourable cost of living with relatively low residential rents. Based on the many administrative functions based there, the public sector is an important employer. Education and research play a very prominent role. Higher education establishments with a total of 40,000 students, and numerous research institutions not only create a large number of jobs, but are also the backbone of "Silicon Saxony", Dresden's high tech location. In total, around 60,000 people are employed in microelectronics and IT. Vehicle construction, aviation, life sciences, nanotechnology/new materials and mechanical engineering and plant construction also contribute to the city's dynamic economic development. The cultural and creative industries also play an important role, and employ 18,500 people. The baroque city with its art treasures has also become a tourism hot spot, with 4.6 million overnight stays each year. With more than 8,000 overnight stays per 1,000 inhabitants, Dresden plays a leading role among the regional centres reviewed.

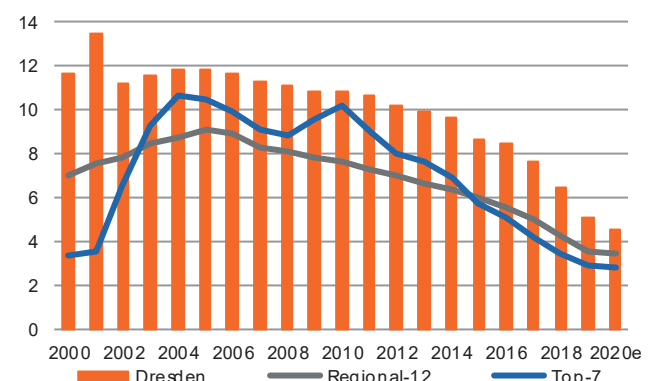
Dresden remains on a growth course

Office space in Dresden

PRIME RENTS FOR OFFICE SPACE IN EUR PER M²

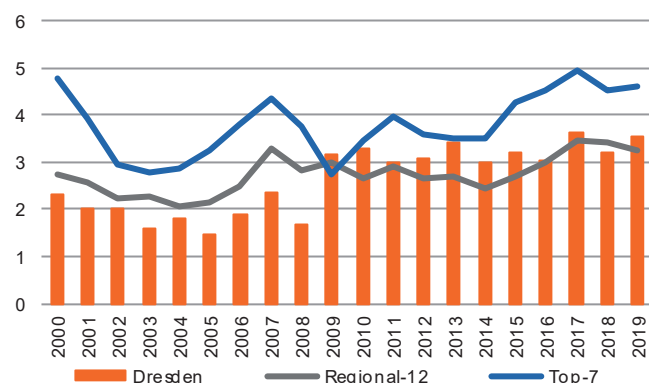
Source: bulwiengesa, DZ BANK forecast

VACANCY RATE IN PER CENT



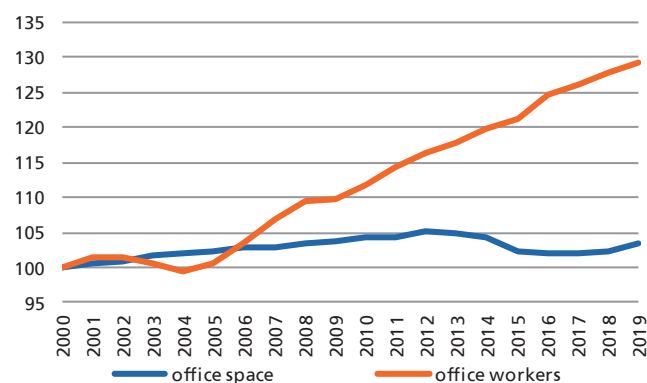
Source: bulwiengesa, DZ BANK forecast

TAKE-UP AS PER CENT OF OFFICE SPACE



Source: bulwiengesa

TREND IN OFFICE SPACE AND NO. OF OFFICE WORKERS



Source: Scope, bulwiengesa

Index 2000 = 100

With 2.7 million m² of office space, Dresden is the third largest east German office market. After the expansion of office space during the construction boom of the 1990s to levels which exceeded actual demand, supply has remained largely stable in the last 20 years. As a result of the economic recovery, the number of office jobs increased by more than 25,000, leading to a reduction of nearly three quarters in a vacancy rate of almost 20 per cent in 1998 to just over 5 per cent. The vacancy rate is thus only slightly above average for German regional centres. As a consequence of the continuing shortage of space, prime rents have increased sharply. Up by slightly more than 40 per cent within ten years and, at EUR 14.80 per m², they are almost in line with the average level for the regional centres we have analysed. Office take-up reached a high level of 95,000 m² in 2019, but was not supported by any large rental agreements. The biggest transaction was 6,400 m² for a mail order company. The 5,000 m² rental agreement for AOK is within the same range. There is also virtually no available marketable space in the out-of-date property stock. Thanks to the increase in office rents, the development of urgently needed office space has also gained pace. For example, TLG is actively involved in developing 25,000 m² of office space. However, space supply is initially likely to contract further this year. Growth in prime rents should nevertheless be slower after the steep rise of the last two years.

Office: economic upturn leads to significant reduction in available space

OFFICE FORECASTS

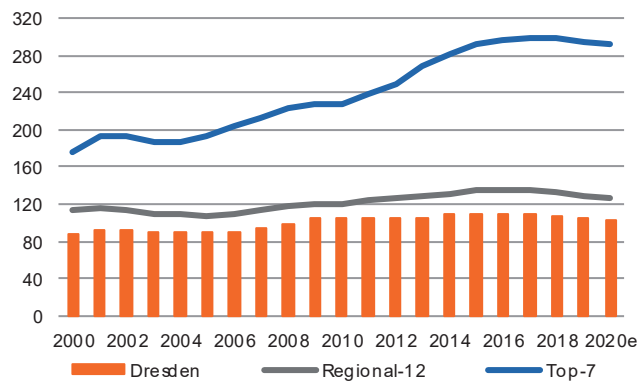
		2017	2018	2019	2020e
Demand					
GDP	% yoy	3.0	3.5	3.9	3.2
Per capita GDP	in EUR	33,902	34,811	35,949	36,914
No. of office workers	in '000	105.2	106.5	107.9	109.2
No. of office workers	% yoy	1.2	1.2	1.3	1.3
Supply					
Total office space	in m ² '000	2,631	2,638	2,666	2,675
Total office space	% yoy	0.0	0.3	1.1	0.3
Vacancy rate	%	7.6	6.4	5.1	4.5
Office rents					
Prime/secondary location	EUR/m ²	12.8 / 5.5	13.5 / 5.7	14.8 / 6.0	15.2 / 6.0
Prime/secondary location	% yoy	1.6 / 0.0	5.5 / 3.6	9.6 / 5.3	2.7 / 3.3

Source: Scope, bulwiengesa, DZ BANK forecast

yoy = year-on-year

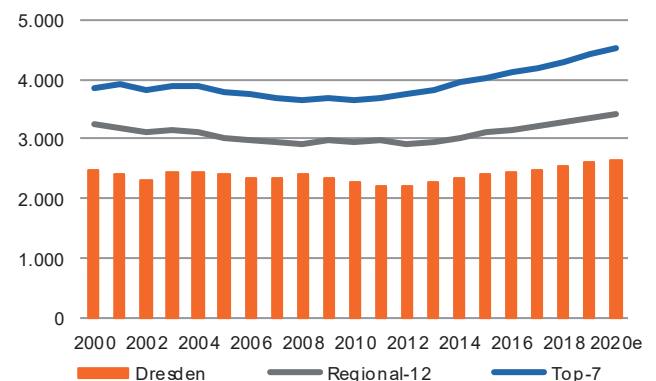
Retail space in Dresden

PRIME RETAIL RENTS IN EUR PER M²



Source: bulwiengesa, DZ BANK forecast

RETAIL SALES IN EUR PER M²



Source: Scope

Dresden, together with Berlin and Leipzig, is one of a trio of top shopping locations in east Germany. General retail conditions in all three locations have improved on a sustained basis as a result of economic recovery, demographic growth and flourishing tourism. The location also has comparatively low purchasing power, which at 91 points, is well below the German average of 100. One plus point for Dresden as a retail location is its catchment area of 1.3 million people. However, the centrality figure of 110 points is not overly high, although large shopping locations such as Chemnitz and Leipzig are at a respective distance of 80 and 120 kilometres. There is regional competition from a large number of out-of-town shopping locations. The baroque city is an attractive retail destination with a high quality of stay and a broad offer of retail and food and drink. In addition to the three prime locations in the city centre - Prager Straße, Seestraße/Altmarkt and Neumarkt – there are two large shopping centres with combined sales space of nearly 100,000 m². The Centrum Galerie opened ten years ago, and the Altmarkt-Galerie was extended in 2011. Sales space has also been created from smaller project developments such as the PRAGER CARRÉE which opened its doors in 2016. A still comparatively new major attraction was created in 2018 with the Decathlon branch in the Kugelhaus. The large volume of tourists and population growth have however been unable to prevent prime rents from declining by nearly 5 per cent to EUR 105 per m² since 2018. Based on the large supply of space, prime rents are likely to fall again slightly this year.

Retail: attractive shopping location with relatively low rents

RETAIL FORECASTS

		2017	2018	2019	2020e
Demand					
Per cap. disposable income	EUR/month	1,856	1,897	1,947	1,989
Unemployment rate	%	6.6	6.1	5.6	5.8
Retail sales	EUR m/% yoy	2,641 / 2.6	2,721 / 3.0	2,813 / 3.4	2,893 / 2.9
Retail sales	EUR/m ² sales space	2,494	2,548	2,613	2,662
Supply					
Retail space	in m ² '000	1,059	1,068	1,076	1,087
Retail space	per capita in m ²	1.94	1.94	1.94	1.95
Retail rent					
Prime/secondary location	EUR/m ²	110 / 9.0	107 / 9.0	105 / 9.0	103.4 / 9.0
Prime/secondary location	% yoy	0.0 / 0.0	-2.7 / 0.0	-1.9 / 0.0	-1.5 / 0.0

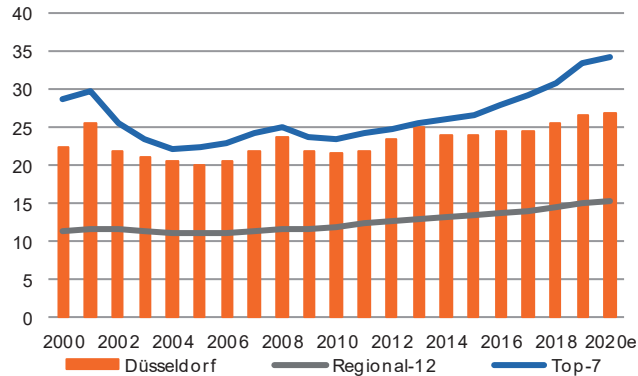
Source: Scope, bulwiengesa, DZ BANK forecast

yoy = year-on-year

DÜSSELDORF

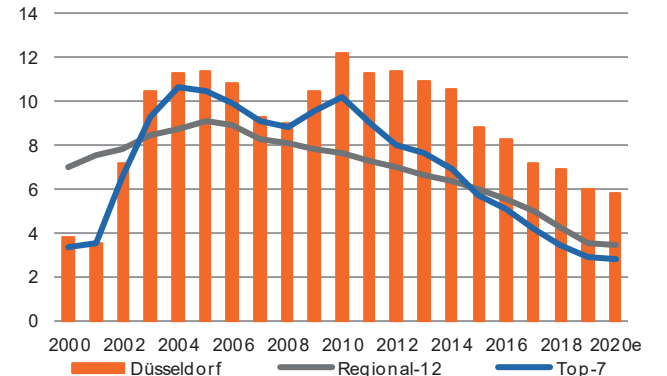
Office space in Düsseldorf

PRIME RENTS FOR OFFICE SPACE IN EUR PER M²



Source: bulwiengesa, DZ BANK forecast

VACANCY RATE IN PER CENT



Source: bulwiengesa, DZ BANK forecast

With 7.6 million m² of office space, Düsseldorf lags just behind Cologne and Stuttgart as the smallest office market among the top locations. However, office take-up is generally higher. Prime rents are also considerably higher than in Cologne and Stuttgart at EUR 26 per m² recently. The importance of the office market is a result of the city's economic strength and its function as a regional capital. However, from 2012 to 2017, prime rents stagnated at EUR 24 to 25 per m², while the average for the top locations increased by nearly 20 per cent. This was probably attributable to the previously high vacancy rate. Since 2018, rents in Düsseldorf have however been increasing due to high demand for space and a smaller supply of office space. The vacancy rate, which was in double digits for a long time, fell to below 6 per cent. In 2019, the high level of rental activity led to the second highest office take-up of 465,000 m². A whole series of large-volume agreements contributed to this. There were three rental agreements for more than 20,000 m² for the advertising agency WPP, PwC and WeWork. The still fairly high vacancy level has made it possible to conclude several large-scale agreements for existing space. This year and next year the volume of completions is likely to increase visibly to well above 100,000 m² respectively. However, based on the high level of pre-letting, the supply of contemporary office space may only improve moderately. If demand for space remains high, prime rents in Düsseldorf could also increase further. The vacancy rate could grow slightly.

Office: as the vacancy rate continues to fall, prime rents in Düsseldorf are also picking up again

OFFICE FORECASTS

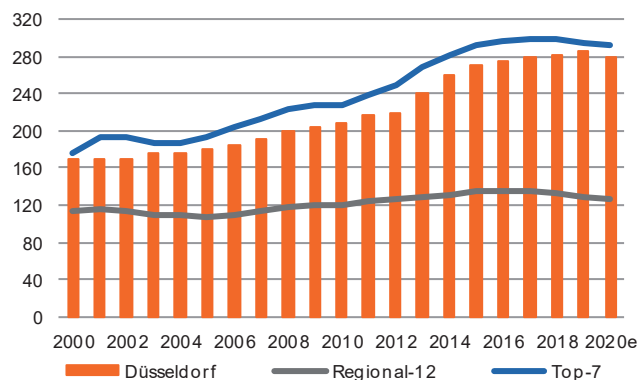
		2017	2018	2019	2020e
Demand					
GDP	% yoy	2.6	3.3	3.7	3.2
Per capita GDP	in EUR	78,115	80,241	82,929	85,301
No. of office workers	in '000	209.2	211.8	214.6	217.3
No. of office workers	% yoy	1.2	1.3	1.3	1.3
Supply					
Total office space	in m ² '000	7,547	7,554	7,621	7,700
Total office space	% yoy	-0.1	0.1	0.9	1.0
Vacancy rate	%	7.2	6.9	6.0	5.8
Office rents					
Prime/secondary location	EUR/m ²	24.5 / 10.3	25.5 / 11.0	26.5 / 11.5	27.0 / 11.5
Prime/secondary location	% yoy	0.0 / 0.0	4.1 / 6.8	3.9 / 4.5	1.9 / 2.6

Source: Scope, bulwiengesa, DZ BANK forecast

yoy = year-on-year

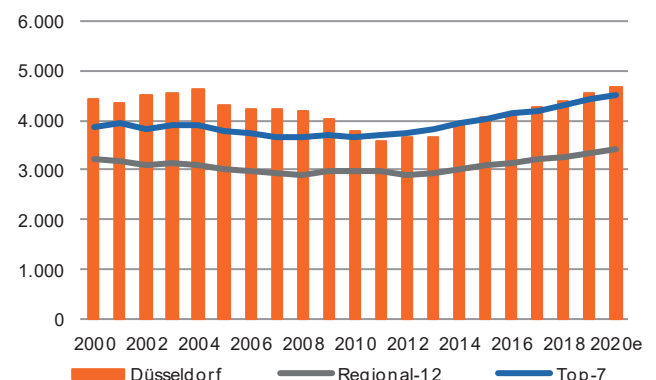
Retail space in Düsseldorf

PRIME RETAIL RENTS IN EUR PER M²



Source: bulwiengesa, DZ BANK forecast

RETAIL SALES IN EUR PER M²



Source: Scope

The city's overall locational strength supports Düsseldorf as a shopping destination which is synonymous with fashion and luxury. Contributory factors are a large catchment area of 2 million people and high purchasing power of 119 points, exceeded only by Munich among the top 7. City-centre retail, which occupies about a third of all sales space in the city, is also of high status. Only Stuttgart has a similarly high concentration of sales space. In other top locations, the city centre accounts for at maximum a quarter of total sales space. The "Kö" luxury site with its extensive range of bars and restaurants, also offers a high quality of stay. The previous split between the "banking" and "shopping" sides is disappearing. The large building sites which have been a feature of Düsseldorf city centre for about ten years, are now gradually approaching completion. The former overpass which has now been relocated in a tunnel and the new underground line have made the city centre much more attractive and accessible. The modernisation of Carsch-Haus, Kaufhof, Sevens and the Kö-Galerie, as well as retail developments such as the Kö-Bogen, are also having a positive impact. Before the city centre finally emerges in all its new glory, work still has to be completed on the spectacular Kö-Bogen II and the new pedestrian zone in what was previously a fairly unattractive prime location in Schadowstraße – probably in 2023. Prime rents defied the general trend in retail rents, increasing to EUR 285 per m² at the end of 2019. However, we do not expect this high level to be sustained this year. Prime rents therefore look set to fall slightly.

Retail: major "Düsseldorfer City construction project nearing completion

RETAIL FORECASTS

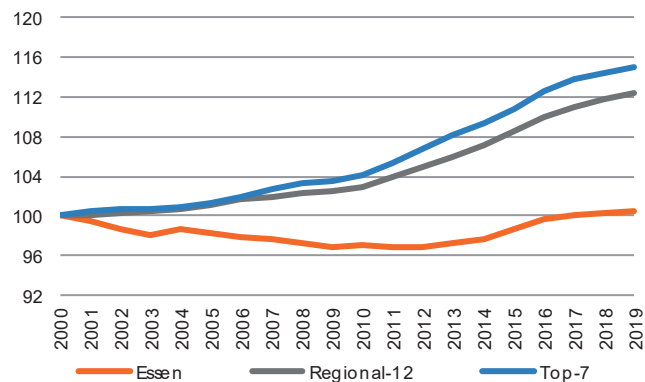
		2017	2018	2019	2020e
Demand					
Per cap. disposable income	EUR/month	2,450	2,499	2,560	2,611
Unemployment rate	%	7.4	6.7	6.7	6.9
Retail sales	EUR m/% yoy	5,291 / 2.9	5,478 / 3.5	5,696 / 4.0	5,890 / 3.4
Retail sales	EUR/m ² sales space	4,251	4,393	4,548	4,676
Supply					
Retail space	in m ² '000	1,245	1,247	1,252	1,260
Retail space	per capita in m ²	2.02	2.02	2.02	2.02
Retail rent					
Prime/secondary location	EUR/m ²	280 / 16.0	282 / 17.0	285 / 17.0	280 / 17.0
Prime/secondary location	% yoy	1.8 / 0.0	0.7 / 6.3	1.1 / 0.0	-1.8 / 0.0

Source: Scope, bulwiengesa, DZ BANK forecast

yoy = year-on-year

ESSEN

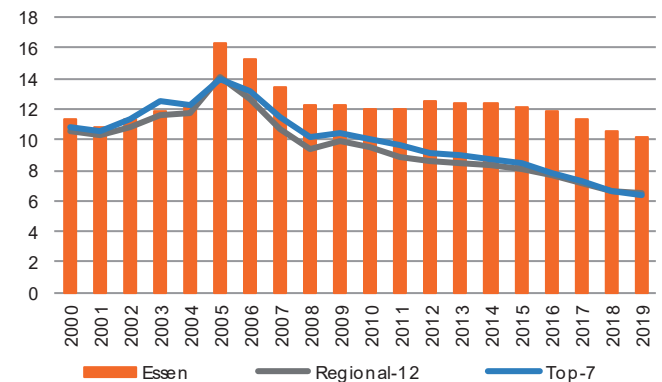
POPULATION GROWTH



Source: Scope

Index 2000 = 100

UNEMPLOYMENT RATE IN PER CENT



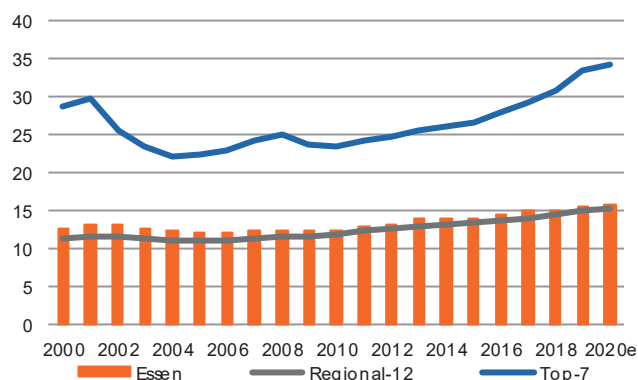
Source: bulwiengesa, BA, DZ BANK forecasts

Things are improving in Essen. The population has been growing again since 2014 after the shrinking process brought about by the crisis in the coal and steel industry. At not quite 600,000 inhabitants – up to 730,000 at the time of Germany's economic miracle – the Ruhr city is still one of the ten biggest German cities. The positive trend, which is also reflected in a moderate increase in the number of people in work, reflects the city's transformation into a service centre. The proportion of people employed in the manufacturing sector has fallen to 13 per cent. The economic focus has shifted towards administration, and Essen is now home to many prominent companies, including two DAX groups (E.ON and RWE) and four MDAX groups (Brenntag, Evonik, Hochtief and ThyssenKrupp). Other big names based in Essen are Aldi-Nord, Deichmann, E.ON-Ruhr gas, the Funke media group, Galeria Karstadt Kaufhof, Innogy, Medion, Schenker and STEAG. Trade fairs are another important earner for the local economy. The University of Duisburg-Essen is also having a positive impact on the city's development; it replaces the former Gesamthochschule which was founded in 1972. Over 30,000 students study at Essen's higher education institutions. Essen has good transport links in view of its central position in the Ruhr region. Düsseldorf Airport is only 30 kilometres away. In spite of successes, unemployment is still high at just over 10 per cent (January 2020).

Upturn in Essen: the population is growing again after falling for a long time

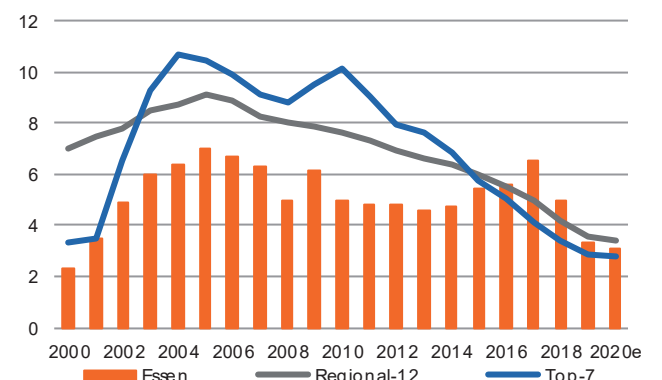
Office space in Essen

PRIME RENT FOR OFFICE SPACE IN EUR PER M²



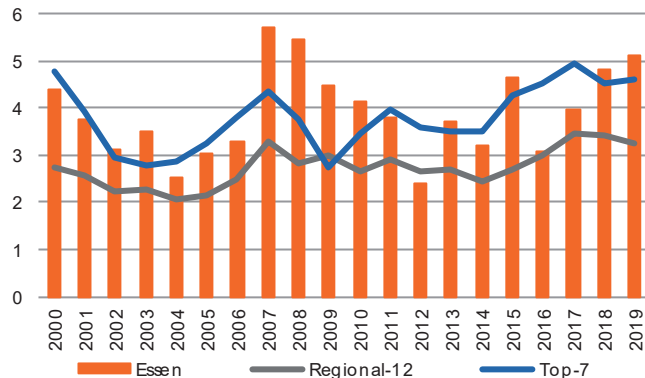
Source: bulwiengesa, DZ BANK forecasts

VACANCY RATE IN PER CENT



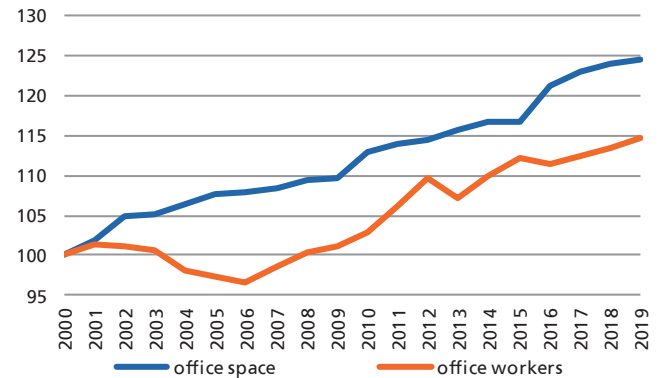
Source: bulwiengesa, DZ BANK forecasts

TAKE-UP AS PER CENT OF OFFICE SPACE



Source: bulwiengesa

TREND IN OFFICE SPACE AND NO. OF OFFICE WORKERS



Source: Scope, bulwiengesa

Index 2000 = 100

Essen is a major office location in Germany and at the same time the leading office location in the Ruhr thanks to the many company head offices based there. The stock amounts to 3.2 million m² and, apart from the top locations, only Hannover, Nuremberg and Bonn are bigger. The Essen office market did well in 2019 with a persistently positive trend and record annual take-up of over 160,000 m². This is equivalent to 5 per cent of the existing stock. As such, the relative attraction of the Essen market is in line with the level of the top locations. The high take-up was buoyed by many transactions in the company head office segment. Four deals involving Aldi (two contracts), Hochtief and RWE were for over 10,000 m². Half of the ten biggest leases involved projects. This illustrates the fact that large, available and marketable offices are in short supply in the current stock. The vacancy rate has halved to 3.3 per cent since 2017. The prime rent has increased to EUR 15.50 on the back of substantial demand for offices and tighter supply. Whereas there was only a minimal flow of newly completed office space in 2019, the level is expected to pick up this year. In view of the fact that most of the new building is already committed, however, supply is only likely to improve marginally. A further reduction in the vacancy rate is possible. Bearing in mind the scarcity of space, there could be another slight increase in the prime rent this year.

Leading office location in the Ruhr area; record take-up in 2019

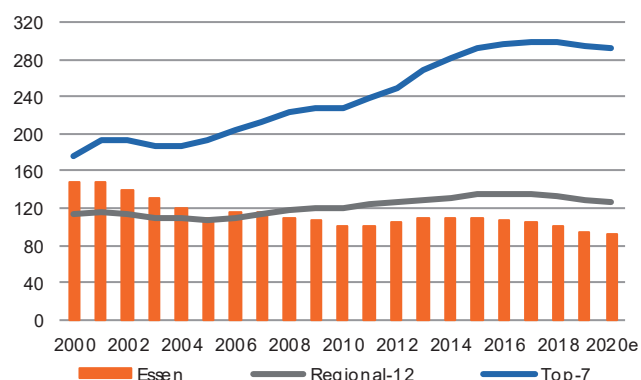
OFFICE FORECASTS

		2017	2018	2019	2020e
Demand					
GDP	% yoy	2.1	2.7	3.1	2.5
Per capita GDP	in EUR	47,554	48,743	50,146	52,197
No. of office workers	in '000	100.2	101.1	102.1	103.1
No. of office workers	% yoy	0.9	1.0	1.0	0.9
Supply					
Total office space	in m ² '000	3,142	3,171	3,182	3,215
Total office space	% yoy	1.5	0.9	0.3	1.0
Vacancy rate	%	6.5	5.0	3.3	3.1
Office rents					
Prime/secondary location	EUR/m ²	15.0 / 6.1	15.0 / 6.5	15.5 / 7.3	15.8 / 7.3
Prime/secondary location	% yoy	3.4 / 0.0	0.0 / 6.6	3.3 / 12.3	2.0 / 2.7

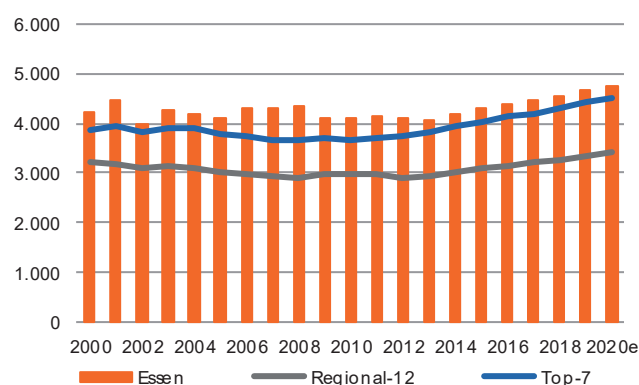
Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

Retail space in Essen

PRIME RETAIL RENT IN EUR PER M²

Source: bulwiengesa, DZ BANK forecasts

RETAIL SALES IN EUR PER M²

Source: Scope

Although Essen is a heavyweight among retail locations in western Germany, its glamour as a go-to shopping destination has now faded somewhat. This is illustrated by a centrality score of 112 points, which is no longer quite so high. One reason for this is greater competition from neighbouring cities Düsseldorf, Dortmund or Oberhausen with its CentrO. Further problems are high unemployment and the population decline of previous years. At 97 points, the purchasing power score is slightly below average. On the plus side, Essen benefits from a 1.4 million-strong catchment area. The decline in the city's importance as a shopping destination is evident from the prime rent which moved in the opposite direction to prime retail rents for a long time. Today, it is one third below its level at the turn of the millennium. In 2013, it recovered to EUR 110 per m². Since 2016, however, it has been falling again, most recently to EUR 94 per m², leading to an aggregate slide of 15 per cent from 2016 to 2019, even though Essen's city centre has become more attractive. This was helped by the opening in 2009 of the big shopping centre on the Limbecker Platz, followed in 2010 by the revitalisation of the RATHAUS GALERIE and in 2013 by the revamping of the Haus am Kettwiger Tor. The city therefore now not only has its prime retail streets, the Limbecker and Kettwiger Straße, but also three modern shopping malls. On balance therefore, the supply of sales space is quite high. Difficulties in letting space are obvious from vacant stores. On the plus side, the decline in footfall in prime shopping locations has not continued. It remains to be seen whether the prime rent will stabilise at its relatively low level. A further slight decline is likely this year.

Prime rent falling in spite of a good range of shopping options and attractive shopping centres

RETAIL FORECASTS

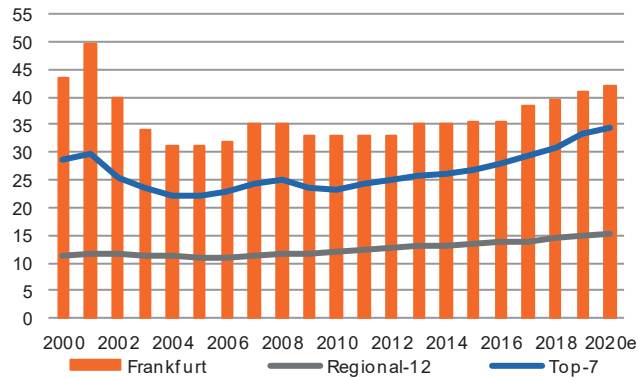
		2017	2018	2019	2020e
Demand					
Per cap. disposable income	EUR/month	1,928	1,959	1,997	2,025
Unemployment rate	%	11.4	10.6	10.2	10.4
Retail sales	EUR m/% yoy	3,846 / 2.3	3,950 / 2.7	4,070 / 3.0	4,172 / 2.5
Retail sales	EUR/m ² sales space	4,458	4,553	4,664	4,746
Supply					
Retail space	in m ² '000	863	867	873	879
Retail space	m ² /inhabitant	1.46	1.47	1.47	1.51
Retail rent					
Prime/secondary location	EUR/m ²	105 / 12.0	100 / 11.5	94 / 11.5	92 / 11.5
Prime/secondary location	% yoy	-2.8 / 0.0	-4.8 / -4.2	-6.0 / 0.0	-2.0 / -1.7

Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

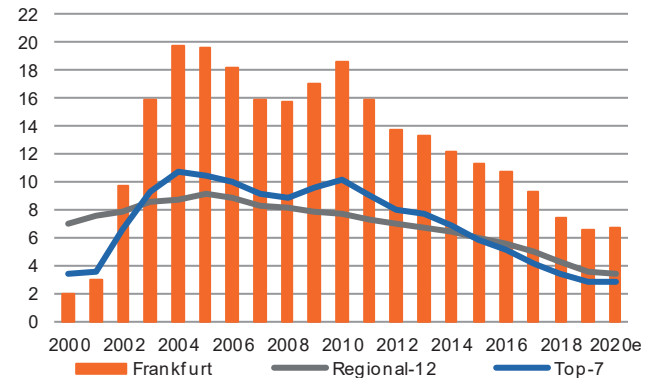
FRANKFURT

Office space in Frankfurt

PRIME RENT FOR OFFICE SPACE IN EUR PER M²

Source: bulwiengesa, DZ BANK forecasts

VACANCY RATE IN PER CENT



Source: bulwiengesa, DZ BANK forecasts

Even though forecasts regarding Brexit-led demand in the Frankfurt office market vary, relocations to the continent still helped bring about a reduction in vacant space and push up the prime rent to EUR 41 per m² in 2019. This makes Frankfurt the only top location to date with a prime rent of over EUR 40 per m². Growing employment in the Rhine-Main region has also led to high demand for office space, allowing a reduction in vacant office space. Moreover, there has hardly been any new space coming onto the market in the last few years. On balance, the vacancy rate fell to under 7 per cent in 2019. Office space take-up only partly reflects the high level of activity in the market: while a high figure of around 600,000 m² was achieved in 2017 and 2018 respectively, the figure last year was around 15 per cent less at around 510,000. The biggest single signing involving Deka-Immobilien was for 46,000 m². ING has leased 28,000 m². The Bundesbank is in third place with 13,500 m². The supply of attractive office space improved in 2019 through newly completed or refurbished offices. This type of space is likely to reach close to 400,000 m² in 2020 and 2021, although the bulk of it is already let. Consequently, the vacancy rate is unlikely to continue falling as it has until recently. Despite the slightly higher vacancy rate, larger connected office spaces are also in short supply in Frankfurt. This is why hardly any dampening effect on the further development of the top rent is expected.

High level of new building likely to bring reduction in vacant space of the last few years to an end

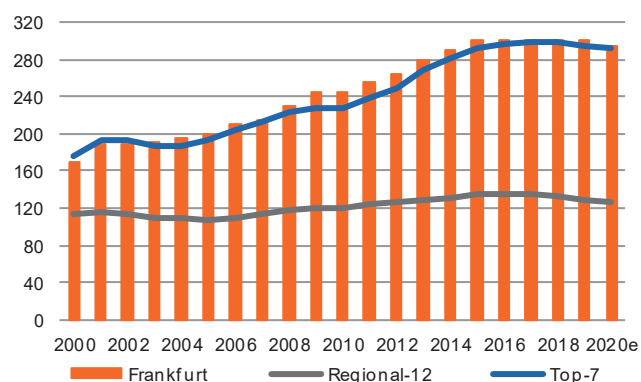
OFFICE FORECASTS

		2017	2018	2019	2020e
Demand					
GDP	% yoy	2.6	3.3	3.7	3.2
Per capita GDP	in EUR	93,801	96,035	98,771	101,249
No. of office workers	in '000	292.1	295.4	298.8	302.1
No. of office workers	% yoy	1.1	1.1	1.1	1.1
Supply					
Total office space	in m ² '000	10,164	10,090	10,187	10,295
Total office space	% yoy	-0.8	-0.7	1.0	1.1
Vacancy rate	%	9.3	7.4	6.5	6.6
Office rents					
Prime/secondary location	EUR/m ²	38.5 / 9.6	39.5 / 9.8	41.0 / 9.8	42.0 / 9.8
Prime/secondary location	% yoy	8.5 / 1.1	2.6 / 2.1	3.8 / 0.0	2.4 / 2.0

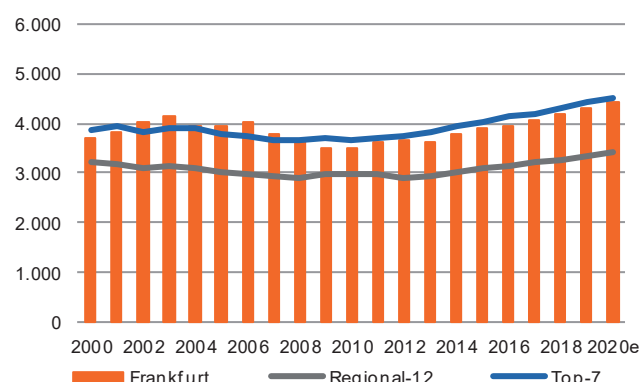
Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

Retail space in Frankfurt

PRIME RETAIL RENT IN EUR PER M²

Source: bulwiengesa, DZ BANK forecasts

RETAIL SALES IN EUR PER M²

Source: Scope

Frankfurt is one of the strongest locations in the German retail sector with a catchment area of 2.4 million people with high purchasing power. A steady increase in the population, employment and tourism are also good news for the city's retailers and food and drink trade. Annual overnight stays have almost doubled to over 10 million in the last ten years. The rebuilding of the Old Town has given Frankfurt a new highlight. Just a few years ago, Frankfurt's growth led to major project developments such as the MyZeil shopping centre (2009) and Skyline Plaza (2013). Today, a growing pool of potential shoppers is helping maintain a stable prime rent, in spite of pressure from e-commerce. The increase in the prime rent in the Zeil, Frankfurt's top retail location, came to a halt at EUR 300 per m² in 2015. The prime rent in the Goethestraße, the luxury end of the market, is a shade below. The negative effect from building works at the Zeil is now over. A Kaufhof store and the new UpperZeil have sprung up on the site of the now demolished Zeilgalerie. Just a little further on, the MyZeil shopping centre has undergone a radical facelift, targeted mainly at lacklustre food and drink outlets which have now been expanded. The centre now also houses an exclusive art-house cinema. We are pleased to note that the closing down in the new year of the Saks off 5th store on the Hauptwache has not led to vacant space in a prominent location. In addition, the city once again has a large sports shop with the new tenant, Karstadt Sports. Outside the city centre, the NordWestZentrum has been partly restructured. We do not see any further demand for larger retail projects at present. The loss of the IAA trade fair is a major blow for the retail sector since it attracted up to 1 million visitors. On balance, we expect a slight fall in the prime rent.

The days of major project developments in Frankfurt's retail sector are over

RETAIL FORECASTS

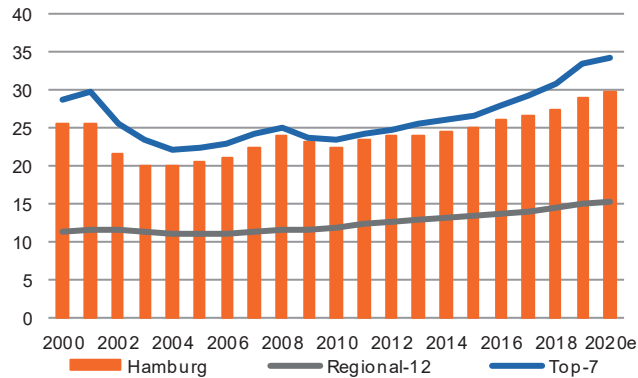
		2017	2018	2019	2020e
Demand					
Per cap. disposable income	EUR/month	2,102	2,138	2,183	2,221
Unemployment rate	%	5.9	5.4	5.1	5.3
Retail sales	EUR m/% yoy	6,250 / 3.0	6,452 / 3.2	6,682 / 3.6	6,883 / 3.0
Retail sales	EUR/m ² sales space	4,062	4,188	4,315	4,416
Supply					
Retail space	in m ² '000	1,539	1,541	1,549	1,559
Retail space	m ² /inhabitant	2.07	2.06	2.05	2.05
Retail rent					
Prime/secondary location	EUR/m ²	300 / 17.5	300 / 18.0	300 / 18.0	295 / 18.0
Prime/secondary location	% yoy	0.0 / 0.0	0.0 / 2.9	0.0 / 0.0	-1.7 / 0.0

Source: Scope, bulwiengesa, DZ BANK forecast

yoy = year-on-year

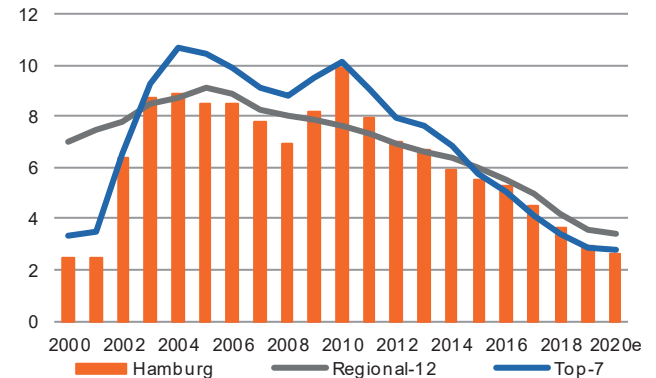
HAMBURG

Office space in Hamburg

PRIME RENT FOR OFFICE SPACE IN EUR PER M²

Source: bulwiengesa, DZ BANK forecasts

VACANCY RATE IN PER CENT



Source: bulwiengesa, DZ BANK forecasts

The upward trend in the Hamburg office market, which has been driven by the city's broadly diversified economy, continued in 2019. Strong market activity led to office space take-up of 540,000 m², largely in line with the previous-year figure. At the same time, the amount of vacant office space has dwindled considerably, making it increasingly difficult to find suitable premises. Last year, the vacancy rate was down to 2.9 per cent from 4.5 per cent in 2017. As a result of the tight supply, eight out of the ten biggest deals involved projects, some of which will not be completed before 2023. The biggest single transaction was for 40,000 m², which will be the Otto-Ver-sand head office in Hamburg-Bramfeld. The second and third largest deals involved XING and Vattenfall. A total of seven transactions were for at least 10,000 m². Because of the backlog in demand, the prime rent continued to climb to EUR 29 per m². It has risen by over 18 per cent in total in the space of five years, and the trend is likely to continue since there is still no sign of any easing in the market situation this year from a higher completion volume. The vacancy rate is therefore set to come down further. New stock of over 200,000 m² per annum is not expected to flow into the market until 2021 onwards. However, bearing in mind a high proportion of owner-occupied assets and space which is already committed, this is only likely to bring about a slight improvement in the situation.

Upturn in Hamburg office market
continued in 2019

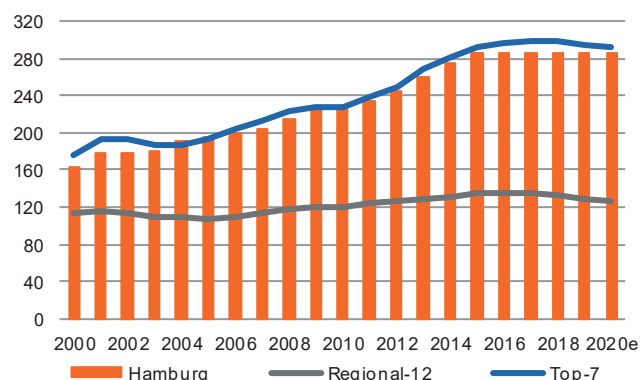
OFFICE FORECASTS

		2017	2018	2019	2020e
Demand					
GDP	% yoy	3.1	3.5	4.0	3.3
Per capita GDP	in EUR	64,727	66,532	68,787	70,709
No. of office workers	in '000	431.7	437.4	443.2	449.0
No. of office workers	% yoy	1.3	1.3	1.3	1.3
Supply					
Total office space	in m ² '000	13,706	13,750	13,851	13,940
Total office space	% yoy	-0.1	0.3	0.7	0.6
Vacancy rate	%	4.5	3.6	2.9	2.6
Office rents					
Prime/secondary location	EUR/m ²	26.5 / 11.0	27.5 / 12.0	29.0 / 12.2	29.8 / 12.2
Prime/secondary location	% yoy	1.9 / 1.9	3.8 / 9.1	5.5 / 1.7	2.8 / 1.6

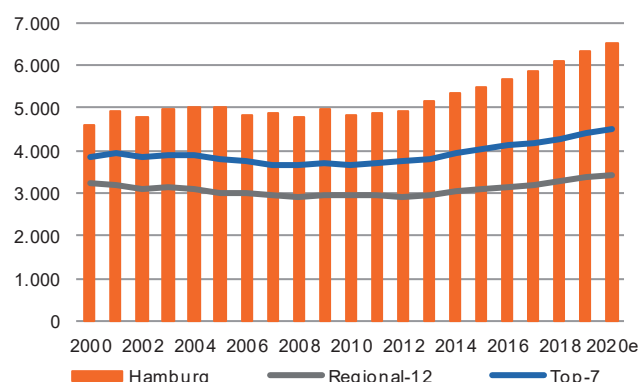
Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

Retail space in Hamburg

PRIME RETAIL RENT IN EUR PER M²

Source: bulwiengesa, DZ BANK forecasts

RETAIL SALES IN EUR PER M²

Source: Scope

Hamburg's status as northern Germany's leading shopping destination is supported by a 3.5 million-strong catchment area, growing population and high purchasing power along with tourism with 14.5 overnight stays and 900,000 cruise-ship passengers per year. On the plus side, the city offers a broad range of shopping options from conventional high-street locations such as the Spitalerstraße and the Mönckebergstraße in the east end of the city, all the way to the luxury end of the market such as the Neuer Wall in the west end of the city. Between the two is the Europa Passage, the only large shopping centre in the city centre. Overall, though, retail space is tight at only 350,000 m² – roughly the same as in Düsseldorf which is much smaller – although improvements have been made gradually through various project developments. However, even in Hamburg, it is becoming more difficult to let retail space, although shops which might otherwise have stood empty are being hidden to some extent by pop-up stores. Nevertheless, the prime rent has held its level of EUR 285 per m² since the end of 2015. This could still be the case this year; after all, interest in Hamburg from retailers and alternative players remains high. Two big future retail projects are emerging: one longer-term project involving the extension of the main line station (the Hauptbahnhof), which would ease access to the Spitalerstraße. The new shopping centre being built by developer Unibail-Rodamco-Westfield in the HafenCity's southern Overseas quarter should open a few years before that – probably in the autumn of 2022. This island solution, which involves plans for some 200 shops over almost 70,000 m², is likely to generate significant competition for the city centre.

Many retail developments bolstering Hamburg's attraction as a shopping destination

RETAIL FORECASTS

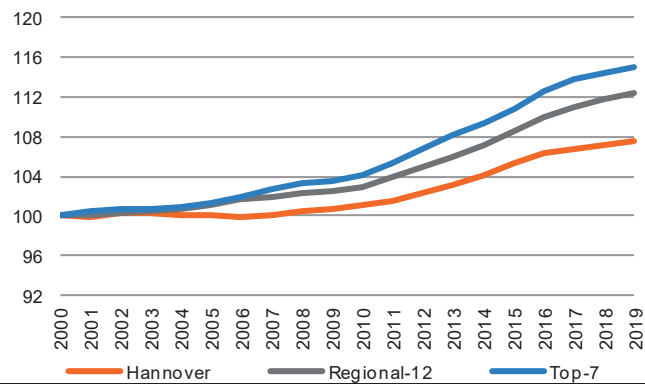
		2017	2018	2019	2020e
Demand					
Per cap. disposable income	EUR/month	2,316	2,352	2,398	2,432
Unemployment rate	%	6.8	6.3	6.1	6.4
Retail sales	EUR m/% yoy	17,599 / 3.6	18,287 / 3.9	19,054 / 4.2	19,748 / 3.6
Retail sales	EUR/m ² sales space	5,881	6,084	6,310	6,506
Supply					
Retail space	in m ² '000	2,993	3,006	3,020	3,035
Retail space	m ² /inhabitant	1,64	1,64	1,64	1,64
Retail rent					
Prime/secondary location	EUR/m ²	285 / 40.0	285 / 40.0	285 / 40.0	285 / 40.0
Prime/secondary location	% yoy	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0

Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

HANNOVER

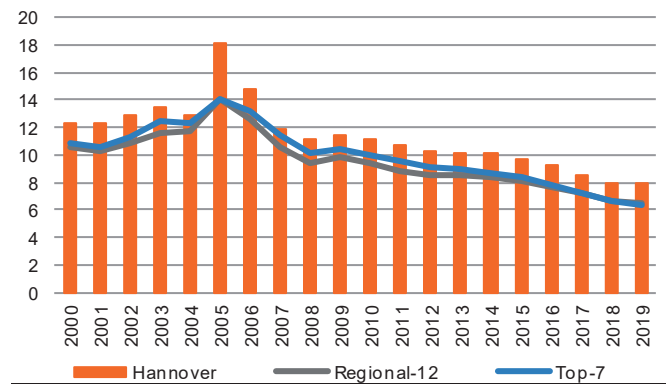
POPULATION GROWTH



Source: Scope

Index 2000 = 100

UNEMPLOYMENT RATE IN PER CENT

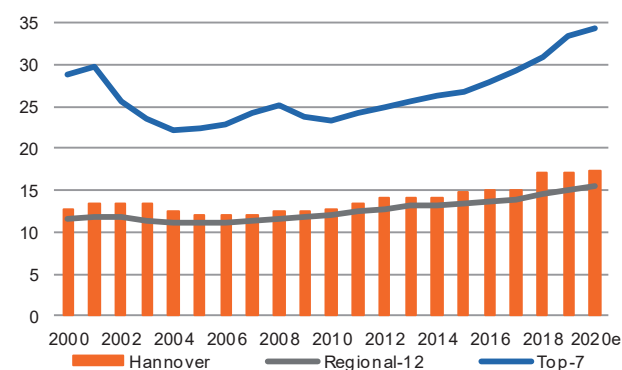


Source: bulwiengesa, DZ BANK forecasts

Hannover is the largest city in Lower Saxony with a population of almost 550,000; it is the 13th largest city in Germany. The city's population growth of around 7 per cent in the last ten years is not low, but still a little way below the average of 10 per cent for the regional centres under consideration in this report. Hannover is the regional capital, an administrative centre and pre-eminent business centre in the state. At the same time, the city is at the heart of the metropolitan Hannover-Braunschweig-Göttingen-Wolfsburg region. Hannover is also a major trade fair centre; it hosted the World Expo in 2000. The city's economy benefits from its function as a major hub in an east-west and north-south direction which has helped the development of a strong logistics sector. Industry is represented by mechanical engineering and automotive firms along with related suppliers. The city is also an important centre for financial services. Insurance companies such as Hannover Re and Talanx which are listed in the MDAX and SDAX respectively have their headquarters in the city. Hannover also has a DAX company, the automotive supplier Continental. Moreover, the city is an important academic centre with various research and higher education institutions with around 50,000 students. Although it has fallen steadily in the last few years, unemployment is still relatively high at around 8 per cent in spite of a broad labour market. Hannover is among the most important locations in Germany after the top 7 for the commercial real estate market with a very large office stock for a regional centre and high rents for office and retail assets.

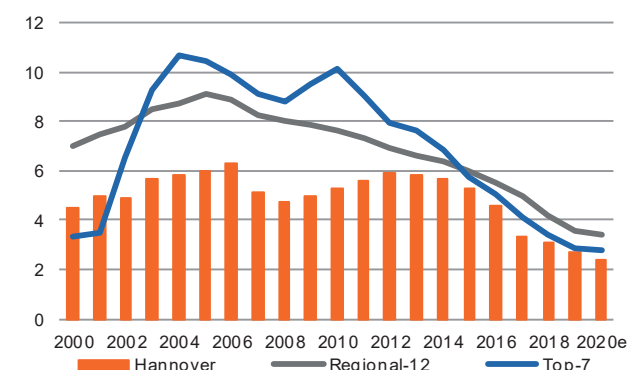
Major property market in
Northern Germany

Office space in Hannover

PRIME RENT FOR OFFICE SPACE IN EUR PER M²

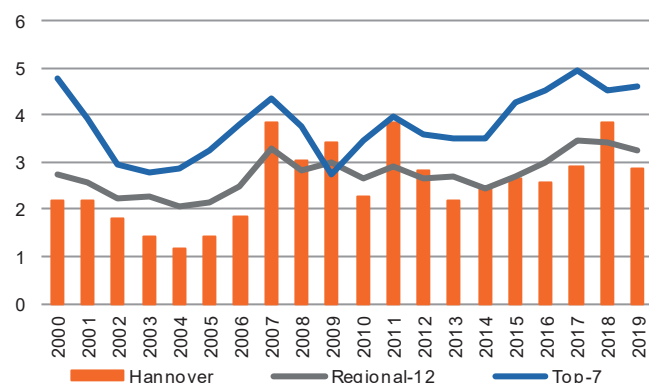
Source: bulwiengesa, DZ BANK forecasts

VACANCY RATE IN PER CENT



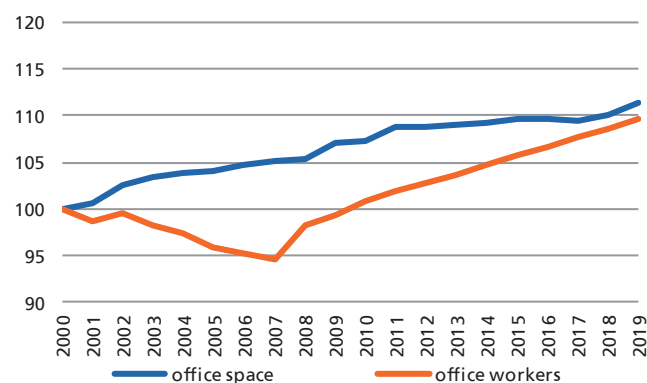
Source: bulwiengesa, DZ BANK forecasts

TAKE-UP AS PER CENT OF OFFICE SPACE



Source: bulwiengesa

TREND IN OFFICE SPACE AND NO. OF OFFICE WORKERS



Source: Scope, bulwiengesa

Index 2000 = 100

Hannover is the biggest office location after the top 7 with an office stock of 4.6 million m². It is followed some way behind by Nuremberg with 3.6 million m². However, a large office stock does not in any go hand-in-hand with a supply surplus. In fact, the vacancy rate has halved since 2012 and is now a low 2.7 per cent, since the expansion of office-based employment of 10 per cent within ten years has been much stronger than the 4 per cent increase in the office stock. Supply is likely to get even tighter this year. The flow of new space will probably be less than 20,000 m² which means that the vacancy rate could decline further. The biggest construction project at present is Continental's new head office which will have 44,000 m² of office space. Together with other new build projects and completed refurbishments, however, supply could improve significantly in 2021. Take-up of 130,000 m² was below the previous-year record of over 170,000 m² which reflected two major transactions – involving Continental and the Hannover city administration – which amounted to a total of 70,000 m². However, there were no such large five-figure transactions in 2019, which is why the lower figure is still an entirely respectable result. Remarkably, in spite of a tight market, only one deal among the top 10 lease agreements was a forward commitment deal. In spite of the lack of supply, we expect the prime rent to remain largely stable this year since it has already risen sharply to over EUR 17 per m². The weakness of the automotive industry could dampen the market.

Office: Hannover is the largest office location in Germany below the 7 top locations

OFFICE FORECASTS

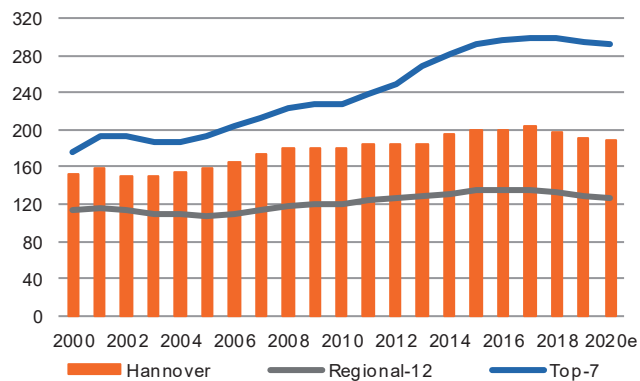
		2017	2018	2019	2020e
Demand					
GDP	% yoy	2.8	3.2	3.6	3.0
Per capita GDP	in EUR	61,658	63,384	65,443	67,134
No. of office workers	in '000	129.7	130.8	131.9	132.9
No. of office workers	% yoy	0.9	0.9	0.8	0.8
Supply					
Total office space	in m ² '000	4,479	4,507	4,556	4,565
Total office space	% yoy	-0.2	0.6	1.1	0.2
Vacancy rate	%	3.3	3.1	2.7	2.4
Office rents					
Prime/secondary location	EUR/m ²	15.0 / 7.6	17.0 / 7.8	17.1 / 8.0	17.2 / 8.0
Prime/secondary location	% yoy	0.0 / 0.0	13.3 / 2.6	0.6 / 2.6	0.8 / 2.5

Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

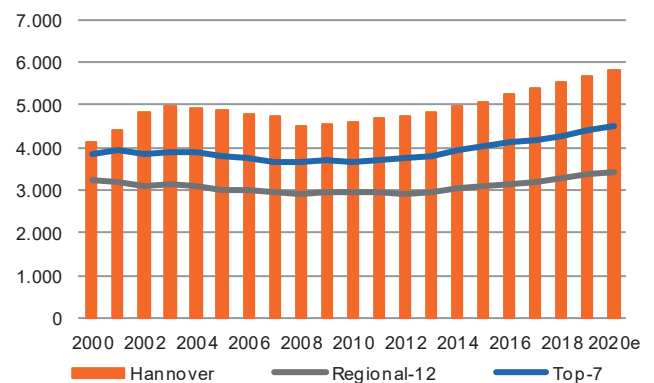
Retail space in Hannover

PRIME RETAIL RENT IN EUR PER M²



Source: bulwiengesa, DZ BANK forecasts

RETAIL SALES IN EUR PER M²



Source: Scope

Hannover is one of Germany's leading shopping destinations. Among the top locations, only Dortmund is slightly more expensive still, and even a decline in the prime rent to EUR 192 per m² has not altered this fact. One of the success factors is a catchment area of 1.8 million people. In addition, Hannover hardly has any competition from neighbouring cities, and, with a fairly large amount of sales space, the city centre is able to hold up well against out-of-town retail parks. On this basis, the city scores a sound 122 points for centrality. At 100 points, the purchasing power score is precisely in line with the German-wide average. Demand is buoyed by tourism in the trade fair city with around 2.2 million overnight stays per year. The city's attraction as a shopping location is based on a good range of shops in the city with several central high streets, namely the Bahnhofstraße/Niki-de-Saint-Phalle-Promenade, Georgstraße and Karmarschstraße. The latter was given a major lift a few years ago with the opening of the Kröpcke-Center. These shopping miles are enhanced by the inner-city Ernst-August-Galerie with its 35,000 m² of sales space which has recently seen a fairly large number of operator and concept changes. There are also attractive secondary locations. New developments are helping maintain the city's huge attraction as a go-to destination. In all, the city centre accounts for around one third of total retail space in Hannover. Even so, Hannover is not entirely immune to the downturn in demand for retail space triggered by e-commerce, which has already led to some vacant premises. Consequently, the still very high prime rent could ease up in spite of undimmed interest from retailers.

Hannover still one of the most expensive retail locations in Germany

RETAIL FORECASTS

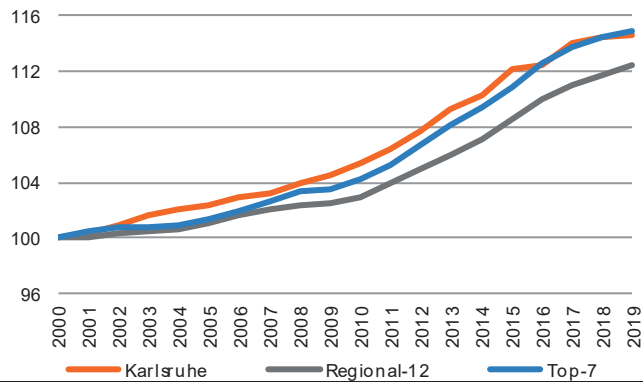
		2017	2018	2019	2020e
Demand					
Per cap. disposable income	EUR/month	2,223	2,266	2,317	2,356
Unemployment rate	%	8,6	8,0	8,0	8,4
Retail sales	EUR m/% yoy	5,103 / 2.6	5,250 / 2.9	5,415 / 3.2	5,557 / 2.6
Retail sales	EUR/m ² sales space	5,375	5,528	5,692	5,840
Supply					
Retail space	in m ² '000	949	950	951	952
Retail space	m ² /inhabitant	1.78	1.77	1.77	1.76
Retail rent					
Prime/secondary location	EUR/m ²	203 / 14.0	198 / 14.0	192 / 14.0	189 / 14.0
Prime/secondary location	% yoy	1.5 / 3.7	-2.5 / 0.0	-3.0 / 0.0	-1.6 / -3.6

Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

KARLSRUHE

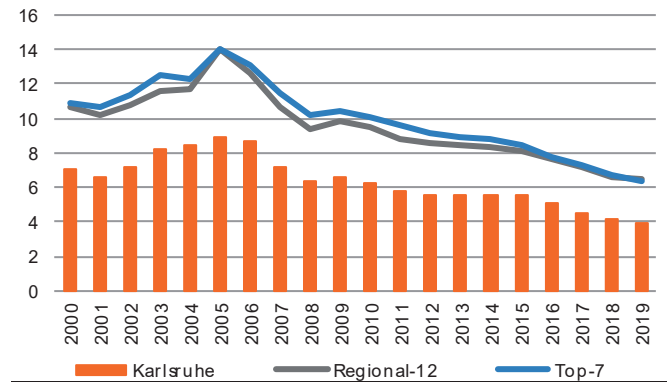
POPULATION GROWTH



Source: Scope

Index 2000 = 100

UNEMPLOYMENT RATE IN PER CENT



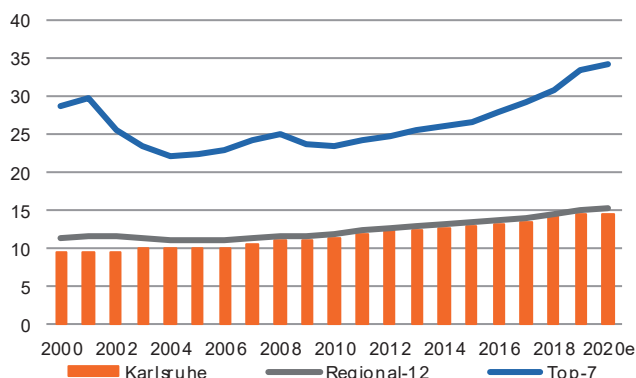
Source: bulwiengesa, BA, DZ BANK forecasts

For a long time, Karlsruhe was the second largest city in Baden-Württemberg after Stuttgart in terms of population size, but it has been relegated into third place by the faster-growing Mannheim. Previously strong population growth came to a halt a few years ago at around 310,000 inhabitants. Even more than in the case of population growth, the two cities differ in terms of their economic focus. Unlike the more industrial Mannheim, Karlsruhe is primarily an administrative centre; it is also a centre for science and technology and services. The city is located on the Upper Rhine and is home to important institutions such as the Federal Constitutional Court, the Federal Supreme Court, the regional government administration and the Federal and State Government Employee Retirement Fund. As a centre of learning, Karlsruhe stands out with various higher education institutions with around 42,000 students enrolled. The most prominent institution is the Karlsruhe Institute of Technology (KIT). As an academic centre, Karlsruhe also benefits from many research institutions. As an economic centre, the city enjoys good transport links via the A5, A6 and A65 motorways, an ICE high-speed train connection, along with an airport and river port. Key sectors are IT, chemicals and mechanical engineering. Well-known firms based in Karlsruhe include the dm pharmacy chain, EnBW, the co-operative IT service provider Fiducia/GAD and pharmaceutical company Schwabe. However, tourism is a more marginal activity in the baroque city and former royal seat. Unemployment is low at 4.3 per cent (January 2020).

Third largest city in Baden-Württemberg and also an important research and administration centre

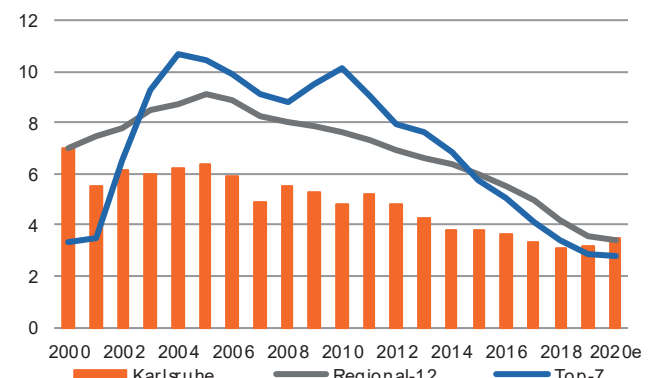
Office space in Karlsruhe

PRIME RENT FOR OFFICE SPACE IN EUR PER M²



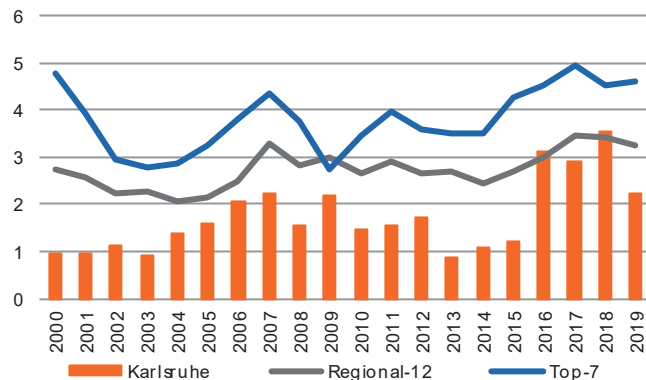
Source: bulwiengesa, DZ BANK forecasts

VACANCY RATE IN PER CENT



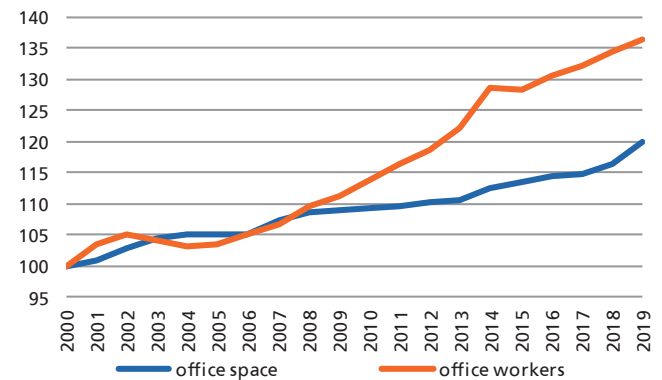
Source: bulwiengesa, DZ BANK forecasts

TAKE-UP AS PER CENT OF OFFICE SPACE



Source: bulwiengesa

TREND IN OFFICE SPACE AND NO. OF OFFICE WORKERS



Source: Scope, bulwiengesa

Index 2000 = 100

Karlsruhe has a relatively large office market of 2.5 million m² in view of the many of- fice jobs arising from the city's function as an administrative hub and centre for the services sector and for science and technology. This is clear from a comparison with cities such as Bremen, Dresden or Leipzig, which are much bigger with well over 500,000 inhabitants, but hardly have any more office space. Even so, the supply of office space is by no means ample. Strong growth in office-based employment of 22 per cent in the last ten years has far exceeded a 10 per cent increase in office space, leading to a vacancy rate of 3.2 per cent most recently. Although take-up in 2019 was still relatively high by Karlsruhe standards at 56,000 m², the level in the three years before that was considerably higher at 70,000 m² and more. Unlike in previous years, there were no major deals of over 10,000 m² in 2019. The biggest single transaction last year involved 8,500 m² leased by the Bundesanstalt für Immo- bilienaufgaben (BImA). The prime rent has increased noticeably to EUR 14.50 since demand has exceeded supply for some time now. After a relatively high take-up in 2019, supply should also increase this year through the completion of an office complex of 55,000 m² adjoining the train station for the IT company Dommermuth. We expect a slight increase in the vacancy rate, whereas the prime rent should remain largely stable.

Increase in office space up slightly in 2019 and 2020

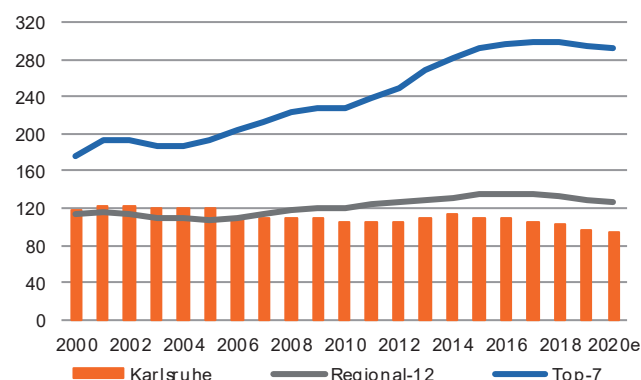
OFFICE FORECASTS

		2017	2018	2019	2020e
Demand					
GDP	% yoy	2.6	3.1	3.5	2.9
Per capita GDP	in EUR	62,796	64,537	66,635	68,443
No. of office workers	in '000	85.6	86.9	88.2	89.5
No. of office workers	% yoy	1.3	1.5	1.5	1.5
Supply					
Total office space	in m ² '000	2,394	2,428	2,498	2,555
Total office space	% yoy	0.5	1.4	2.9	2.3
Vacancy rate	%	3.3	3.1	3.2	3.5
Office rents					
Prime/secondary location	EUR/m ²	13.4 / 6.3	14.2 / 6.5	14.5 / 6.6	14.6 / 6.6
Prime/secondary location	% yoy	0.8 / 1.6	6.0 / 3.2	2.1 / 1.5	1.0 / 0.0

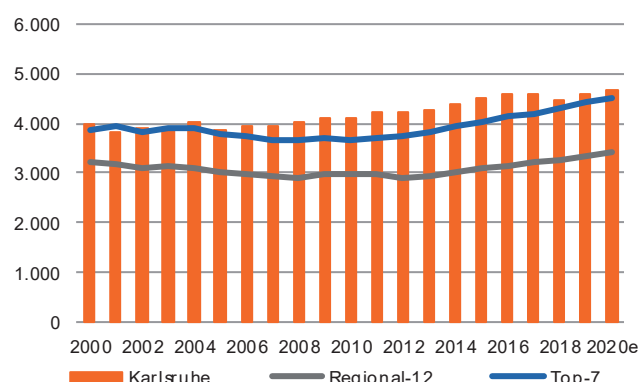
Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

Retail space in Karlsruhe

PRIME RETAIL RENT IN EUR PER M²

Source: bulwiengesa, DZ BANK forecasts

RETAIL SALES IN EUR PER M²

Source: Scope

Karlsruhe is among the most attractive shopping locations in Baden-Württemberg. Plus points for retailers include strong population growth over many years, a 1.1 million-strong catchment area and solid economic base with low unemployment. Purchasing power is slightly above average at 104 points. The city scores around 120 points for centrality. Two well integrated inner-city shopping locations, the Postgalerie and Ettlinger Tor, contribute to the city's strength as a place for shopping. After rising to EUR 113 in 2014, the prime rent has fallen back noticeably to EUR 96 per m² lately. This is likely to reflect primarily extensive and long-term building work on the inner-city "combination" solution project, which involves moving road and rail traffic below ground for the length of Karlsruhe's main shopping mile, the Kaiserstraße. Completion is projected for the end of 2020. However, that will not be the end of building work in the city centre: once the above project has been completed, work will begin on revamping the Kaiserstraße. Once all the work has been completed, the city centre will have a proper pedestrian area which should considerably enhance its standing as a shopping destination. A significant turnover in tenants suggests that retailers are already taking up positions in preparation for the new environment. In spite of the forthcoming end of building work, the prime rent could dip slightly this year, as suggested by problems in letting non-prime sales space. The trend is likely to be dampened not just by e-commerce, but also by the Durlach-Center which was extended in 2018 with a Decathlon store and by a new IKEA outlet, which is likely to open in 2020.

Major building works in the city centre have noticeably depressed the prime rent

RETAIL FORECASTS

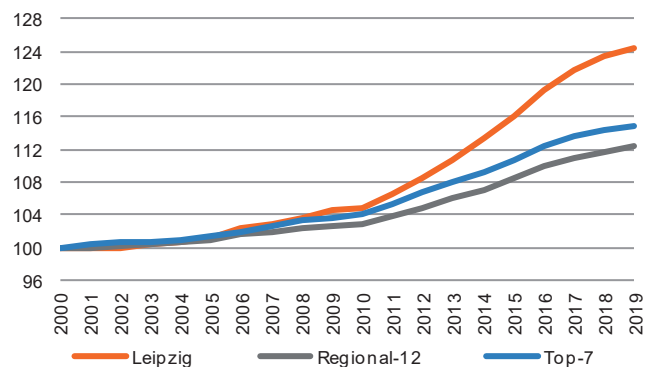
		2017	2018	2019	2020e
Demand					
Per cap. disposable income	EUR/month	2,153	2,197	2,249	2,290
Unemployment rate	%	4.5	4.1	3.9	4.1
Retail sales	EUR m/% yoy	2,515 / 2.4	2,555 / 1.6	2,632 / 3.0	2,696 / 2.4
Retail sales	EUR/m ² sales space	4,596	4,479	4,583	4,669
Supply					
Retail space	in m ² '000	547	570	574	577
Retail space	m ² /inhabitant	1.76	1.83	1.84	1.85
Retail rent					
Prime/secondary location	EUR/m ²	106 / 8.5	103 / 8.5	96 / 8.5	95 / 8.5
Prime/secondary location	% yoy	-3.6 / 0.0	-2.8 / 0.0	-6.8 / 0.0	-1.0 / -2.4

Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

LEIPZIG

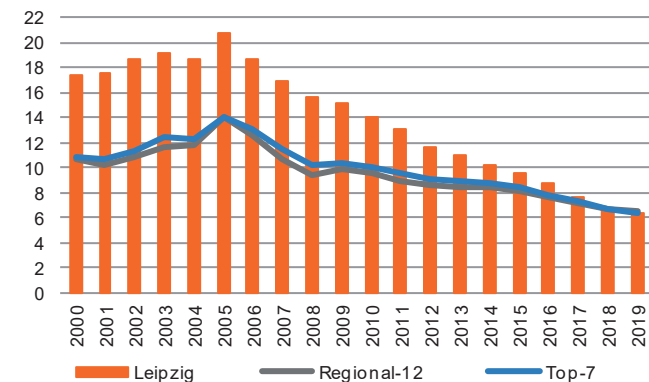
POPULATION GROWTH



Source: Scope

Index 2000 = 100

UNEMPLOYMENT RATE IN PER CENT

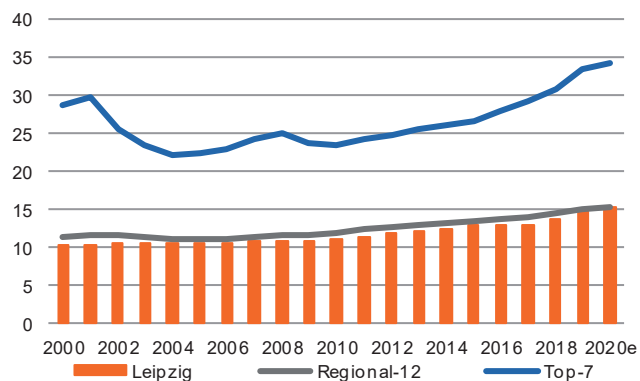


Source: bulwiengesa, BA, DZ BANK forecasts

Leipzig is the second largest city in eastern Germany in terms of population, and, up until a few years ago, was still synonymous with painful losses in the property market. At one time, a third of office space stood empty. Today, Leipzig is a fast-growing boomtown and once again a sought-after property location. The attractiveness of the city with its many historical buildings, high quality of life and sustained economic recovery have all led to an increase in the population of almost 20 per cent to 600,000 in the last ten years. Leipzig has therefore risen from 13th place at the turn of the millennium to 8th among the big German cities. However, the advantage of cheap living is now gone as a result of a sharp rise in rents with initial rents now up to an average of almost EUR 12 per m². However, Leipzig scores points for lively demand in the labour market. In spite of strong population growth, unemployment has fallen from over 20 per cent to 6.4 per cent (January 2020). The city's economic success is built on a long tradition of hosting important trade fairs and being a centre for commerce and industry. After reunification, many well-known companies such as BMW and Porsche built plants in Leipzig. Growth is likely to continue with the focus on key economic clusters which are automotive, healthcare/biotechnology, energy, logistics as well as IT/media and the creative sector. A successful start-up scene has also emerged in an environment that is home to a dozen higher education facilities with 40,000 students. Tourism is an important and growing economic factor.

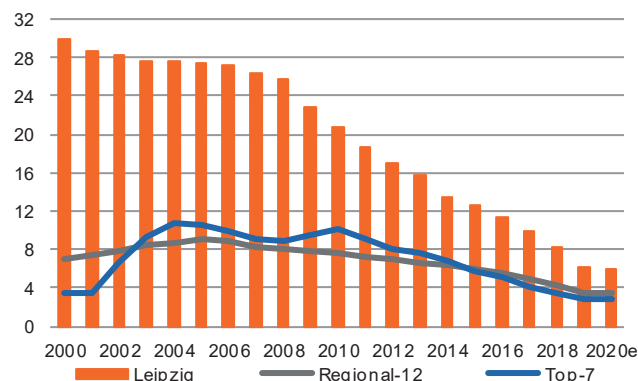
Infrastructure, education facilities and housing market struggling to keep up as a result of strong growth in the boomtown

Office space in Leipzig

PRIME RENT FOR OFFICE SPACE IN EUR PER M²

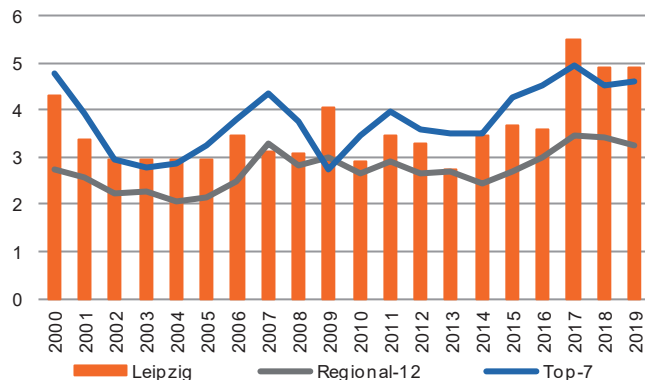
Source: bulwiengesa, DZ BANK forecasts

VACANCY RATE IN PER CENT



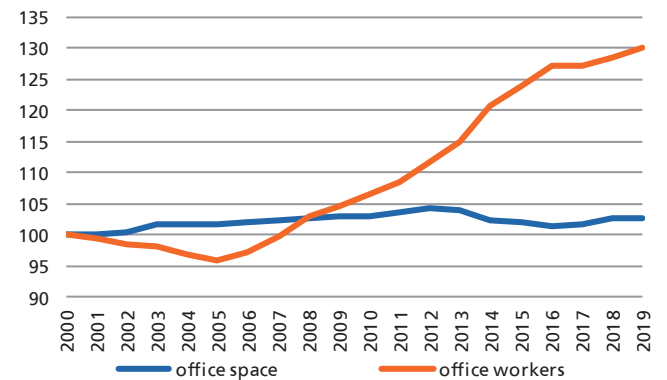
Source: bulwiengesa, DZ BANK forecasts

TAKE-UP AS PER CENT OF OFFICE SPACE



Source: bulwiengesa

TREND IN OFFICE SPACE AND NO. OF OFFICE WORKERS



Source: Scope, bulwiengesa

Index 2000 = 100

Leipzig's office stock grew by almost 1 million to 2.7 million m² during the post-reunification boom – far more than was actually needed. Consequently, the vacancy rate had risen to 33 per cent by 1997. Thereafter, new building came to a standstill, which means that the office stock has hardly changed to date. In the last few years, the situation has turned around completely from the days of surplus and a lack of demand. The ongoing rise in employment has led to the creation of around 30,000 office-based jobs in the last 20 years and hence to a reduction in the vacancy rate to 6 per cent. Although this is still a fairly high figure, the fact that a lot of stock is now rather dated means that the supply of marketable space has diminished considerably. It has also meant that rents have risen sharply from a still cheap level a few years ago. The prime rent has surged by almost 40 per cent to the latest figure of EUR 14.80 in the space of ten years. Tight supply also seems to have had a dampening effect on take-up. Although the figure of 135,000 m² in 2019 was still in line with the previous-year level, it was down from the record level of 2017. Take-up was buoyed by two big transactions. The tenants are BIMA and the Leipzig University of Applied Sciences (HTWK Leipzig). All the other deals were much smaller, at a maximum of 2,500 m². However, there is no sign of any improvement in the office market yet. Although new stock is once again under construction, only a small fraction of it will be available in the market. In addition, in view of the lack of options, new building is rarely going up in sought-after city-centre locations; it is mostly being built on the outskirts. The prime rent is likely to rise further, but no longer quite as sharply since it is already high.

Economic upturn has led to a scarcity of marketable office stock

OFFICE FORECASTS

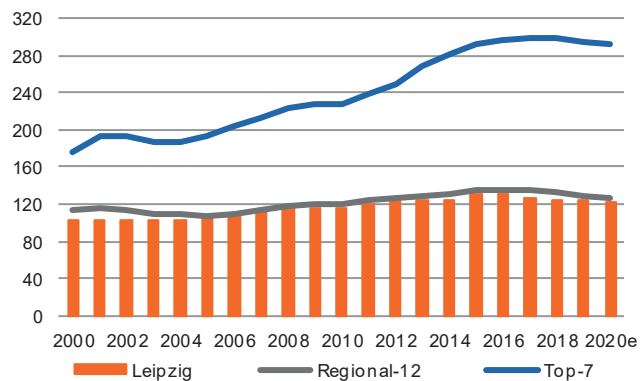
		2017	2018	2019	2020e
Demand					
GDP	% yoy	2.9	3.6	4.1	3.5
Per capita GDP	in EUR	35,005	35,775	36,949	38,057
No. of office workers	in '000	96.1	97.1	98.4	99.7
No. of office workers	% yoy	-0.1	1.1	1.3	1.3
Supply					
Total office space	in m ² '000	2,724	2,756	2,748	2,800
Total office space	% yoy	0.4	1.1	-0.3	1.9
Vacancy rate	%	9.9	8.3	6.2	6.0
Office rents					
Prime/secondary location	EUR/m ²	13.0 / 6.0	13.8 / 6.4	14.8 / 7.0	15.2 / 7.0
Prime/secondary location	% yoy	0.0 / 3.4	6.2 / 6.7	7.2 / 9.4	2.7 / 2.9

Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

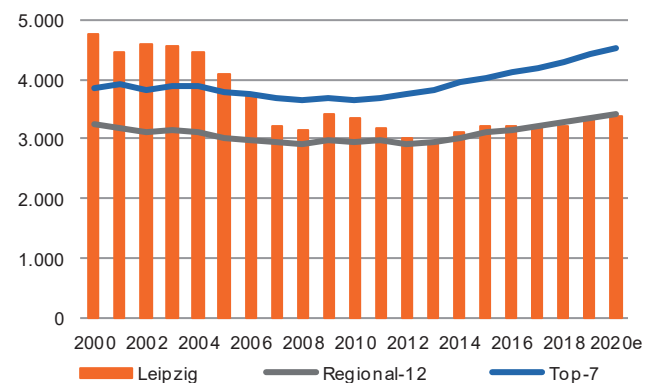
Retail space in Leipzig

PRIME RETAIL RENT IN EUR PER M²



Source: bulwiengesa, DZ BANK forecasts

RETAIL SALES IN EUR PER M²



Source: Scope

With its attractive city centre, Leipzig is the third go-to shopping destination in eastern Germany along with Berlin and Dresden. Conditions for retail are positive. Within the space of just ten years, job and population figures have increased by 50,000 and 100,000 respectively. The pool of potential shoppers is also boosted by a flourishing tourist trade. The annual number of overnight stays has risen by 1.5 million to 3.4 million during the ten-year period under consideration. Leipzig also benefits from a 1.2 million-strong catchment area. Accessibility to the city centre from outlying areas has improved noticeably with the completion of the City tunnel in 2013 and link-up to the overground (S-Bahn). One downside is weak purchasing power, which is well below the German-wide average at 87 points. Although Leipzig hardly gets any competition from surrounding towns, its centrality score is rather low at 107 points. This is likely to reflect the proximity of various out-of-town shopping centres. The prime rent which rose to its highest level so far of EUR 130 per m² in 2015, has since been easing up slightly, falling to EUR 125 per m² most recently. We expect a further slide this year. This does not reflect either a lack of customer or retailer interest in the city centre which has several prime shopping streets such as the Petersstraße and Grimmaische Straße. It also has the Höfe am Brühl shopping centre and the Hainspitze. The main dampening factor is a good supply of retail space. According to JLL, new tenants were being sought for 13 per cent of sales space in top locations at the halfway stage in 2019. On the plus side, a solution has now been found for the former Karstadt store. It is scheduled to reopen as “N30” at the end of 2021 offering a mix of retail and office space along with food and drink outlets.

Signs of saturation in spite of the economic upturn and strong population growth

RETAIL FORECASTS

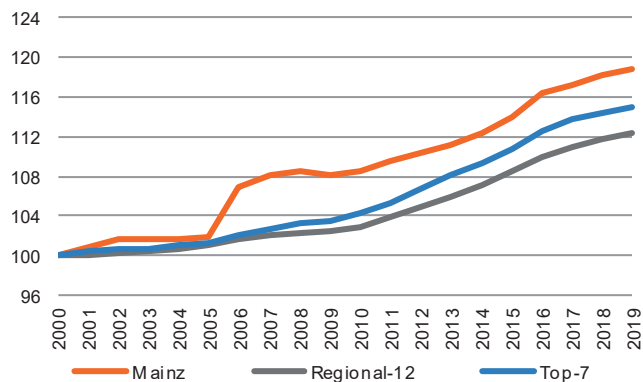
		2017	2018	2019	2020e
Demand					
Per cap. disposable income	EUR/month	1,725	1,757	1,805	1,849
Unemployment rate	%	7.7	6.7	6.3	6.5
Retail sales	EUR m/% yoy	2,330 / 2.7	2,412 / 3.5	2,508 / 4.0	2,593 / 3.4
Retail sales	EUR/m ² sales space	3,195	3,221	3,309	3,374
Supply					
Retail space	in m ² '000	729	749	758	768
Retail space	m ² /inhabitant	1.27	1.28	1.29	1.30
Retail rent					
Prime/secondary location	EUR/m ²	127 / 9.5	125 / 9.5	125 / 9.5	122 / 9.5
Prime/secondary location	% yoy	-2.3 / 0.0	-1.6 / 0.0	0.0 / 0.0	-2.4 / -1.1

Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

MAINZ

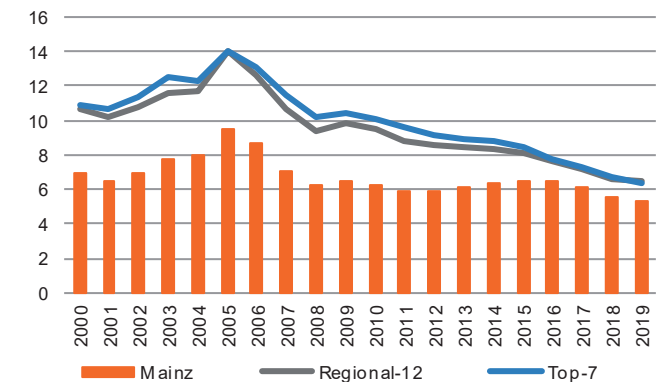
POPULATION GROWTH



Source: Scope

Index 2000 = 100

UNEMPLOYMENT RATE IN PER CENT



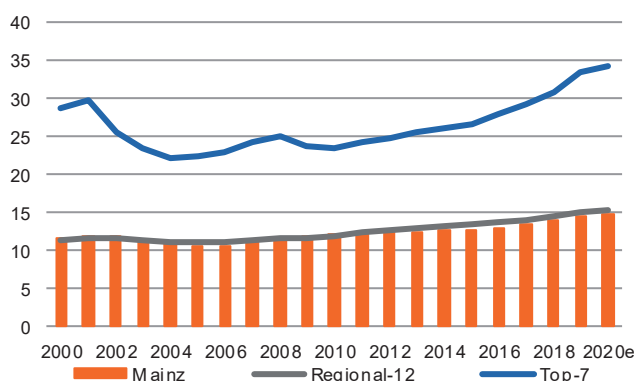
Source: bulwiengesa, BA, DZ BANK forecasts

Mainz's advantageous location on the Rhine and Main was already prized in Roman times. Today, the capital of the Rhineland-Palatinate also benefits from its location in the economically strong Rhine-Main area with the Frankfurt financial hub only 40 kilometres away. As a university town with a high quality of life and cheaper rents than in Frankfurt, Mainz has seen sustained population growth of 10 per cent to 220,000 inhabitants in the space of ten years. Public administration along with radio and TV, prominently represented by ZDF, SWR and 3sat play a key role for the local economy. The creative sector and services, focusing mainly on health and social services are also major employers. The logistics sector is rather small in spite of Main's port on the Rhine in view of less than optimum transport links. The manufacturing sector also plays a fairly secondary role. In contrast, Mainz is an important seat of learning with four universities at which 40,000 are enrolled, and many research institutions. Larger companies include the glass manufacturer Schott, credit insurer Coface or chemical company Werner & Mertz (which produces the shoe polish Erdal). Unemployment is relatively low; it stood at 5.4 per cent in January 2020. However, the figure has only fallen marginally in the last few years. The key property development in Mainz is in the Zollhafen area, a mixed-use project which will create space for 4,000 jobs and 1,400 flats, although this does not cover the high demand for housing.

Capital of the Rhineland-Palatinate and a major media centre in the western Rhine-Main area

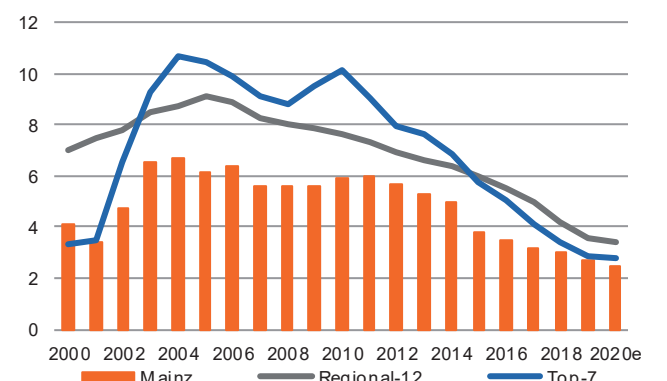
Office space in Mainz

PRIME RENT FOR OFFICE SPACE IN EUR PER M²



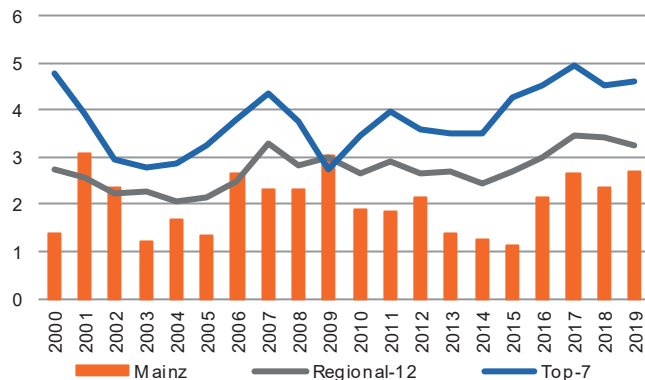
Source: bulwiengesa, DZ BANK forecasts

VACANCY RATE IN PER CENT



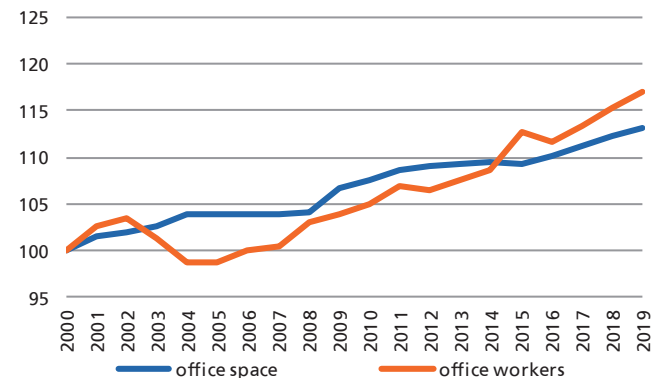
Source: bulwiengesa, DZ BANK forecasts

TAKE-UP AS PER CENT OF OFFICE SPACE



Source: bulwiengesa

TREND IN OFFICE SPACE AND NO. OF OFFICE WORKERS



Source: Scope, bulwiengesa

Index 2000 = 100

Mainz has a fairly small office market of 1.6 million m². The city's location on the western edge of the Rhine-Main region hardly has any impact on activity in the office market; demand for office space is mainly local. In the last ten years, the office stock has only increased by a modest 6 per cent, while office-based employment has risen twice as fast. This trend has led to a marked reduction in vacant space. Since 2010, the vacancy rate has more than halved to 2.7 per cent and rents have increased accordingly. Since 2009, the prime rent for office space has surged by over 20 per cent to EUR 14.50 per m² last year. Take-up in Mainz is mostly relatively low. Last year though, it was quite high at 44,000 m². The biggest single transaction was for 4,000 m²; the tenant is BioNTech. The next five transactions were roughly half the size, all – like the BioNTech signing – involving forward commitment deals for office space which will not be completed until this year or next year. From this, it is clear that the supply of large, marketable office space has virtually dried up. This is likely to remain the case for the time being since there is no large completion volume scheduled for either this year or next year. In view of tight supply, we expect another slight decline in the vacancy rate and a further rise in the prime rent, which could increase by 2 to 3 per cent as it has done in the last few years.

Supply remains tight and is likely to lead to further marked rise in prime rent for office space in 2020

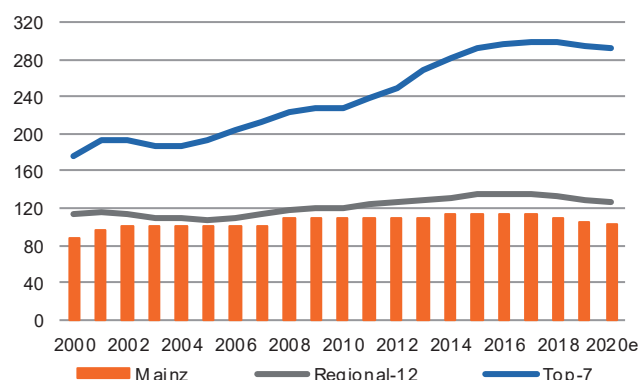
OFFICE FORECASTS

		2017	2018	2019	2020e
Demand					
GDP	% yoy	2.3	2.7	3.0	2.5
Per capita GDP	in EUR	57,630	58,668	60,138	61,439
No. of office workers	in '000	52.8	53.7	54.5	55.4
No. of office workers	% yoy	1.5	1.6	1.6	1.6
Supply					
Total office space	in m ² '000	1,609	1,624	1,637	1,650
Total office space	% yoy	1.0	0.9	0.8	0.8
Vacancy rate	%	3.2	3.0	2.7	2.5
Office rents					
Prime/secondary location	EUR/m ²	13.5 / 7.7	13.9 / 8.0	14.5 / 9.0	14.9 / 9.0
Prime/secondary location	% yoy	3.8 / 2.7	3.0 / 3.9	4.3 / 12.5	2.4 / 3.3

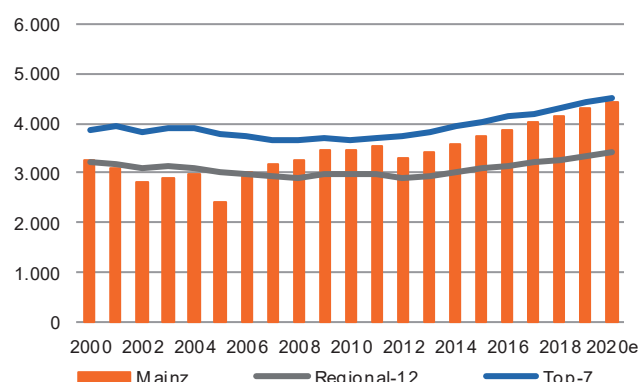
Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

Retail space in Mainz

PRIME RETAIL RENT IN EUR PER M²

Source: bulwiengesa, DZ BANK forecasts

RETAIL SALES IN EUR PER M²

Source: Scope

As a shopping location, Mainz benefits from a catchment area of 1 million people which mainly extends south-west of the city. North and eastwards, the catchment area is curtailed by the Rhine and shopping locations in the Rhine-Main area. There is strong competition from Wiesbaden across the Rhine and from the top shopping destination Frankfurt which is only 40 kilometres away. A study carried out by IHK also came to this conclusion. Although Mainz's inhabitants have a high purchasing power of 107 points, they are increasingly spending their money in the two cities mentioned above and also shopping online. In addition, Mainz has no inner-city shopping centre to attract shoppers apart from the fairly small Römerpassage. It therefore lacks larger, more on-trend retail spaces. On the other hand, Mainz's city centre offers a good range of shops in its three main shopping streets, Am Brand, Schuster- und Stadthausstraße. Overall, though, footfall is down and likewise for the prime rent which has fallen by a total of EUR 10 to EUR 104 per m² in 2017 and 2018. We believe a further slight dip is likely this year. On the plus side, the amount of vacant stock is fairly low, although some stores remain persistently unoccupied. A tenant (ADAC) has now been found for the long vacant premises in the market buildings. However, this highlights the fact that, like elsewhere, even space in top locations is increasingly being let to a new kind of tenant rather than to conventional retailers. In contrast, there is growing demand from food and drink outlets in Mainz city centre. It is encouraging to note that after being at a standstill for a long time, the revamping of the Ludwigstraße is now apparently making progress.

City centre struggling with stiff competition

RETAIL FORECASTS

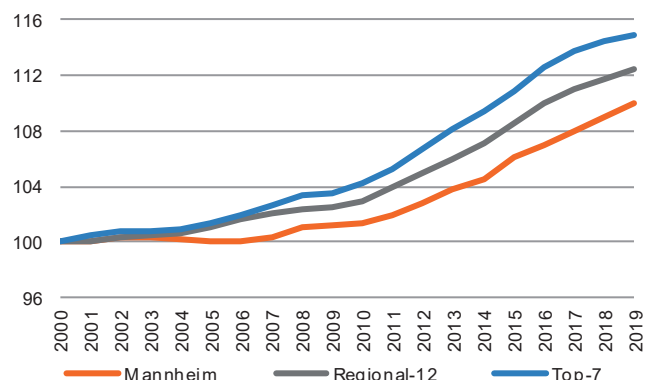
		2017	2018	2019	2020e
Demand					
Per cap. disposable income	EUR/month	2,079	2,110	2,157	2,199
Unemployment rate	%	6,1	5,5	5,3	5,5
Retail sales	EUR m/% yoy	2,016 / 3.4	2,092 / 3.7	2,175 / 4.0	2,248 / 3.4
Retail sales	EUR/m ² sales space	4,004	4,144	4,299	4,428
Supply					
Retail space	in m ² '000	504	505	506	508
Retail space	m ² /inhabitant	2.35	2.34	2.33	2.33
Retail rent					
Prime/secondary location	EUR/m ²	114 / 9.5	110 / 9.5	104 / 9.5	102.0 / 9.5
Prime/secondary location	% yoy	0.0 / 0.0	-3.5 / 0.0	-5.5 / 0.0	-1.9 / -2.1

Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

MANNHEIM

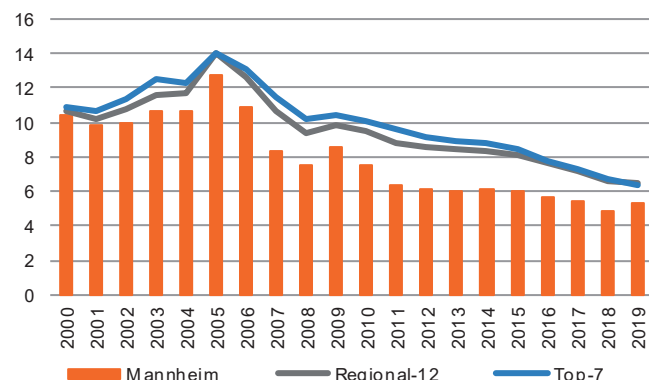
POPULATION GROWTH



Source: Scope

Index 2000 = 100

UNEMPLOYMENT RATE IN PER CENT

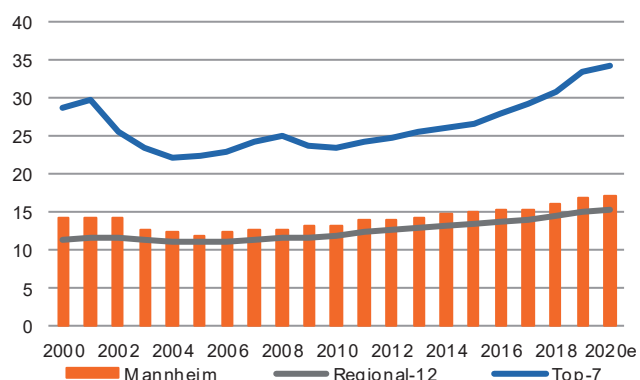


Source: bulwiengesa, BA, DZ BANK forecasts

Mannheim is the third largest city in Baden-Württemberg with 325,000 inhabitants. The population has grown at a strong rate of 9 per cent in the last ten years; however, it was not always the case. Unlike the slightly smaller Karlsruhe, the population stagnated for a long time as the industrial city struggled with high unemployment and image problems. Unemployment, which was still in double digits up to 2006, has now halved to 6.2 per cent (January 2020). A year-on-year increase of a good half a percentage point reflects a change in the spring of 2019 in the way labour market statistics are calculated. Mannheim remains the economic centre of the Rhine-Neckar region and a renowned seat of science with a large university and several higher institutes with a total of almost 30,000 students. It benefits from its location on the Rhine and Neckar and from good transport links via the A5 and A6 motorways and the high-speed ICE train. Mannheim also has a major river port. Its core sectors are the electrical/electronics industry, chemicals and pharmaceuticals along with machinery and automotive. The insurance and financial sectors as well as logistics have also done well. Mannheim moreover has a lively start-up scene in many start-up centres. Big names with a base in Mannheim include Daimler, Bilfinger, MVV Energie, Phoenix Pharmahandel, Südzucker and Fuchs Petrolub. For its future development, the city is able to take advantage of large disused military, railway and industrial sites. One such development is the Glückstein-Quartier. The 2023 Federal Garden Show will also take place on reclaimed land.

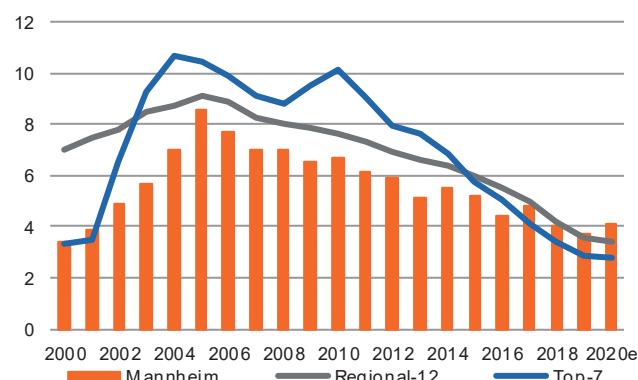
The industrial city of Mannheim has become an important centre for commerce and science

Office space in Mannheim

PRIME RENT FOR OFFICE SPACE IN EUR PER M²

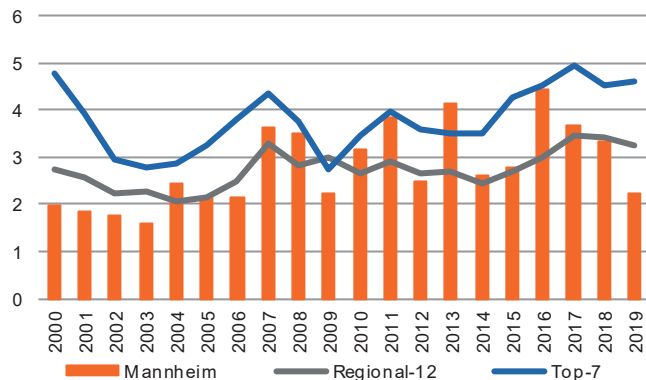
Source: bulwiengesa, DZ BANK forecasts

VACANCY RATE IN PER CENT



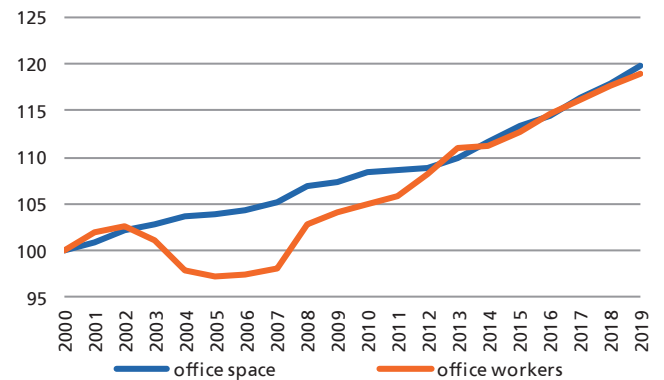
Source: bulwiengesa, DZ BANK forecasts

TAKE-UP AS PER CENT OF OFFICE SPACE



Source: bulwiengesa

TREND IN OFFICE SPACE AND NO. OF OFFICE WORKERS



Source: Scope, bulwiengesa

Index 2000 = 100

Mannheim is a major office location in the economically strong Rhine-Neckar region with a stock of 2.1 million m². One contributory factor has been the gradual but growing importance of the services sector. A sustained rise in the number of office-based jobs has led to a fall in the vacancy rate, which was still quite a high a few years ago, to under 4 per cent. Although extensive new building activity since 2013 has slowed down the reduction in vacant space, it has also brought contemporary office stock to the city. The supply of new, albeit expensive space is likely to have contributed to Mannheim becoming one of the most expensive office locations among the top 7. The prime rent has now reached almost EUR 17 per m² which means, that, apart from the top locations, only Bonn and Hannover are even more expensive. After likely take-up from 2016 to 2018, the figure last year was noticeably lower at 48,000 m². This mainly reflected the absence of any major transactions. The two biggest deals in 2019 were for 5,000 m² each; the tenants are Roche Diagnostics and the Familienheim Rhein-Neckar housing association. There has been more speculative new building in the last few years, not least because of a rise in the prime rent. Building has mostly been in the Eastsite business park and in the Glückstein-Quartier. The vacancy rate could increase slightly next year in view of a relatively high completion volume of office space amounting to an estimated 60,000 m² this year and 70,000 m² next year. In contrast, the rising trend in the prime rent is likely to slow down.

Mannheim one of the most expensive office markets in the whole of Germany apart from the top 7

OFFICE FORECASTS

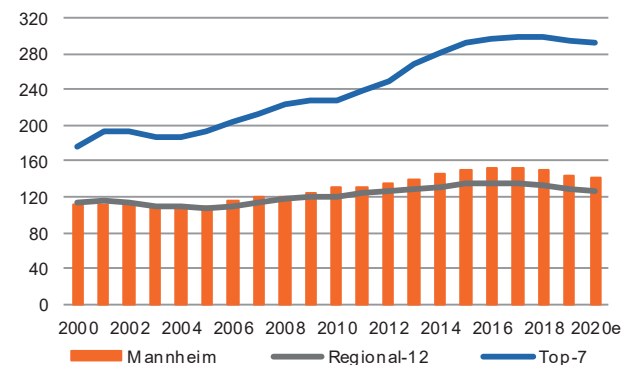
		2017	2018	2019	2020e
Demand					
GDP	% yoy	2.4	2.7	3.0	2.3
Per capita GDP	in EUR	57,996	58,979	60,153	61,469
No. of office workers	in '000	73.9	74.8	75.7	76.6
No. of office workers	% yoy	1.3	1.3	1.2	1.2
Supply					
Total office space	in m ² '000	2,080	2,107	2,141	2,175
Total office space	% yoy	1.7	1.3	1.6	1.6
Vacancy rate	%	4.8	4.0	3.7	4.1
Office rents					
Prime/secondary location	EUR/m ²	15.4 / 8.1	16.2 / 8.2	16.8 / 8.4	17.1 / 8.4
Prime/secondary location	% yoy	1.3 / 0.0	5.2 / 1.2	3.7 / 2.4	1.5 / 2.4

Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

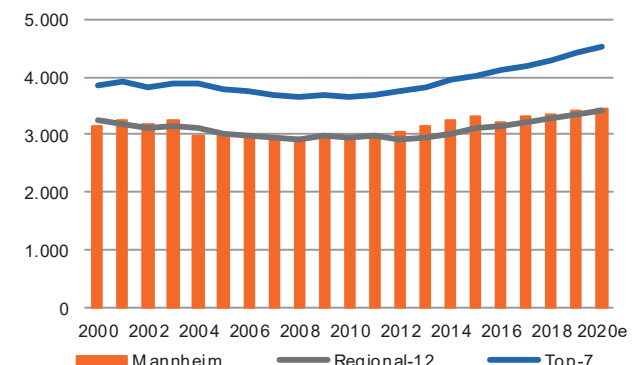
Retail space in Mannheim

PRIME RETAIL RENT IN EUR PER M²



Source: bulwiengesa, DZ BANK forecasts

RETAIL SALES IN EUR PER M²



Source: Scope

Mannheim is the prime shopping location in the Rhine-Neckar region. It has a catchment area of around 1.3 million people and a very high centrality score of almost 150 points. The influx of shoppers with a high purchasing power from the surrounding area makes up for the city's slightly below-average purchasing power of 97 points. Mannheim's attraction as a shopping destination had led to an increase in the prime rent to EUR 153 per m² by 2016. Even the increased offer from the opening of the Rhein-Galerie on the other bank of the Rhine in 2010 has not had any noticeable negative impact. The same is true of the increase in space from the Q6Q7 shopping centre which opened in 2016 and which has enhanced the attraction of the city centre's Planken shopping mile. In 2018 and 2019, however the prime rent dipped by a total of EUR 10 to EUR 143 m². The reasons for the decline, apart from pressure from online shopping, include building work to remodel the Planken which was completed in the spring of 2019. Work is also progressing in the Breite Straße. The former Mömax building – and Karstadt before that – reopened in September 2019 as K1 Karree, offering a mix of retail, food and drink outlets, fitness facilities and offices. Mannheim remains a sought-after location for retailers. In view of the new shopping options in the city and the revamped and above all building-work-free Planken, we expect the prime rent to remain stable this year after the decline of the last two years.

Planken shopping mile once again free of building work after a radical transformation

RETAIL FORECASTS

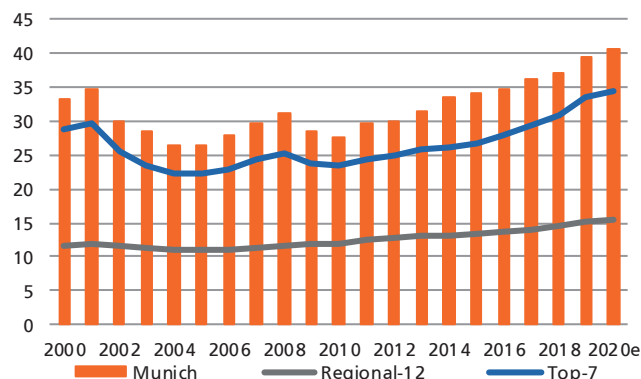
		2017	2018	2019	2020e
Demand					
Per cap. disposable income	EUR/month	1,987	2,003	2,036	2,064
Unemployment rate	%	5.4	4.9	5.3	5.6
Retail sales	EUR m/% yoy	2,705 / 2.7	2,784 / 2.9	2,872 / 3.2	2,948 / 2.6
Retail sales	EUR/m ² sales space	3,303	3,363	3,425	3,462
Supply					
Retail space	in m ² '000	819	828	839	852
Retail space	m ² /inhabitant	2.67	2.67	2.68	2.72
Retail rent					
Prime/secondary location	EUR/m ²	153 / 12.5	150 / 12.5	143 / 12.5	141 / 12.5
Prime/secondary location	% yoy	0.0 / 0.0	-2.0 / 0.0	-4.7 / 0.0	-1.4 / 0.0

Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

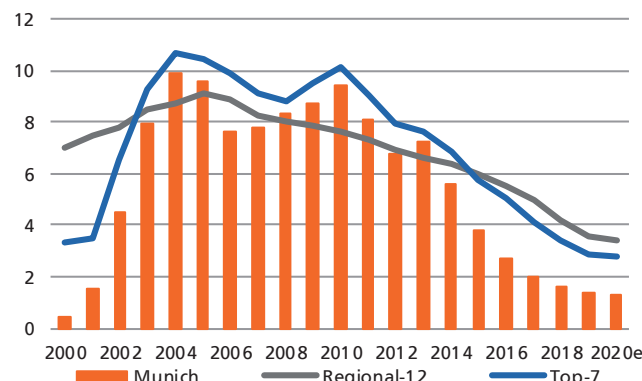
MUNICH

Office space in Munich

PRIME RENT FOR OFFICE SPACE IN EUR PER M²

Source: bulwiengesa, DZ BANK forecasts

VACANCY RATE IN PER CENT



Source: bulwiengesa, DZ BANK forecasts

It is now also virtually impossible to find any vacant space in the Munich office market. Out of a stock of 14 million m², only 190,000 m² was still available at the end of 2019 – spread across the whole of Munich. This equates to a vacancy rate of 1.4 per cent. Demand for office space in the Bavarian capital is being driven by a broadly diversified economy with five DAX groups alone based in the Munich region. The city is also home to many technology companies. Google, for example, is expanding its footprint and building a new head office in the Maxvorstadt district for that purpose; at 42,000 m², it also leads the list of the ten biggest transactions in 2019. It is followed in second place by Apple with 30,000 m². Amazingly, in spite of the ongoing shortage of space, there were three major transactions last year involving existing office stock. Inevitably, though, a scarce supply has had a major impact on take-up which was down to just 527,000 m². The figure is well below the level of the two previous years, which was over 200,000 m² higher respectively. The prime rent rose to EUR 39.50 per m² in view of persistently high demand and tight supply. Peripheral areas are benefiting from the lack of space in preferred office locations. As in 2019, there are signs of an increased flow of new office stock this year, but it is likely to be fully absorbed by the market. A marked improvement in supply can be ruled out. The prime rent is likely to rise further.

Supply in the second most expensive office market in Germany has dried up just as much as in the housing market

OFFICE FORECASTS

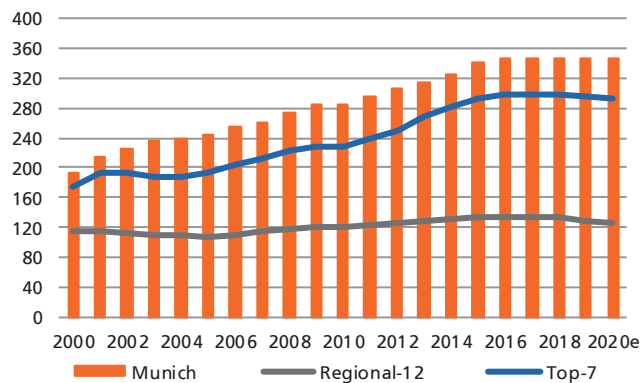
		2017			2018			2019			2020e		
Demand													
GDP	% yoy	2.9			3.4			3.8			3.1		
Per capita GDP	in EUR	68,687			71,394			74,178			76,346		
No. of office workers	in '000	422.9			426.9			430.9			435.0		
No. of office workers	% yoy	0.9			0.9			0.9			1.0		
Supply													
Total office space	in m² '000	13,747			13,828			14,031			14,150		
Total office space	% yoy	0.3			0.6			1.5			0.8		
Vacancy rate	%	2.0			1.6			1.4			1.3		
Office rents													
Prime/secondary location	EUR/m²	36.0	/	14.5	37.0	/	15.5	39.5	/	16.5	40.6	/	16.5
Prime/secondary location	% yoy	3.7	/	7.4	2.8	/	6.9	6.8	/	6.5	2.8	/	3.0

Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

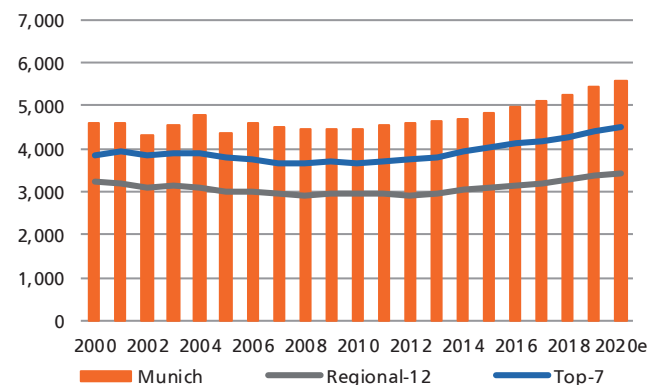
Retail space in Munich

PRIME RETAIL RENT IN EUR PER M²



Source: bulwiengesa, DZ BANK forecasts

RETAIL SALES IN EUR PER M²



Source: Scope

Munich is the number one location in the German retail sector based on the prime rent, retail-space productivity and purchasing power. This reflects outstanding conditions backed by a strong economy and at the same time a fast-growing catchment area of over 3 million people. The potential pool of shoppers is bolstered by a large number of visitors from home and abroad, with over 17 million overnight stays annually. This puts Munich in second place after Berlin among tourist hotspots in Germany. Another plus point is a great visitor experience in the city centre which offers Bavarian flair and good quality food and drink outlets. The city's success also reflects its shopping offer which ranges from mass-market retail concepts, old family-run specialist stores and luxury goods shops. In addition, there is around half a million m² of retail space in the city, although it has been able to keep up with demand. However, Munich has recently gained attractive new retail space with city-centre developments such as the Palais an der Oper or the Hofstatt. There are further projects underway such as the Hettlage/Alte Akademie, the remodelling of the Sattlerplatz or – slightly outside the city centre – the newly opened Forum Schwanthalerhöhe in the former XXXLutz. The biggest project is the rebuilding of the main railway station, which is likely to take until the end of this decade. Unlike other cities, Munich's city centre has no problem with empty stores. However, the city is gradually becoming more uniform as chain store operators drive out the old family-run shops. In view of the strength of the city as a shopping destination, the prime rent is likely to remain at its high level of EUR 345 per m² this year.

Various developments making Munich even more attractive as a shopping destination

RETAIL FORECASTS

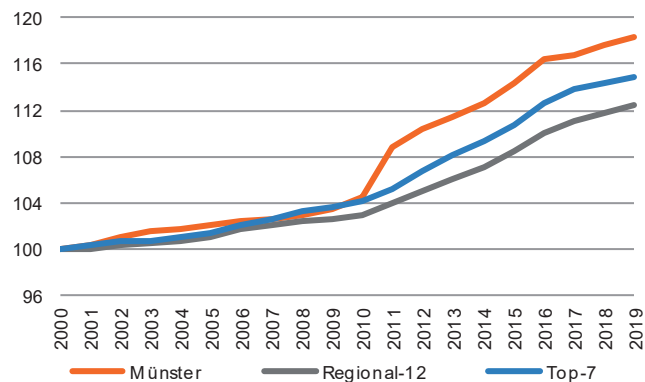
		2017	2018	2019	2020e
Demand					
Per cap. disposable income	EUR/month	2,747	2,845	2,944	3,024
Unemployment rate	%	4.2	3.8	3.5	3.7
Retail sales	EUR m/% yoy	10,722 / 3.5	11,127 / 3.8	11,580 / 4.1	11,988 / 3.5
Retail sales	EUR/m ² sales space	5,116	5,246	5,428	5,585
Supply					
Retail space	in m ² '000	2,096	2,121	2,133	2,146
Retail space	m ² /inhabitant	1.43	1.45	1.46	1.47
Retail rent					
Prime/secondary location	EUR/m ²	345 / 39.0	345 / 40.0	345 / 41.0	345 / 41.0
Prime/secondary location	% yoy	0.0 / 2.6	0.0 / 2.6	0.0 / 2.5	0.0 / 0.0

Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

MÜNSTER

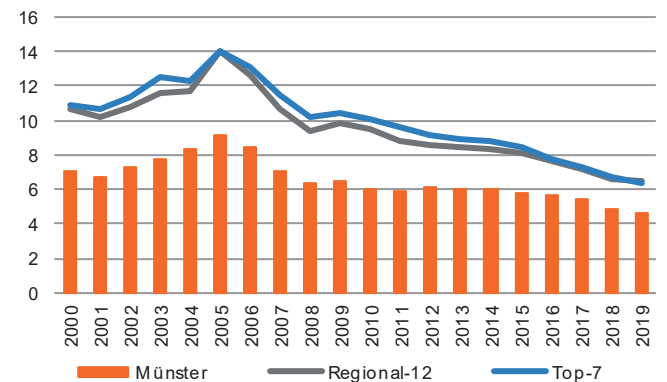
POPULATION GROWTH



Source: Scope

Index 2000 = 100

UNEMPLOYMENT RATE IN PER CENT



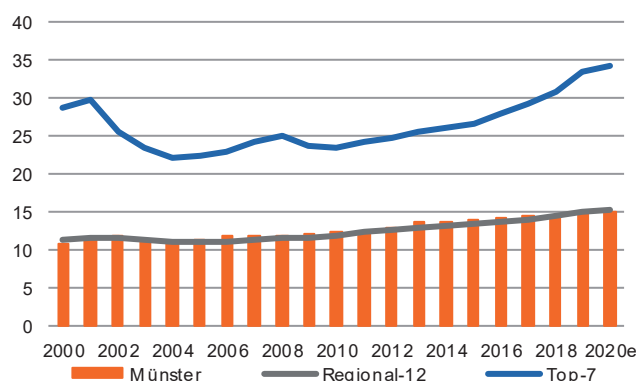
Source: bulwiengesa, BA, DZ BANK forecasts

Whereas many large towns in North Rhine-Westphalia, above all in the Ruhrgebiet are faced with a dwindling population and high unemployment, Westphalian Münster remains firmly on an upward trend. The population has grown by over 50,000 since the beginning of the 1990s to almost 315,000 at present. The number of inhabitants has increased by 14 per cent in the last ten years alone. During this period, employment has risen by as much as 16 per cent, which is above average. Unemployment is low at 4.6 per cent (January 2020). Münster is a major academic centre with a large number of research and higher education institutions with a total of around 65,000 students. Three quarters of these are at the Westfälische Wilhelms University. Unlike in the Ruhr cities, industry and big companies hardly play a role in Münster; the local economy is mostly driven by SMEs. The biggest employers are the University Hospital, the University itself and the city administration. Well-known companies are the paint manufacturer Brillux, the insurance company LVM and filter manufacturer Hengst. Tourism is an important contributor to the local economy. The city attracts many visitors to its charming old town and famous Prinzipalmarkt. Moreover, Münster is the administrative centre for Westphalia, an area with over eight million more inhabitants than most other German states.

Flourishing, mostly SME-biased economic centre

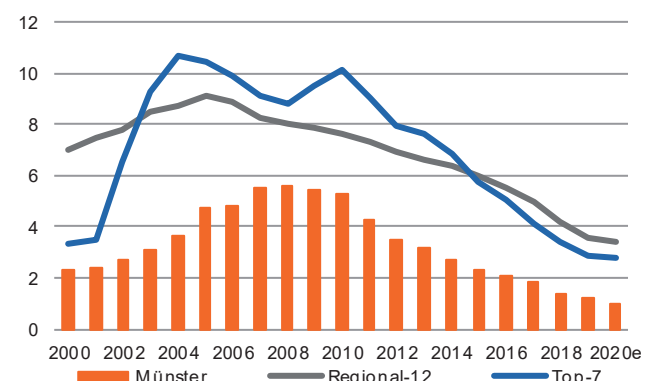
Office space in Münster

PRIME RENT FOR OFFICE SPACE IN EUR PER M²



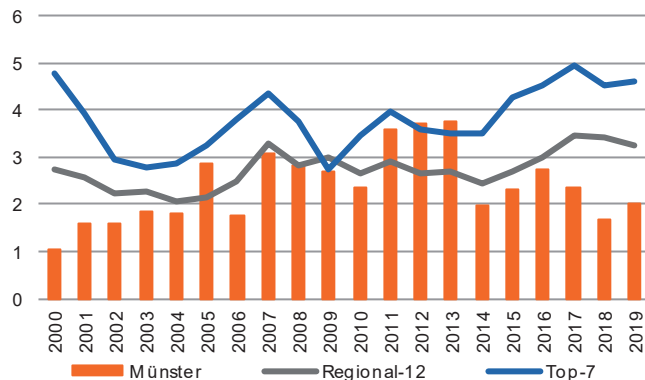
Source: bulwiengesa, DZ BANK forecasts

VACANCY RATE IN PER CENT



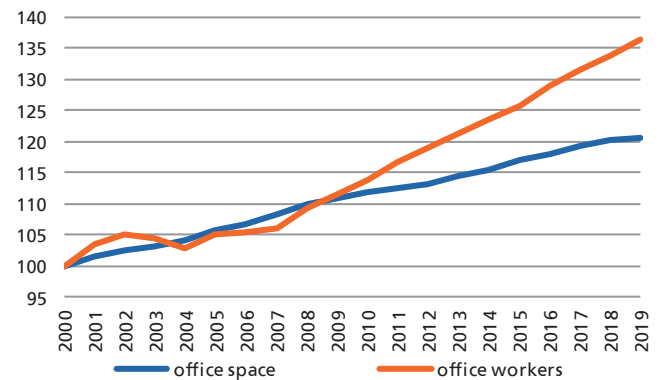
Source: bulwiengesa, DZ BANK forecasts

TAKE-UP AS PER CENT OF OFFICE SPACE



Source: bulwiengesa

TREND IN OFFICE SPACE AND NO. OF OFFICE WORKERS



Source: Scope, bulwiengesa

Index 2000 = 100

Attractive though Münster may be, the difficulty in finding suitable housing or office space is a downside. The supply of space in an office market of slightly over 2.2 million m² has practically dried up. In 2019, the vacancy rate fell to just over 1 per cent. Under such conditions, even unattractive premises are marketable. New offices are mainly built for owner occupiers and speculative developments tend to be the exception. All in all, however, measured in relation to the sharp rise in the number of office-based jobs, far too little office space is being developed. While the number of office-based jobs has increased by over 20 per cent within the space of ten years, office space has not even grown by half that much. There are no signs of any fundamental improvement the tight supply in the near future; there is hardly any new building underway which would ease the situation, and when there is, it is mostly earmarked for owner-occupation, so will not help the rental market. Bearing in mind the shortage of available space in the existing stock, take-up in 2019 was very respectable at 45,000 m². The three biggest transactions were for 6,000, 4,500 and 3,500 m² respectively. The tenants are the University Hospital, Landschaftsverband Westfalen-Lippe and Coppenrath Publishing. Eight out of the ten biggest lease agreements are at the development stage. However, the market situation should improve slightly through various projects – including for the rental market. These include office projects in the Stadthafen II and Dreieckshafen. The prime rent which rose to EUR 14.80 per m² in 2019 is likely to lift further this year in view of a tight market.

Hardly any new office space built in spite of significant shortage of space

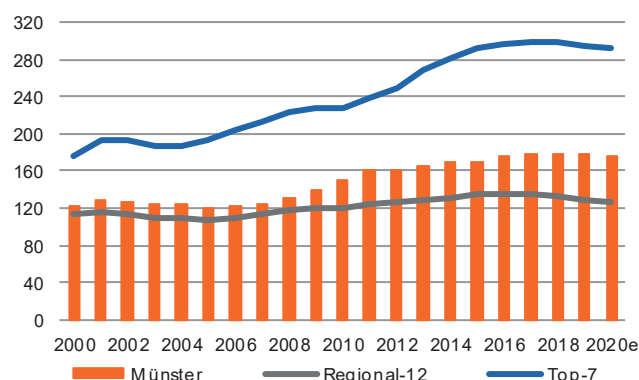
OFFICE FORECASTS

		2017	2018	2019	2020e
Demand					
GDP	% yoy	3.3	3.7	4.0	3.4
Per capita GDP	in EUR	58,757	60,520	62,553	64,341
No. of office workers	in '000	73.3	74.7	76.0	77.4
No. of office workers	% yoy	1.8	1.9	1.9	1.8
Supply					
Total office space	in m ² '000	2,210	2,228	2,235	2,245
Total office space	% yoy	1.0	0.8	0.3	0.4
Vacancy rate	%	1.8	1.4	1.2	1.0
Office rents					
Prime/secondary location	EUR/m ²	14.4 / 6.4	14.5 / 6.7	14.8 / 7.1	15.1 / 7.1
Prime/secondary location	% yoy	1.4 / 3.2	0.7 / 4.7	2.1 / 6.0	2.0 / 2.8

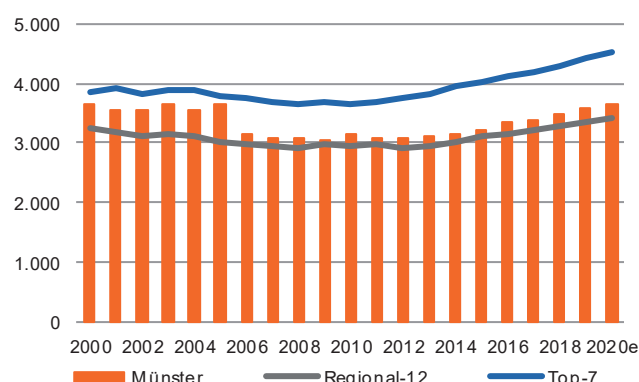
Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

Retail space in Münster

PRIME RETAIL RENT IN EUR PER M²

Source: bulwiengesa, DZ BANK forecasts

RETAIL SALES IN EUR PER M²

Source: Scope

Conditions are favourable for the retail sector, reflecting the city's central location in the Münsterland, an 800,000-strong catchment area and the absence of competing shopping destinations. In addition, strong population growth has led to a corresponding increase in potential shoppers. The purchasing power score is at a relatively high level of 107 points in spite of a large proportion of students. In addition, many shoppers from surrounding areas and tourists are attracted to the city. This leads to a high centrality score of 128 points. The city centre offers shoppers an attractive choice of goods with the usual mass-market, high-street chains in the Ludgeristraße, rounded off by more family-run stores and more exclusive shops on the Prinzpalmarkt. The city also has an attractive inner-city shopping centre with the Münster Arkaden which opened in 2006. It was followed by further developments such as the Stubengasse shopping mall and the Hanse-Carré. The city centre's strength is illustrated by the fact that over a third of total retail sales are generated there. The sum of the location's plus points makes it highly attractive for retailers. So far, the prime rent has maintained its level of almost EUR 180 per m² which is well above the average for a regional centre. However, retail in Münster is also being affected by developments in the retail sector arising from changes in shopper preferences such as a decline in demand for sales space from clothing chain stores or store closures. However, a tight supply of space and stronger demand from food and drink outlets for suitable premises are likely to dampen the widespread squeeze on rents in Münster, but not stop it.

Strong retail location in Westphalia with high rents

RETAIL FORECASTS

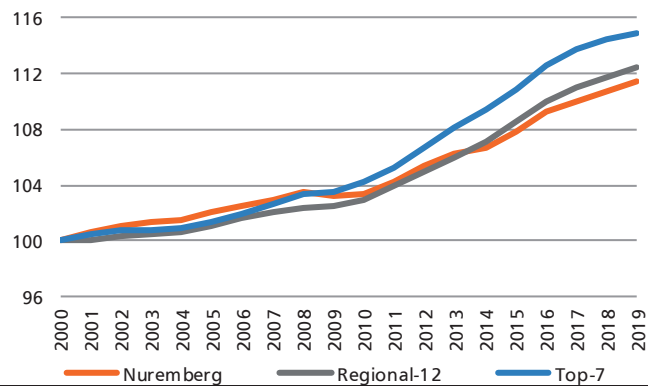
		2017e	2018	2019	2020e
Demand					
Per cap. disposable income	EUR/month	2,248	2,295	2,352	2,398
Unemployment rate	%	5.4	4.9	4.6	4.8
Retail sales	EUR m/% yoy	2,154 / 3.1	2,228 / 3.4	2,311 / 3.7	2,384 / 3.2
Retail sales	EUR/m ² sales space	3,379	3,471	3,575	3,666
Supply					
Retail space	in m ² '000	637	642	647	650
Retail space	m ² /inhabitant	2.05	2.05	2.05	2.05
Retail rent					
Prime/secondary location	EUR/m ²	178 / 10.5	178 / 10.5	178 / 10.5	175 / 10.5
Prime/secondary location	% yoy	1.7 / 5.0	0.0 / 0.0	0.0 / 0.0	-1.7 / 0.0

Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

NUREMBERG

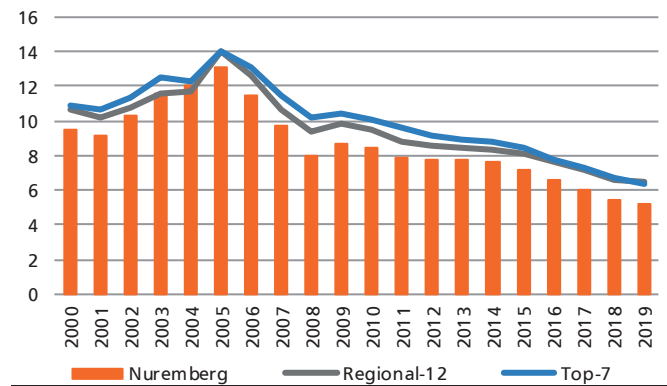
POPULATION GROWTH



Source: Scope

Index 2000 = 100

UNEMPLOYMENT RATE IN PER CENT

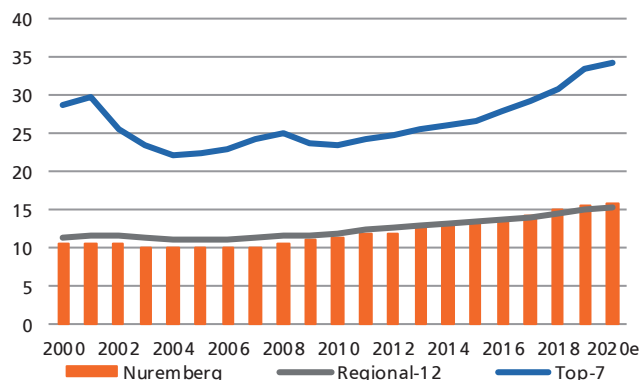


Source: bulwiengesa, BA, DZ BANK forecasts

Nuremberg is the second largest city in Bavaria with 535,000 inhabitants and the economic and cultural centre of Franconia, forming an important economic region together with the neighbouring towns of Fürth and Erlangen. It is known the world over for its old imperial palace, Christmas market and toy fair. The city's economy has suffered reversals, first through the industrial structural change of the 1970s and then through major company insolvencies and plant closures. The city has now successfully overcome these challenges, and instead of a population drain and high unemployment, both are seeing a positive trend. Unemployment has fallen sharply; it was down to 5.4 per cent in January 2020. The city's successful transformation into a services centre has been helped by the fact that the Friedrich-Alexander University Erlangen-Nürnberg has also been based in Nuremberg since 1961. Nuremberg is now home to over a dozen higher education institutions and around 26,000 students. The state of Bavaria aims to increase the importance of Nuremberg as a university town with the newly founded Technical University Nuremberg in the south of the city which is scheduled to open in 2025. In spite of the structural transformation, the industrial sector is still of fairly major importance. Over 15 per cent of people in employment in the city work in manufacturing. Key sectors are IT, logistics, high-tech along with energy and medical technology. Trade fairs and congresses are also a major earner along with tourism with 7,000 overnight stays per 1,000 inhabitants per year. The city's transport links are outstanding through the A3, A6 and A9 motorways, the ICE hub as well as an airport and river port on the Main-Danube Canal.

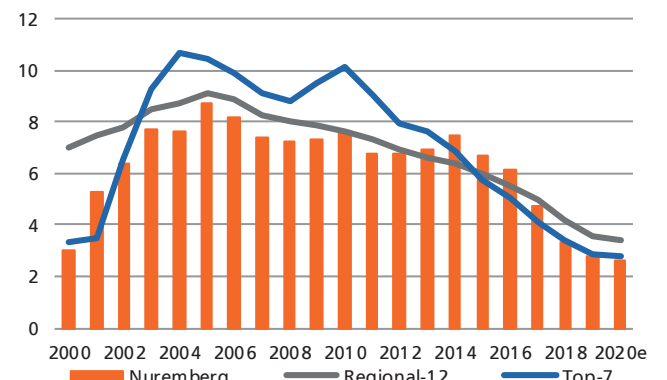
Bavaria's second largest city still on successful track after many setbacks

Office space in Nuremberg

PRIME RENT FOR OFFICE SPACE IN EUR PER M²

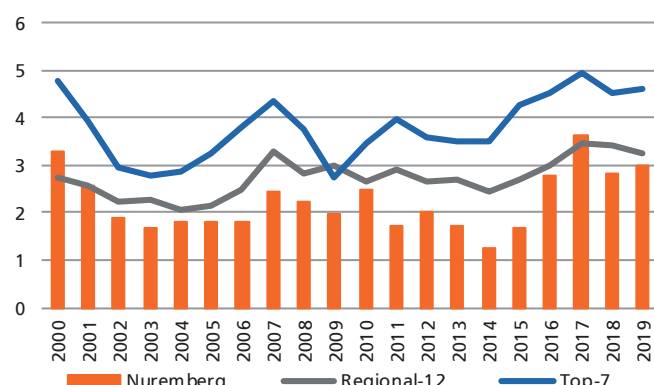
Source: bulwiengesa, DZ BANK forecasts

VACANCY RATE IN PER CENT



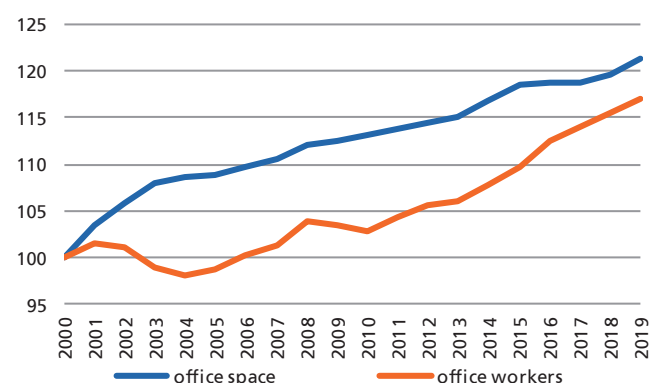
Source: bulwiengesa, DZ BANK forecasts

TAKE-UP AS PER CENT OF OFFICE SPACE



Source: bulwiengesa

TREND IN OFFICE SPACE AND NO. OF OFFICE WORKERS



Source: Scope, bulwiengesa

Index 2000 = 100

At 3.7 million m², Nuremberg is the second largest office market in Germany after Hannover and below the top seven locations. A sound economic performance means that the number of office-based jobs has grown by 13 per cent in the last ten years, i.e. faster than the office stock which has expanded by around 8 per cent. This has led to a further reduction in the amount of vacant office space which was still fairly high a few years ago. Last year, the vacancy rate fell to below 3 per cent. This means that there are hardly any larger office spaces available in the existing stock. The fact that last year saw the second ever highest take-up at 110,000 m² reflects two big forward commitment deals which account for half of the overall take-up. The tenant for the larger of the two deals (for 42,000 m²) is the Nuremberg city administration. The tenant in the second deal involving 11,500 m² is Datev. The biggest transaction size after that, however, was much smaller at 1,800 m² for office space from existing stock. In the wake of Nuremberg's economic recovery and tighter supply of office space, the prime rent rose to EUR 15.50 per m². It has increased by 41 per cent over a ten-year period – the strongest increase, along with Dresden, among all top regional centres. Of all the locations under consideration in this study, only Berlin has shown an even stronger rise in office rents. At less than 40,000 m², the completion volume this year will not help ease the market situation. We anticipate a further reduction in the vacancy rate in 2020 and a rise in the prime rent towards EUR 16 per m².

Second largest office market after the top 7

OFFICE FORECASTS

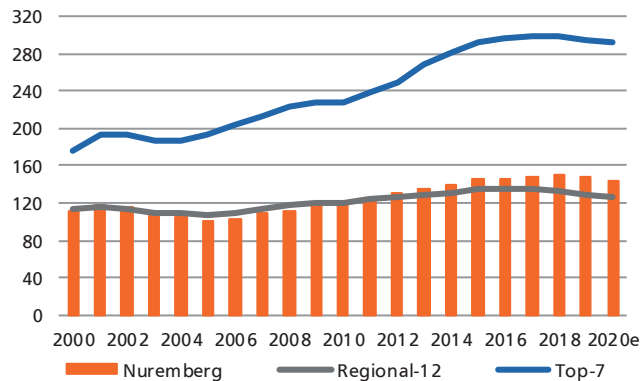
		2017	2018	2019	2020
Demand					
GDP	% yoy	2.2	2.8	3.2	2.7
Per capita GDP	in EUR	55,451	56,594	58,090	59,380
No. of office workers	in '000	120.4	122.0	123.7	125.4
No. of office workers	% yoy	1.3	1.3	1.4	1.4
Supply					
Total office space	in m ² '000	3,603	3,628	3,679	3,725
Total office space	% yoy	0.0	0.7	1.4	1.3
Vacancy rate	%	4.7	3.3	2.8	2.6
Office rents					
Prime/secondary location	EUR/m ²	14.2 / 7.5	15.0 / 7.7	15.5 / 8.0	16.0 / 8.0
Prime/secondary location	% yoy	2.9 / 4.2	5.6 / 2.7	3.3 / 3.9	3.0 / 2.5

Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

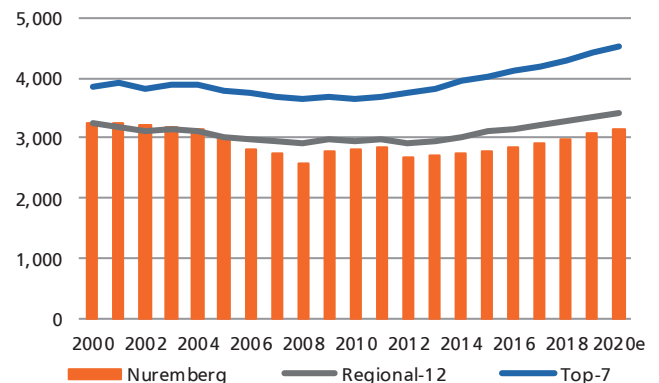
Retail space in Nuremberg

PRIME RETAIL RENT IN EUR PER M²



Source: bulwiengesa, DZ BANK forecasts

RETAIL SALES IN EUR PER M²



Source: Scope

Nuremberg is the leading shopping destination in northern Bavaria with a catchment area of around 2 million inhabitants. Competition from the surrounding towns is limited, leading to a high centrality figure of almost 130 points. At 105, the purchasing power score is also above the German average. Consumption is buoyed by 3.6 million overnight stays per year at the last count. The old town offers a high-quality visitor experience and an attractive shopping circuit. The Karolinenstraße has the highest density of chain stores and therefore the highest footfall and highest prime rent. One positive factor in Nuremberg is the wide range of shops, including the hip Gostenhof district. The shopping experience in the inner city will be boosted further with the Altstadt Karree which is due to rise up on the site of the 1950s City-Point shopping centre. Until very recently, however, it was not clear when building work on the EUR 200 million project would begin. The project envisages 12,000 m² of retail space along the Breite Gasse and Pfannenschmiedgasse where a Zalando store is planned as a customer magnet. The whole will be enhanced by a hotel and food and drink outlets in the Hallplatz. Until completion, customers have the choice of two other shopping malls, the older Franken Center and revamped Mercado, although these are outside the city centre. Last year, Nuremberg's prime rent dipped to EUR 147. Nuremberg's strength as a location is illustrated by the fact that the prime rent has so far held at just under its peak. This year, we believe that a modest fall is likely.

Nuremberg to get an attractive city-centre shopping mall

RETAIL FORECASTS

		2017	2018	2019	2020e
Demand					
Per cap. disposable income	EUR/month	2,151	2,183	2,227	2,262
Unemployment rate	%	6.0	5.4	5.2	5.5
Retail sales	EUR m/% yoy	3,840 / 2.3	3,947 / 2.8	4,069 / 3.1	4,173 / 2.5
Retail sales	EUR/m ² sales space	2,923	2,998	3,080	3,155
Supply					
Retail space	in m ² '000	1,314	1,317	1,321	1,323
Retail space	m ² /inhabitant	2,56	2,55	2,54	2,53
Retail rent					
Prime/secondary location	EUR/m ²	147 / 15.0	150 / 15.0	147 / 15.0	144 / 15.0
Prime/secondary location	% yoy	1.4 / 0.0	2.0 / 0.0	-2.0 / 0.0	-2.0 / 0.0

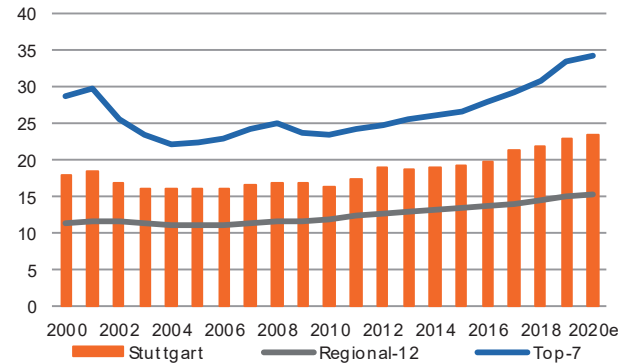
Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

STUTT GART

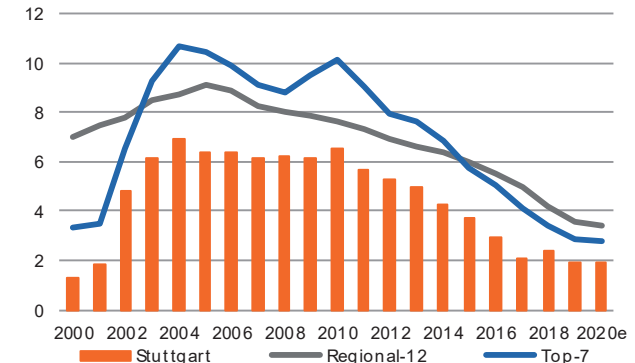
Office space

PRIME RENT FOR OFFICE SPACE IN EUR PER M²



Source: bulwiengesa, DZ BANK forecasts

VACANCY RATE IN PER CENT



Source: bulwiengesa, DZ BANK forecasts

Stuttgart ranks fifth among the German office locations with 7.9 million m² of space. However, for a long time, the market lagged behind the other six top locations in terms of both take-up and prime rent which was still below EUR 20 per m² up until 2016. However, the gap has now narrowed. The prime rent has surged 17 per cent to EUR 23 per m² since 2017, reflecting not only demand but a further tight supply of space. In 2019, the vacancy rate fell to 2 per cent. Even so, Stuttgart scored its second-best take-up ever that year with a figure of slightly over 300,000 m². This was helped by five transactions in the five-digit bracket amounting to a total of 100,000 m². The biggest space was leased by the Land Baden-Württemberg. It was followed in second and third place by Vector Informatik and Siemens. In view of the scarcity of space, seven of the ten biggest lease transactions were forward commitment deals for offices still under construction. In spite of a widespread dearth of space and rise in the prime rent, demand is concentrated on inner city locations, not least because these are more attractive for office workers than periphery locations which are harder to get to. The tight supply is hardly likely to change this year; the situation is only expected to start improving from 2021 onwards. In contrast, demand could weaken if the deterioration in prospects for Stuttgart's all-important industry and automotive sector starts hitting the office segment. For this reason, we assume at best a moderate increase in the prime rent, in spite of the tight supply.

Tight supply limiting take-up and pushing up prime rent

OFFICE FORECASTS

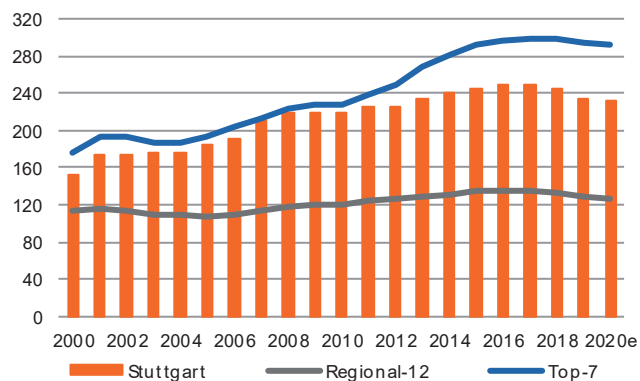
		2017	2018	2019	2020e
Demand					
GDP	% yoy	2.5	3.0	3.5	2.9
Per capita GDP	in EUR	82,642	84,742	87,341	89,565
No. of office workers	in '000	197.9	200.1	202.4	204.7
No. of office workers	% yoy	1.1	1.1	1.2	1.1
Supply					
Total office space	in m ² '000	7,787	7,853	7,905	7,995
Total office space	% yoy	1.4	0.8	0.7	1.1
Vacancy rate	%	2.1	2.4	1.9	1.9
Office rents					
Prime/secondary location	EUR/m ²	21.4 / 9.1	22.0 / 9.5	23.0 / 11.0	23.3 / 11.0
Prime/secondary location	% yoy	8.6 / 3.4	2.8 / 4.4	4.5 / 15.8	1.5 / 0.0

Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

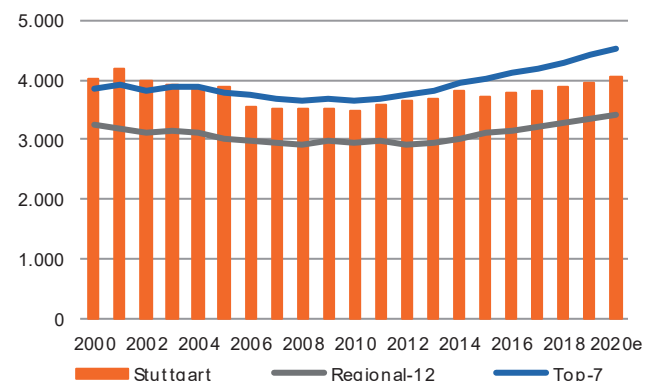
Retail space

PRIME RETAIL RENT IN EUR PER M²



Source: bulwiengesa, DZ BANK forecasts

RETAIL SALES IN EUR PER M²



Source: Scope

The retail sector in Stuttgart benefits from a catchment area of 2.6 million inhabitants with a strong economy. Tourism makes a significant contribution to the number of shoppers with almost 4 million overnight stays per year. The city's strength as a location and shortage of space in the main shopping street, the Königstraße, has also prompted the development of several large inner-city retail projects, leading to an increase in retail space in the city of over 20 per cent at a stroke. The two inner-city shopping centres, MILANEO and GERBER, with a combined retail space of around 60,000 m² opened almost simultaneously in 2014 at opposite ends of the inner city. In spite of this, the prime rent still rose to EUR 250 per m². The new centres have not only brought about an increase in retail space, but also enhanced the city's attraction as a shopping destination. A further 10,000 m² of sales space was added in 2017 with the opening of the Dorotheen Quartier – the last of the larger new retail developments in Stuttgart to date. An active letting business has led to a fairly large number of changes in tenants not only in the Königstraße, but also in the Stiftstraße. Remarkably, there has been a relatively large number of transactions involving large retail spaces. The biggest of these – and last available space in the former Karstadt – was a space of almost 4,000 m² leased by Karstadt Sports. However, an increase in supply and growing headwind from e-commerce are leading to vacant stores and longer leases. In addition, there was a noticeable fall in the prime rent to EUR 235 per m² in 2019. One of the contributory factors may have been weaker economic prospects for Stuttgart. We suspect that the prime rent could come down slightly further this year.

Noticeable fall in rents in prime Stuttgart retail locations

RETAIL FORECASTS

		2017	2018	2019	2020e
Demand					
Per cap. disposable income	EUR/month	2,426	2,470	2,524	2,566
Unemployment rate	%	4.7	4.7	4.1	4.8
Retail sales	EUR m/% yoy	4,148 / 2.6	4,274 / 3.0	4,418 / 3.4	4,541 / 2.8
Retail sales	EUR/m ² sales space	3,827	3,892	3,964	4,045
Supply					
Retail space	in m ² '000	1,084	1,098	1,115	1,123
Retail space	m ² /inhabitant	1.72	1.73	1.75	1.76
Retail rent					
Prime/secondary location	EUR/m ²	250 / 16.0	245 / 16.0	235 / 16.0	232 / 16.0
Prime/secondary location	% yoy	0.0 / 6.7	-2.0 / 0.0	-4.1 / 0.0	-1.3 / 0.0

Source: Scope, bulwiengesa, DZ BANK forecasts

yoy = year-on-year

LOCATIONS AT A GLANCE

OFFICE PROPERTIES

	Total Office Stock 2019 Data			Prime Rent Euro/m ²			Prime Rent in % yoy			Vacancy Rate in %		
	in 1,000 m ²	2009 to 2019 in %	per office worker in m ²	2018	2019	2020e	2018	2019	2020e	2018	2019	2020e
Augsburg	1,421	7.1	25.3	13.0	13.2	13.4	1.6	1.5	1.8	5.1	4.5	4.8
Bremen	2,707	10.5	25.3	13.0	13.2	13.4	1.6	1.5	1.5	4.1	4.2	4.5
Darmstadt	1,632	7.0	31.4	13.2	13.2	13.4	0.8	0.0	1.5	3.7	3.4	3.1
Dresden	2,666	-0.2	24.7	13.5	14.8	15.2	5.5	9.6	2.7	6.4	5.1	4.5
Essen	3,182	13.4	31.2	15.0	15.5	15.8	0.0	3.3	2.0	5.0	3.3	3.1
Hannover	4,556	4.1	34.6	17.0	17.1	17.2	13.3	0.6	0.8	3.1	2.7	2.4
Karlsruhe	2,498	10.0	28.3	14.2	14.5	14.6	6.0	2.1	1.0	3.1	3.2	3.5
Leipzig	2,748	-0.4	27.9	13.8	14.8	15.2	6.2	7.2	2.7	8.3	6.2	6.0
Mainz	1,637	6.1	30.0	13.9	14.5	14.9	3.0	4.3	2.4	3.0	2.7	2.5
Mannheim	2,141	11.7	28.3	16.2	16.8	17.1	5.2	3.7	1.5	4.0	3.7	4.1
Münster	2,235	8.7	29.4	14.5	14.8	15.1	0.7	2.1	2.0	1.4	1.2	1.0
Nuremberg	3,679	7.9	29.7	15.0	15.5	16.0	5.6	3.3	3.0	3.3	2.8	2.6
Regional property centres mean	2,592	6.8	29.0	14.6	15.1	15.4	5.0	3.2	1.9	4.2	3.5	3.4
<i>Total</i>	<i>31.102</i>											
Berlin	19,399	6.1	32.7	33.5	39.0	40.5	11.7	16.4	3.8	1.7	1.3	1.5
Cologne	7,744	5.0	31.0	22.0	23.5	24.0	4.8	6.8	2.1	2.8	2.3	2.1
Düsseldorf	7,621	5.7	35.5	25.5	26.5	27.0	4.1	3.9	1.9	6.9	6.0	5.8
Frankfurt	10,187	1.9	34.1	39.5	41.0	42.0	2.6	3.8	2.4	7.4	6.5	6.6
Hamburg	13,851	6.9	31.3	27.5	29.0	29.8	3.8	5.5	2.8	3.6	2.9	2.6
Munich	14,031	5.3	32.6	37.0	39.5	40.6	2.8	6.8	2.8	1.6	1.4	1.3
Stuttgart	7,905	6.8	39.1	22.0	23.0	23.3	2.8	4.5	1.5	2.4	1.9	1.9
Top locations mean	11,534	5.5	33.2	30.8	33.4	34.3	5.3	8.3	2.8	3.4	2.8	2.8
<i>Total</i>	<i>80,738</i>											

Source: bulwienges, Scope, DZ BANK forecasts

Means are space-weighted. The **prime rent** indicated by BulwienGesa represents the mean of the three top three to five percent of lettings in the market, which means that the prime rent given is not the same as the absolute top rent. For this reason, higher rent figures for individual locations which are sometimes quoted in alternative market reports, are fundamentally not contradictory.

RETAIL PROPERTIES

	Total Retail Stock 2019 Data			Prime Rent EUR/m ²			Prime Rent in % yoy			Retail Sales in % yoy		
	in 1,000 m ²	2009 to 2019 %	Per capita in m ²	2018	2019	2020e	2018	2019	2020e	2018	2019	2020e
Augsburg	954	7.2	3.2	113	108	106	-1.7	-4.4	-1.9	2.2	2.5	1.9
Bremen	1,586	26.0	2.8	130	130	128	0.0	0.0	-1.5	3.6	3.9	3.4
Darmstadt	392	8.1	2.5	97	93	91	-3.0	-4.1	-2.2	2.6	2.8	2.3
Dresden	1,076	19.0	1.9	107	105	103	-2.7	-1.9	-1.5	3.0	3.4	2.9
Essen	873	9.8	1.5	100	94	92	-4.8	-6.0	-2.0	2.7	3.0	2.5
Hannover	951	6.1	1.8	198	192	189	-2.5	-3.0	-1.6	2.9	3.2	2.6
Karlsruhe	574	16.6	1.8	103	96	95	-2.8	-6.8	-1.0	1.6	3.0	2.4
Leipzig	758	34.1	1.3	125	125	122	-1.6	0.0	-2.4	3.5	4.0	3.4
Mainz	506	16.8	2.3	110	104	102	-3.5	-5.5	-1.9	3.7	4.0	3.4
Mannheim	839	14.1	2.7	150	143	141	-2.0	-4.7	-1.4	2.9	3.2	2.6
Münster	647	19.8	2.1	178	178	175	0.0	0.0	-1.7	3.4	3.7	3.2
Nuremberg	1,321	17.5	2.5	150	147	144	2.0	-2.0	-2.0	2.8	3.1	2.5
Regional property centres mean	873	16.4	2.1	133	129	127	-1.4	-2.6	-1.8	2.9	3.3	2.8
<i>Total</i>	<i>10,478</i>											
Berlin	6,778	19.4	1.9	310	300	300	0.0	-3.2	0.0	2.9	3.2	2.7
Cologne	1,410	1.3	1.3	255	255	250	0.0	0.0	-2.0	3.3	3.8	3.3
Düsseldorf	1,252	28.5	2.0	282	285	280	0.7	1.1	-1.8	3.5	4.0	3.4
Frankfurt	1,549	11.5	2.1	300	300	295	0.0	0.0	-1.7	3.2	3.6	3.0
Hamburg	3,020	11.3	1.6	285	285	285	0.0	0.0	0.0	3.9	4.2	3.6
Munich	2,133	15.9	1.5	345	345	345	0.0	0.0	0.0	3.8	4.1	3.5
Stuttgart	1,115	16.2	1.8	245	235	232	-2.0	-4.1	-1.3	3.0	3.4	2.8
Top locations mean	2,465	15.5	1.7	298	294	293	0.0	-1.4	-0.5	3.4	3.8	3.2
<i>Total</i>	<i>17,256</i>											

Source: bulwiengesa, Scope, DZ BANK forecast

Means are space-weighted. The **prime rent** indicated by BulwienGesa represents the mean of the three top three to five percent of lettings in the market, which means that the prime rent given is not the same as the absolute top rent. For this reason, higher rent figures for individual locations which are sometimes quoted in alternative market reports, are fundamentally not contradictory.

STRUCTURAL DATA 2019

	Inhabitants in 1,000	Inhabitants 2009-2019 in %	GDP in EUR m	Per Capita GDP in EUR	Per Capita Dispos- able Income EUR/Month	Unemploy- ment Rate in %
Augsburg	296	11.6	14,723	49,658	1,968	4.9
Bremen	574	6.0	30,928	53,881	2,164	9.5
Darmstadt	159	14.1	10,252	64,325	2,250	5.0
Dresden	555	11.0	19,959	35,949	1,947	5.6
Essen	592	3.7	29,687	50,146	1,997	10.2
Hannover	537	6.9	35,168	65,443	2,317	8.0
Karlsruhe	312	9.7	20,801	66,635	2,249	3.9
Leipzig	588	18.7	21,714	36,949	1,805	6.3
Mainz	217	10.0	13,058	60,138	2,157	5.3
Mannheim	313	8.7	18,828	60,153	2,036	5.3
Münster	315	14.4	19,724	62,553	2,352	4.6
Nuremberg	520	7.9	30,217	58,090	2,227	5.2
Regional property centres mean	415	9.6	22,088	53,225	2,100	6.5
<i>Total</i>	<i>4,980</i>		<i>265,057</i>			
Berlin	3,648	12.1	131,651	36,091	2,019	7.8
Cologne	1,087	9.8	64,068	58,960	2,213	7.8
Düsseldorf	620	6.8	51,451	82,929	2,560	6.7
Frankfurt	755	15.7	74,573	98,771	2,183	5.1
Hamburg	1,845	8.7	126,886	68,787	2,398	6.1
Munich	1,460	12.0	108,320	74,178	2,944	3.5
Stuttgart	636	10.0	55,522	87,341	2,524	4.1
Top locations mean	1,436	11.0	87,496	60,940	2,322	6.4
<i>Total</i>	<i>10,050</i>		<i>612,470</i>			

Source: Scope, BA, own calculations

Means are inhabitant and space-weighted

GLOSSARY

Office take-up	Office space in a specific location newly occupied through letting or owner-occupation during a one-year period. This does not include contract extensions. Office take-up is counted from the time of signing of the transaction rather than the time the new occupant actually moves in.
Flow of new building	Newly built office space being brought to market in the respective year.
Vacancy rate	Proportion of vacant office space in the respective location in relation to available space.
Purchasing power index	Purchasing power is relevant for the retail sector since it defines the disposable income of households, i.e. their ability to buy products and services. The purchasing power index measures the financial ability to buy goods and services in a specific location in relation to the German-wide average which is set at 100 points.
Net initial yield	The initial rental yield for office and retail space is the ratio of net rental income and total purchase price, taking into account expenses.
Reg 12/Regional 12	Space-weighted index made up of the 12 regional centres analysed in this report, namely Augsburg, Bremen, Darmstadt, Dresden, Essen, Hanover, Karlsruhe, Leipzig, Mainz, Mannheim, Münster and Nuremberg.
Prime rent	The prime rent represents an average of the top 3-5% of all lettings in a market, and the figure given is therefore not the absolute top rent realised.
Top 7	Space-weighted index made up of the top seven locations, namely Berlin, Düsseldorf, Frankfurt, Hamburg, Cologne, Munich and Stuttgart.
Centrality index	Centrality is calculated by dividing retail sales in a location by the purchasing power relevant to that location multiplied by 100. A figure of more than 100 points indicates that retail sales are higher than the relevant purchasing power and the location therefore attracts additional purchasing power.

Source: bulwiengesa, DZ BANK

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