

MAIN REGIONAL REAL ESTATE MARKETS IN GERMANY 2018

OUTLOOK FOR OFFICE MARKETS REMAINS POSITIVE,
WHILST DEMAND FOR RETAIL SPACE IS STAGNATING

A RESEARCH PUBLICATION BY DG HYP | MARCH 2018



Volksbanken Raiffeisenbanken
cooperative financial network



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PREFACE

As the commercial real estate bank within the Volksbanken Raiffeisenbanken cooperative financial network, we have regularly analysed the markets we actively cover for several years, publishing the results in real estate market reports. Thanks to strong demand for commercial real estate in Germany, regional locations are very popular amongst investors. For this reason, we regularly publish a study analysing the main regional real estate markets for office and retail properties in Augsburg, Bremen, Darmstadt, Dresden, Essen, Hanover, Karlsruhe, Leipzig, Mannheim, Mainz, Münster and Nuremberg. We compare results for these regional markets against the top locations – Germany’s seven biggest cities – which are also covered in the market report. Covering a total of 19 markets therefore, with a broad regional diversification, the report provides comprehensive insights into the two most important segments of the German commercial real estate market: offices and retail.

Thanks to the continued positive economic environment in Germany, office rents in the cities surveyed rose once again last year. Even though the increase in top rents for retail as well as office properties at the regional locations fell short of growth rates observed in metropolitan areas, the main regional markets still offer manifold opportunities for real estate investments. This is evident, for instance, when looking at the notably higher yield from rents, where figures for regional centres have exceeded those of metropolitan areas, both for offices and retail properties. On a positive note, vacancies on the office market have continued to decline virtually everywhere. Rising employment, growing demand for office space – together with a shortage of available space – are expected to keep top rents rising further during 2018. In the retail market, however, top rents are stagnating across the board, having seen strong increases for many years. Whilst strong consumer confidence keeps pushing up retail sales, it is the flourishing online commerce that is especially reaping the benefits. Nevertheless, weaker demand for retail space is offset by growing interest from other demand segments, such as operators of specialist restaurant chains.

This ninth market report on “Regional Real Estate Markets” 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: the regional report for Berlin and the East German states is scheduled for May 2018, with the report for Baden-Württemberg set to follow in July. An overview of DG HYP’s real estate market reports is available on our website:

<http://www.dghyp.de/en/unternehmen/markt-research/>

DG HYP

March 2018

UPTURN IN OFFICE MARKET AND STAGNATION IN RETAIL

Commercial real estate remains very popular with investors. The largest market segments, which account for between 70 and 80 per cent of the funds invested, are office and retail properties. High demand for office blocks and shopping centres is being fuelled by low capital market yields, but there are also good fundamental reasons to invest in the commercial real estate market.

Office properties, which account for nearly half of commercial real estate investment, are currently benefiting particularly. This is because the continuing economic upturn is boosting employment levels, and thus demand for office space. Because only a modest volume of new office buildings has been completed for some time, vacancy rates have fallen sharply, while rents have increased. There is no sign as yet of an end to the buoyant economic conditions, and the prospects for office markets therefore remain positive.

The retail sector is benefiting from strong growth in retail sales. However, retail property is not viewed so positively, since only a fifth of investment volume is in this segment. High-street retail is struggling because, although customers like to stroll around city centres, the proportion of in-store purchases is falling as actual purchases are increasingly made online at home. Retailers are responding to this trend by scaling down demand for retail space, and are now less willing to accept higher rents. On the other hand, demand for city centre space is increasing from other clients, particularly restaurant chains. Below the line, the longstanding upward trend in prime rents has however broadly come to a halt.

The commercial real estate market remains focused on the major cities with their strong economic power and large and liquid property markets. **Top locations** in Germany include the seven most densely populated cities. However, there is also potential in the **regional centres**, i.e. second-tier locations. Investor interest is also substantial here, although there is often not much information available on the commercial real estate markets. This ninth edition of our report on **regional property centres** is intended to help investors to assess the risks and opportunities of the top locations. As previously, in addition to **12 regional centres throughout Germany**, the **7 top locations** are also included as a comparison.

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-Württemberg	Frankfurt	Hesse
Hannover	Lower Saxony	Münster	North Rhine-Westphalia	Hamburg	Hamburg
Karlsruhe	Baden-Württemberg	Nuremberg	Bavaria	Munich	Bavaria
				Stuttgart	Baden-Württemberg

Level of investor interest in commercial real estate remains high

Buoyant labour market creates high demand for office space

Despite positive consumer sentiment, outlook for retail properties has deteriorated

9th edition of “regional property centres” report once again discusses the office and retail market segments in 12 regional centres and 7 top locations

The next chapter analyses the office markets in the 19 locations covered. A market overview of the retail sector is then provided starting on **page 11**. Individual locations are discussed in alphabetical order from **page 19**. Tables summarising the most important market data are available on **pages 69 to 71**.

Office properties: Rents rise thanks to high demand and supply shortage

Market conditions in the office sector

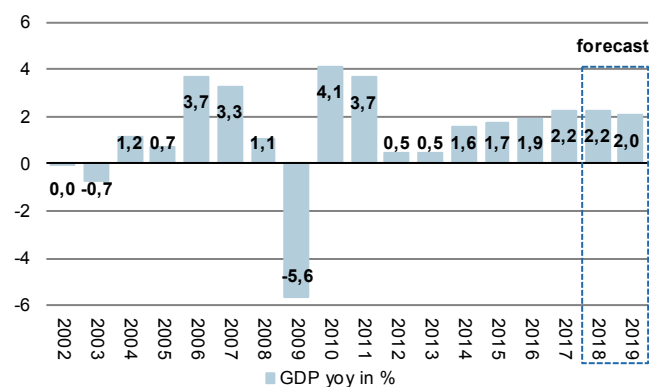
The conditions for office space demand could scarcely be any better. The German engine of economic growth is running like clockwork, and forecasts for economic output have been raised despite international crises. While the growth rate was still expected to reach slightly above 1 per cent a year ago, today we expect annual growth to exceed 2 per cent. However, the labour market is also expected to continue to reach new highs in terms of employment levels. And companies are reporting good results: the top 30 companies in the key German index the DAX are likely to achieve record earnings and dividends in 2017. The favourable conditions – driven by investment, exports and private consumptions – will probably also continue.

Within only a decade, the omens for the symbiotically interconnected markets for labour and office space have thus undergone a complete transformation. Instead of combating persistent mass unemployment, qualified workers are currently in short supply. And in the office market, companies and public authorities are struggling to find available office space in many locations. The previous oversupply, with high double-digit vacancy rates in some cases, has been largely reduced. For, while demand for office space has grown strongly, virtually no new office development has been carried out since the international financial market crisis.

Upturn continues: favourable climate for German office markets

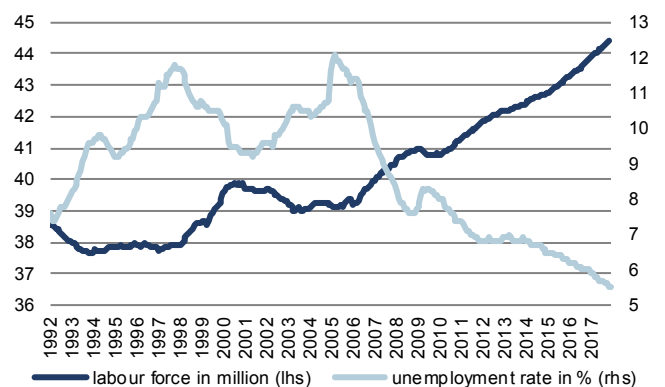
Changed times: instead of high unemployment and high vacancy rates, qualified workers and office space currently in short supply

PROSPECTS FOR GERMAN ECONOMIC GROWTH REMAIN POSITIVE



Source: DZ BANK Research

SHORTAGE OF SKILLED LABOUR RATHER THAN JOBS IN MANY PLACES AT THE MOMENT



Source: Federal Labour Office, Bundesbank

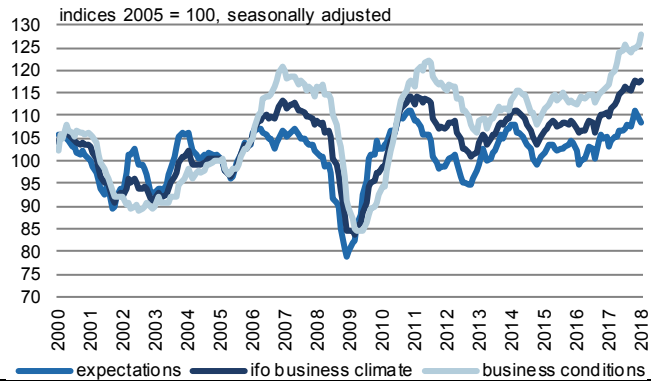
The positive trend in employment should continue, driven by favourable economic conditions, although the shortage of skilled workers may have a braking effect. Demand for office space from companies, public authorities and educational institutions is therefore likely to continue to increase, but possibly at a slower pace. Conversely, little will change in terms of the supply shortage, because the volume of office space completed in Germany between 2005 and 2016 was consistently low. Construction volume is admittedly likely to increase, as indicated at least by the growth in building permits in 2016. For the first time in a long period, more than 3 million sqm of office space was approved again. In the previous ten years the average figure was only 2.6 million sqm per annum. However, similar to the housing market, it will not be

Office completions not increasing significantly despite high demand for office space

Main regional real estate markets in Germany | 2018

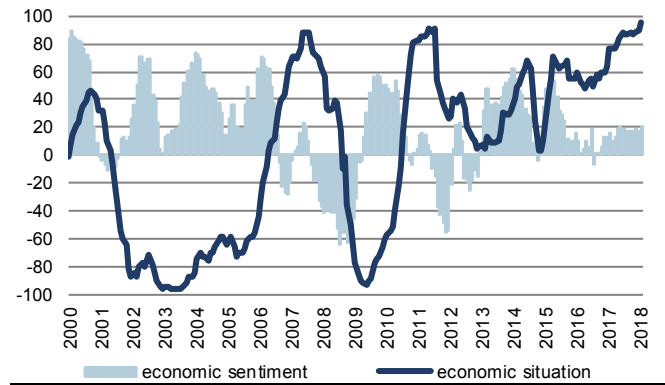
possible to make good the supply shortfall which has accumulated over many years in the short term.

IFO INSTITUTE BUSINESS CLIMATE CLIMBS TO RECORD LEVEL AT BEGINNING OF 2018



Source: ifo Institute

ECONOMIC EXPECTATIONS INCREASE AGAIN AT BEGINNING OF 2018



Source: ZEW

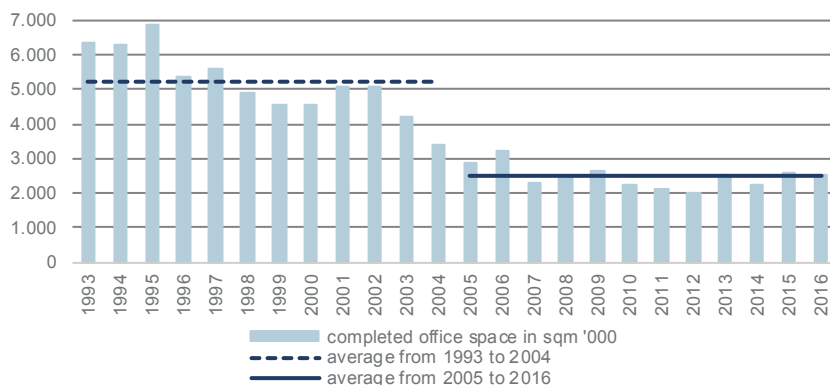
The high demand for office space could however decline in the longer term. An economic downturn could bring the current relatively prolonged expansionary economic cycle to an end. Structural changes, such as the demographic shift and the digitalisation of the world of work, could also lead to weaker demand for office space.

Demand for office supply may decline in longer term

There are already signs now that the number of people in work might fall in a few years' time, when the baby boomer generation starts to gradually retire at the beginning of the next decade. It is even more difficult to predict whether improved technical IT options will lead to a boom in home working, or whether working together in a team in a central location will continue to play a crucial role for office work. Uncertainty surrounding the longer-term trend in office employment at least casts doubt on future demand for office properties, heightening the risks associated with new build projects.

Demographic change and digitalisation could dampen office demand in future

COMPLETION OF OFFICE SPACE THROUGHOUT GERMANY NOT GAINING MOMENTUM DESPITE HIGH DEMAND



Source: German Federal Statistics Office

Office: market trend in the locations reviewed

The 19 locations analysed in this market report cover a broad spectrum of German office locations. This is reflected in the following diagram on the left showing the supply of office space: the range extends from 1.4 million sqm in Augsburg, the smallest office

Typical office market in a large regional centre is the size of 2 to 3 million sqm

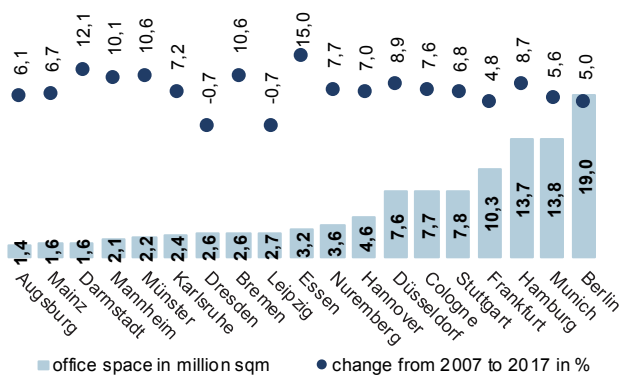
Main regional real estate markets in Germany | 2018

location in Germany, to nearly fourteen times this level - 19 million sqm in Berlin - which is by far the largest. Three other large office markets have office space of more than 10 million sqm: Frankfurt, Hamburg, and Munich. The following three top locations are of almost equal size with nearly 8 million sqm respectively. Hannover is next in line as the largest office centre among the top locations with 4.6 million sqm, ahead of Nuremberg with 3.6 million sqm. Of the "outliers" at the upper and lower ends, the larger regional centres have a supply of office space in a range of 2 to 3 million sqm.

Taken together, the 12 regional centres account for slightly less than 31 million sqm. This is just shy of the total office space of Berlin and Munich together. Overall, the seven top locations account for nearly 80 million sqm of office space. The sharp divergence between the two standard categories makes it clear that - to a greater extent than in the retail and housing markets - the office market is focused mainly on the top locations. However, in terms of growth in the supply of space over the last ten years, the regional centres and the top locations are on a par, with growth of around 7 per cent respectively.

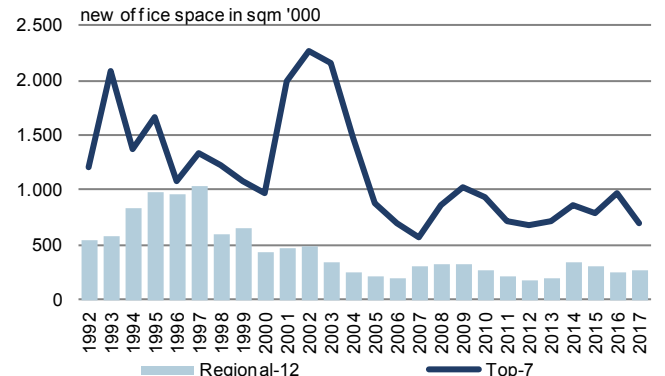
Office space increases by only 7 per cent in 10 years despite boom in labour market

REGIONAL OFFICE MARKETS AND TOP LOCATIONS, SORTED BY SUPPLY OF SPACE



Source: BulwienGesa

NO END IN SIGHT TO SUPPLY SHORTAGE: NO SIGN OF GROWTH IN NEW SPACE AS YET



Source: BulwienGesa

In contrast to the momentum for housebuilding, the increasing shortfall in the supply of office space we already mentioned shows no sign of leading to any significant expansion in new space as yet. Current volumes of new space fall far short of the levels reached in the 1990s and during the dot com boom - particularly in the top locations. The average volume of new office space in top locations has been around 800,000 sqm per year since 2010. Between 2000 and 2009, despite much worse labour market conditions, the figure was around 1.3 million sqm, which was more or less in line with growth in the 1990s.

Despite positive labour market conditions there is no sign of a boom in...

In the 12 regional centres, cumulative new office space has amounted to around 260,000 sqm since 2010. In the previous ten years, the level was much higher at 330,000 sqm per year, but still lagged far behind new space of approximately 800,000 sqm per year in the 1990s. The high volume at that time was largely due to the post-reunification construction boom in Dresden and Leipzig.

... new office building in either the regional centres or top locations

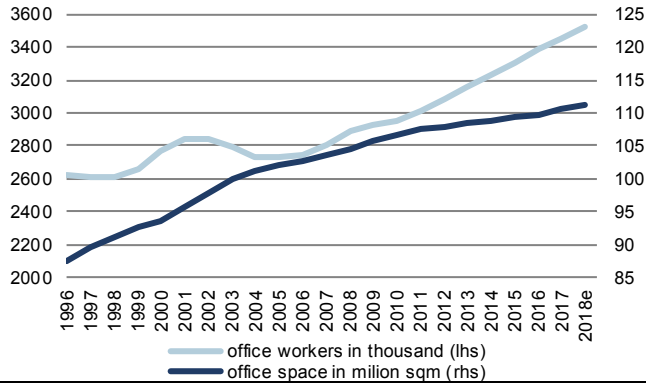
The continuing shortage of office space has been evident for some time. For, in contrast to the 7 per cent growth in office space over a ten-year period, the number of office jobs in the regional centres grew by nearly 20 per cent in this period, and by 25 per cent in top locations. The extent of vacant office space, which was still very marked a few years ago in some areas, has consequently fallen sharply in most locations. The average vacancy rate in the regional centres was still 5 per cent in 2017,

Vacancy rate falls faster in top locations than in regional centres

Main regional real estate markets in Germany | 2018

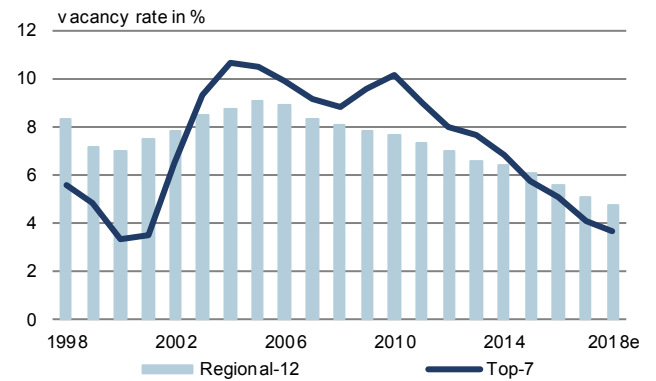
compared to more than 8 per cent in 2007. The decline has been considerably more marked in the top locations, probably because the job market is more buoyant. In 2017, the average vacancy rate in the Top 7 was calculated as 4.1 per cent, compared to more than 9 per cent in 2007.

NO. OF OFFICE JOBS GROWING FASTER THAN OFFICE SPACE FOR MANY YEARS



Source: BulwienGesa, Feri

OFFICE VACANCY RATES CONTINUE TO FALL

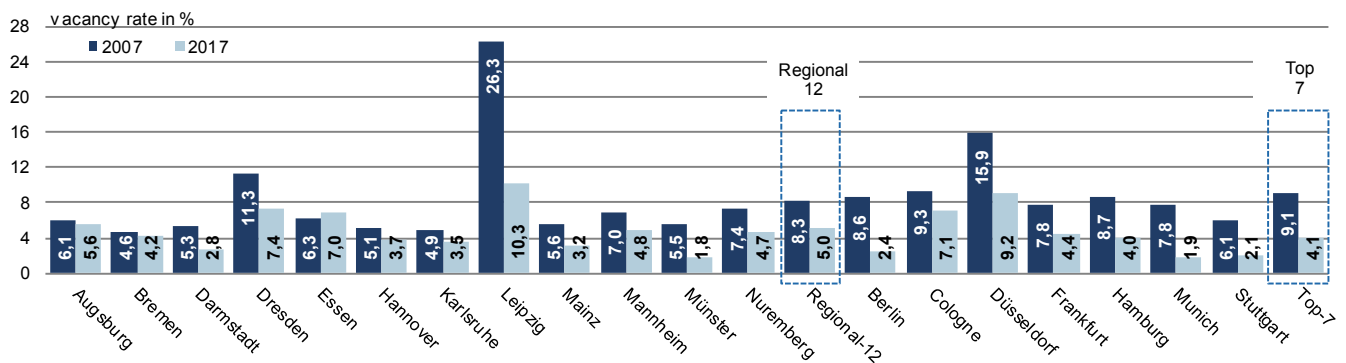


Source: BulwienGesa

Nine of the 19 locations currently have vacancy rates of 4 per cent or less. In Berlin, Munich, Münster and Stuttgart, virtually all reserve supply has been used up, with vacancy rates of around 2 per cent. It is now almost impossible to meet demand for large, interconnecting office space available in the short term. Large-volume rental agreements are usually connected with new developments in these locations, but have to be secured several years in advance.

Space reserves virtually exhausted in some cities

PROPORTION OF EMPTY OFFICE SPACE HAS FALLEN SHARPLY IN SOME LOCATIONS



Source: BulwienGesa

Had it not been for the shortage of available space, take-up would presumably have been higher last year. Total volume in the top locations has nevertheless exceeded the previous year's high level of 3.6 million sqm by another 100,000 sqm, reaching a new historical high. However, relative to total space, volume of 4.6 per cent fell slightly short of the previous maximum of 4.8 per cent in 2000. Conversely, the regional centres did not achieve an excellent result in 2017 in either absolute or relative terms. At just under 860,000 sqm – 2.8 per cent of the supply of space – levels achieved were in fact close to the 10-year average.

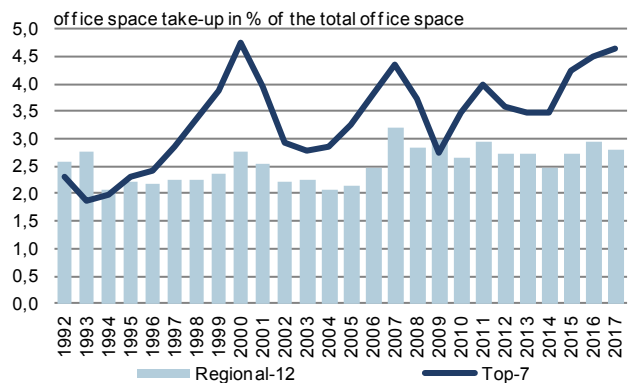
Despite supply shortage, top locations report very high take-up in 2017

Main regional real estate markets in Germany | 2018

Two locations – Berlin and Frankfurt – achieved take-up of more than 5 per cent respectively of existing space. Frankfurt's office market, which was still suffering recently from negative factors in the financial sector – particularly digitalisation, regulation, and low interest rates – has been supported by the buoyant economy of the Rhine-Main region and also, of course, by the imminent Brexit consequences. In Berlin, in the wake of the strong economic upturn in the German capital, a German office location reported take-up of 1 million sqm for the first time. This corresponds to more than a fifth of cumulative take-up in the 19 locations reviewed.

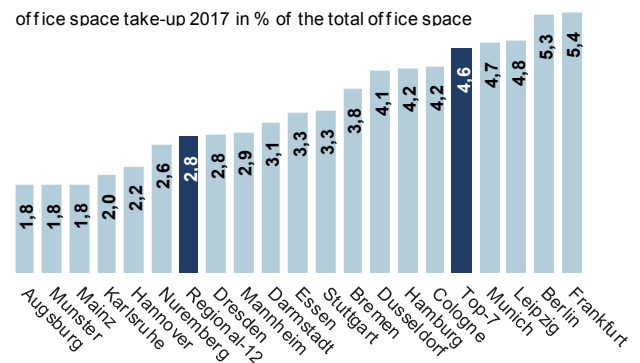
Existing space take-up exceeded 5 per cent in both Berlin and Frankfurt

TAKE-UP IN TOP 7 CONTINUES TO INCREASE, BUT STABLE TREND IN REGIONAL CENTRES



Source: BulwienGesa

SOME REGIONAL CENTRES ALSO SHOW HIGH LEVELS OF TAKE-UP



Source: BulwienGesa

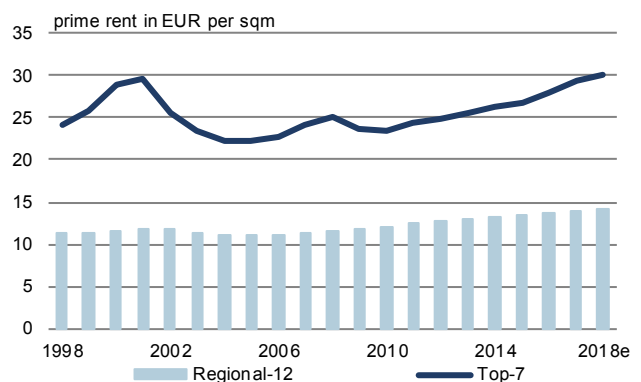
The positive economic conditions and excellent sentiment at companies are fuelling demand for office space, which, as we have described, is coming up against increasingly sparse supply. Prime rents in 14 of the 19 locations analysed have consequently reacted with strong growth some cases but have stagnated in the other five locations. No locations therefore reported a decline in rents. However, prime rents in top locations have on average increased much more sharply than in regional centres – by 4.7 compared to 1.6 per cent. This is mainly attributable to very strong rent growth in Berlin (+7.1 per cent), Frankfurt (+8.5 per cent), and Stuttgart (+8.6 per cent).

High demand and supply shortage drive prime rents in top locations up sharply

As a result of the impetus for office demand created by Brexit, prime rents in Frankfurt have risen to EUR 38.50 per sqm, leading to a further widening of the divergence from the next in line Munich, which followed “close on the heels” of the

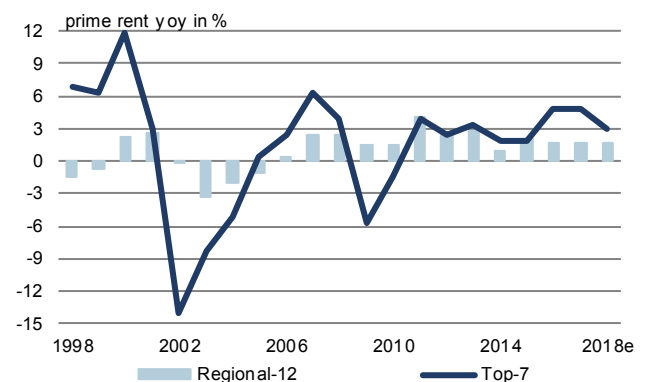
Thanks to Brexit, Frankfurt has consolidated its position as the most expensive German office market

PRIME RENTS IN TOP LOCATIONS MOVE CLOSE TO FORMER PEAK LEVEL OF 2001



Source: BulwienGesa

OFFICE MARKETS OF REGIONAL CENTRES REPORT GROWTH IN PRIME RENTS FOR TWELFTH YEAR IN SUCCESSION

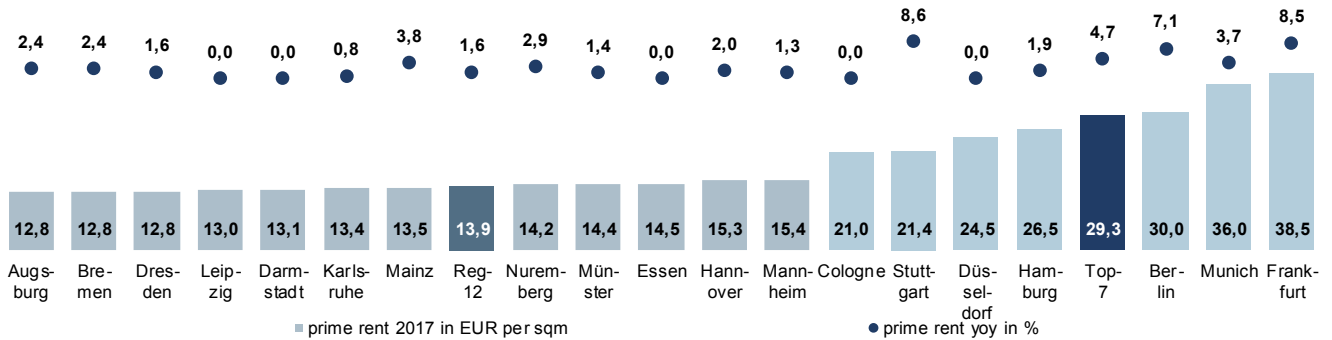


Source: BulwienGesa

Main regional real estate markets in Germany | 2018

financial centre. Prime rents in the Bavarian capital increased to EUR 36 per sqm. Berlin, which was still affordable only a few years ago, has worked its way up to third position. Prime office space here cost EUR 30.00 per sqm in 2017. In Stuttgart, the cheapest office location so far among the top 7 contenders, the figure topped EUR 20 for the first time, with prime rents rising to EUR 21.40 per sqm.

PRIME OFFICE RENTS 2017: HIGHEST GROWTH IN BERLIN, FRANKFURT AND STUTTART



Source: BulwienGesa

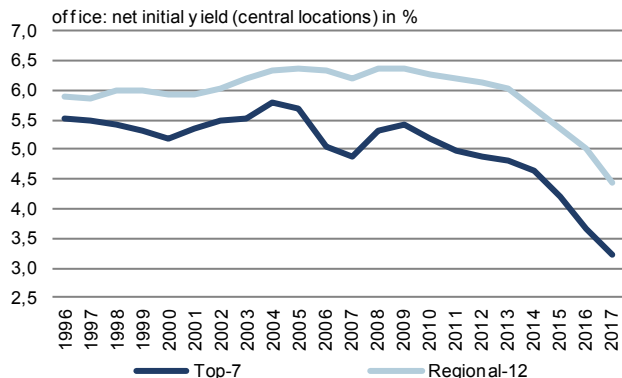
Prime office rents of around EUR 14 per sqm in regional centres were roughly half the level of EUR 29 in the top locations. The range of rents between the cheapest regional centre – Augsburg at EUR 12.80 per sqm – and the most expensive – Mannheim at EUR 15.40 per sqm – was thus relatively narrow. Apart from the two “expensive” regional centres Hannover and Mannheim, the typical rent level in the office markets of the large regional centres ranges from EUR 13 to 14 per sqm.

Prime rents of EUR 13 to 15 per sqm are the norm in the office market of a large regional centre

Favourable conditions for office markets have maintained a high level of investor interest in this segment. As in the previous year, nearly half the volume invested in commercial real estate relates to this area – last year the figure was EUR 57bn, EUR 5bn more than in 2016. Conversely, the proportion for retail properties was significantly lower at around one fifth of commercial real estate investment. High demand has led to another steep decline in yields despite rising rents.

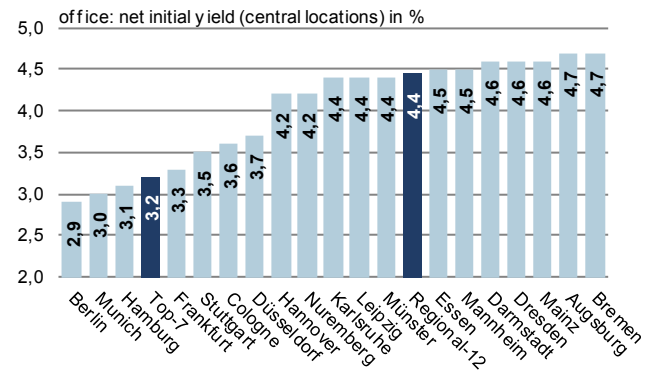
Continuing high level of investor interest in office properties

ALREADY LOW INITIAL RENTAL YIELDS FOR OFFICE PROPERTIES DECLINE FURTHER



Source: BulwienGesa

YIELD RANGE AROUND 2 PERCENTAGE POINTS, SIMILAR TO RETAIL



Source: BulwienGesa

Initial rental yields for office properties in central locations have fallen by around half a percentage point to an average of 3.2 per cent in top locations and 4.4 per cent in

Initial rental yield fell by half a percentage point in 2017

regional centres. Similar to the retail sector, the yield divergence between the two market segments has remained stable. The yield curve divergence here is also between 1.1 and 1.3 percentage points. The yield trend does not therefore reflect stronger demand in the regional centres at the expense of the top locations. Investment in office properties in most regional centres yielded around 4.5 per cent in most locations. The range is wider for the top locations, extending from 2.9 per cent in Berlin to 3.7 per cent in Düsseldorf in 2017.

Summary of office market and forecast

The office market clearly performed well in 2017 given the ongoing economic upturn. However, demand for office space triggered by further strong job growth is coming up against an increasing shortage of space. As in the housing market, the demand overhang is driving up rents. Prime rents have increased particularly strongly in Berlin, Frankfurt and Stuttgart. Nevertheless, while housebuilding has gained pace strongly, the volume of office completions remains subdued. However, the number of building approvals for office buildings has recently increased visibly.

Why is new office building not increasing more strongly in a favourable economic climate? There are various possible reasons for this. In many cities where there are no reserves of space, for example large-scale converted areas, potential building sites are in short supply, and this is also being reflected in housebuilding figures which are still too low. Capacity utilisation levels in the construction sector are also very high already. And new build costs have increased significantly. In addition to these fairly technical reasons, other factors are also however likely to be playing a role: the current upturn is intact, but has already been ongoing for a fairly prolonged period, and an economic slowdown becomes more likely as time goes by. If this happens, cyclical demand for office space generally declines sharply. The situation is compounded by structural factors: demographic change and the digitalisation of the world of work could dampen demand for office space in future.

The shortage of office space and the robust labour market appear to contradict this view; however, past experience shows that vacant office space can quickly rise to high levels. For example, not so long ago a large number of office properties outside the core segment showed persistent vacancy rates which reached 100 per cent in some cases. It therefore makes sense not to create more office space than is required in the long term. However, it is difficult to predict what those long-term office needs might be. Conversely, it is easier to gauge the short-term prospects for the office market. If, as expected, the current economic upturn continues this year, office demand is likely to remain buoyant. Because there will be little overall change in the supply shortage, we expect increasing prime rents and falling vacancy rates.

OFFICE – FORECAST FOR PRIME RENTS AND VACANCY RATES

	2016	2017	2018e
12 regional centres			
Prime rents in EUR/sqm (vs. previous year in %)	13.7 (+1.8)	13.9 (+1.6)	14.1 (+1.6)
Vacancy rate in % (vs. previous year in % points)	5.5 (-0.5)	5.0 (-0.5)	4.7 (-0.3)
7 top locations			
Prime rents in EUR/sqm (vs. previous year in %)	28.0 (4.9)	29.3 (4.7)	30.2 (3.0)
Vacancy rate in % (vs. previous year in % points)	5.1 (-0.7)	4.1 (-1.0)	3.7 (-0.4)

Source: BulwienGesa, DZ BANK Research 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.

High demand and supply shortage drive up rents, but fail to trigger visible growth in new office building

Factors hampering new office building: capacity bottlenecks, lack of space, building costs, end of the upturn, demographic trends or digitalisation?

2018 forecast: vacancy rates falling, prime rents rising

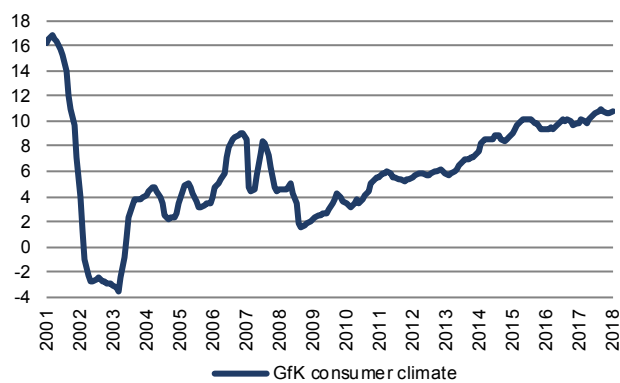
Retail properties: prime rents continued to stagnate in 2017

Market conditions in the retail sector

The economy is running smoothly, the labour market is flourishing, and consumer sentiment is buoyant. Continuing low interest rates make savings less attractive, and there are consequently few reasons not to spend money. The resulting consumer spending was once again clearly reflected in the sales trend in the German retail sector in 2017. For what was already the third year in succession, retail sales increased by around 3 per cent over the year – a much higher rate than in the previous years after the millennium. Following the prolonged period of stagnation which depressed the German retail sector in the first ten years of the millennium, sentiment in the retail sector should now be at optimum levels. Particularly since growth in tourism in Germany is providing further support for retail growth as a result of the large number of visitors taking city breaks.

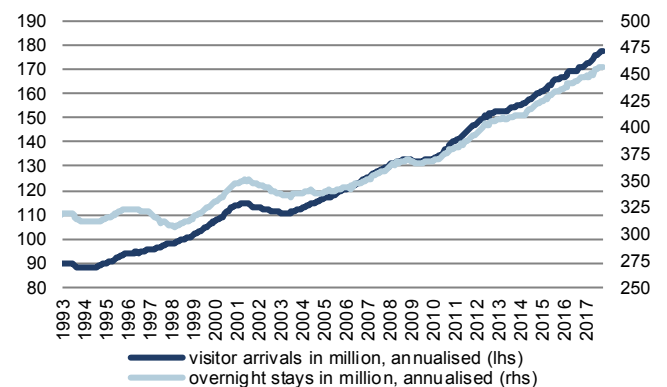
Economic climate for retail remains very good

CONSUMER CLIMATE HAS REACHED A HIGH LEVEL



Source: GfK

TOURISM IN GERMANY REMAINS ON A GROWTH COURSE



Source: German Federal Statistics Office

However, there is no major cause for celebration, particularly for high-street retail. For growth is focused mainly on online shopping, which is growing very disproportionately by nearly 10 per cent annually. Retail is thus one of the sectors where digitalisation is already having a particularly marked impact since consumers can order products and compare prices both at home and while travelling. This development has helped to create the paradoxical situation whereby rent growth over a prolonged period in top shopping locations comes to a halt precisely when private consumer spending reaches a particularly high level.

Despite good conditions: subdued sentiment for high-street retail

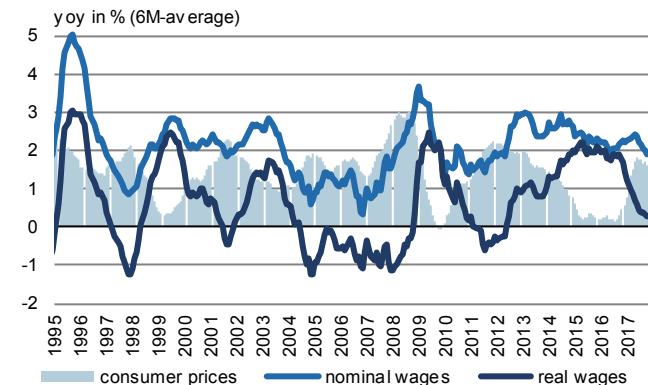
The digitalisation of the retail sector does not however mean that shopping expeditions are becoming any less popular. In fact, customers like to spend their leisure time visiting shopping precincts and shopping centres and these are also being updated in many places via project and urban development measures. The provision of restaurants and fast food outlets is also improving increasingly, and this is also benefiting the quality of the shopping experience. However, customers are spending less on the high street. An increasing proportion of purchases are being ordered online, and sales growth in shops thus lags behind overall retail growth.

City shopping expeditions still popular, but purchases made online

It is therefore consistent for retailers to react by requiring less retail space and becoming less willing to pay higher rents. Added to this is the growing popularity of factory outlet centres (FOCs). In these out-of-town shopping malls, chain stores offer similar products as in prime locations, but at lower prices. This is also eating into sales generated in city centres.

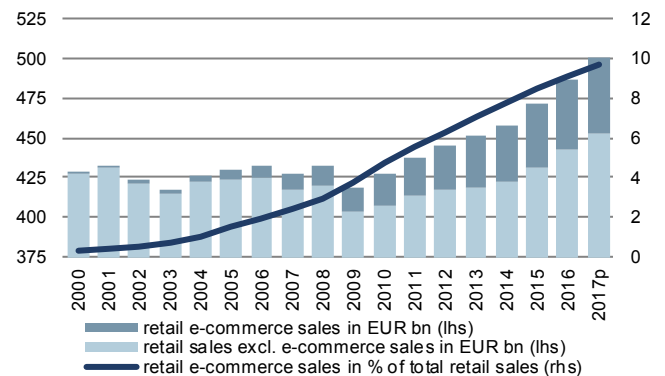
Online shopping and out-of-town factory outlets: is demand for city centre retail space falling?

HIGHER INFLATION HAS VISIBLY SLOWED REAL WAGE GROWTH



Source: German Federal Statistics Office ,Thomson Reuters

HIGH-STREET DERIVES LITTLE BENEFIT FROM RETAIL SALES GROWTH



Source: HDE

The challenges faced by the retail sector are unlikely to get any easier. The e-commerce success story looks set to continue. As the number of suppliers and products grows, and as ordering processes become easier and delivery times shorter, online sales volume is likely to continue to show dynamic growth. Consumers could also become less willing to take a possibly longer route to a shopping centre or a city.

Weaker demand from retailers for space ...

However, this need not necessarily lead to falling demand for city-centre retail space. For the best locations are not only attractive to traditional retailers. While this type of demand has weakened recently, other users of space are increasingly moving into prime locations. These include supermarkets and drugstores, many food outlets, particularly restaurant chains, and fitness studios. Online retailers such as Amazon also need retail space to gain access to customers via sales channels other than their online shops.

... offset by food outlets and other users

Despite the change in shopping habits caused by digitalisation, conditions for high-street retail have generally improved in recent years. There are two main contributory factors here: firstly, a positive trend in sales. And secondly, the strong growth in retail space evident in Germany over a prolonged period has clearly levelled off. Retail space thus grew by around 1.3 million sqm annually between 2000 and 2010. However, annual growth has since fallen by two thirds to around 400,000 sqm.

Sales increase, but virtually no growth in retail space since 2010

The decline in sales floor productivity – sales per sqm of retail space – evident for many years has consequently recovered strongly since 2011. While the average level throughout Germany was still EUR 3,900 per sqm in 2000, the figure had fallen by around EUR 550 in 2009, a decline of about 15 per cent. Levels have however been increasing again since 2010: last year average sales per sqm clearly exceeded EUR 3,600, and are therefore back at more than 90 per cent of the figure at the beginning of the millennium again. However, these are nominal figures. If we factor in the price increase of nearly 30 per cent since 2000, the comparable figure increases to nearly EUR 5,000. Today, sales per sqm are thus reaching only slightly more than 70 per cent of the figure reported at the beginning of the millennium.

Space productivity recovers, but still lags behind previous levels

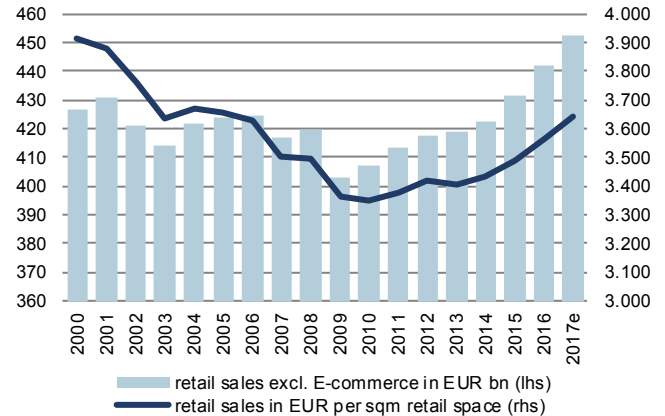
Main regional real estate markets in Germany | 2018

GROWTH IN RETAIL SPACE SLOWS CONSIDERABLY IN GERMANY ...



Source: HDE, DZ BANK Research

... AND SALES FLOOR PRODUCTIVITY IS THEREFORE POSITIVE AGAIN THANKS TO RETAIL SALES GROWTH



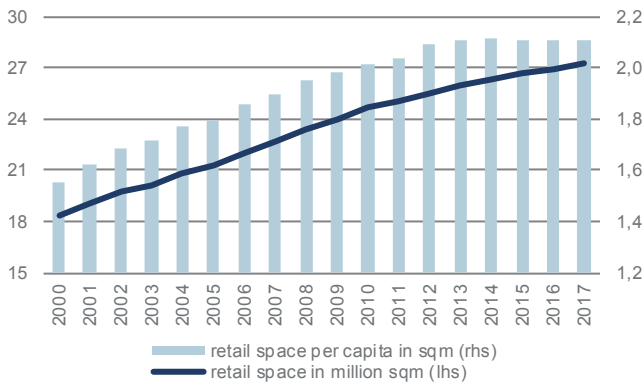
Source: HDE, DZ BANK Research

Retail: market trend in the locations reviewed

The trend we have described in the German retail sector is also evident in the 19 locations we have reviewed. However, cumulative retail space has increased by nearly 50 per cent 2000 here – from 18 to a total of 27 million sqm currently – much more rapidly than in Germany as a whole where the growth rate has been 14 per cent. The pace of growth in the cities reviewed has nevertheless also weakened as retail space has increased. However, because demographic growth has also been high in the major cities, retail space per capita has also stopped increasing.

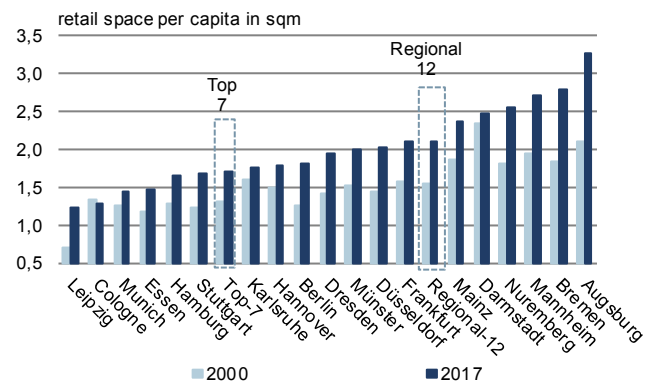
Retail space in 19 locations up by 50 per cent since beginning of millennium

TOTAL RETAIL SPACE GROWTH HAS BEEN STAGNATING FOR SOME YEARS NOW



Source: Feri, DZ BANK Research

RETAIL SPACE PER CAPITA HAS RISEN CONSIDERABLY IN SOME CASES COMPARED TO 2000



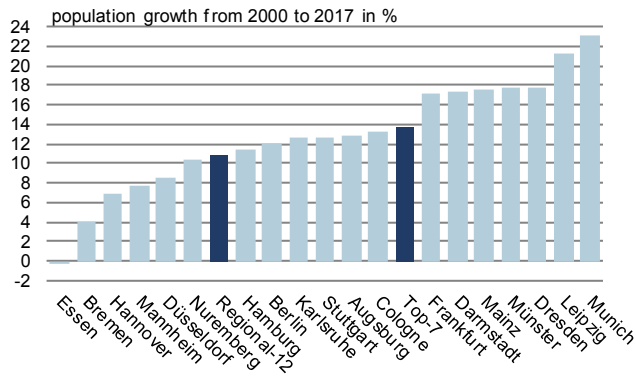
Source: Feri

Retail space per capita in the individual locations not only shows major differences in terms of level, but has also developed very differently since the year 2000. While, in theoretical terms, retail space per capita in Leipzig and Cologne is only slightly more than one sqm, levels in Augsburg, Mannheim and Bremen are more than twice as high. And while retail space per capita in these three cities has grown by 1 sqm in just under 20 years, it has increased only marginally, if at all, in Karlsruhe, Cologne and Munich. In terms of sales floor productivity, the upward trend is slightly more pronounced in the top locations than in the regional centres.

Trend in retail space differs very widely in individual locations

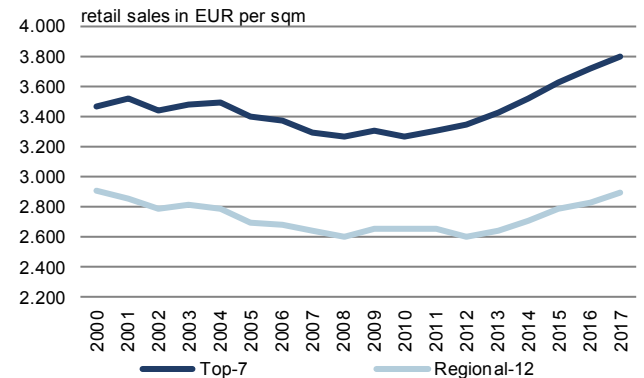
Main regional real estate markets in Germany | 2018

STRONG DEMOGRAPHIC GROWTH IN MOST CITIES SINCE MILLENNIUM



Source: Feri

SALES FLOOR PRODUCTIVITY POSITIVE IN REGIONAL CENTRES, BUT PARTICULARLY SO IN THE TOP LOCATIONS



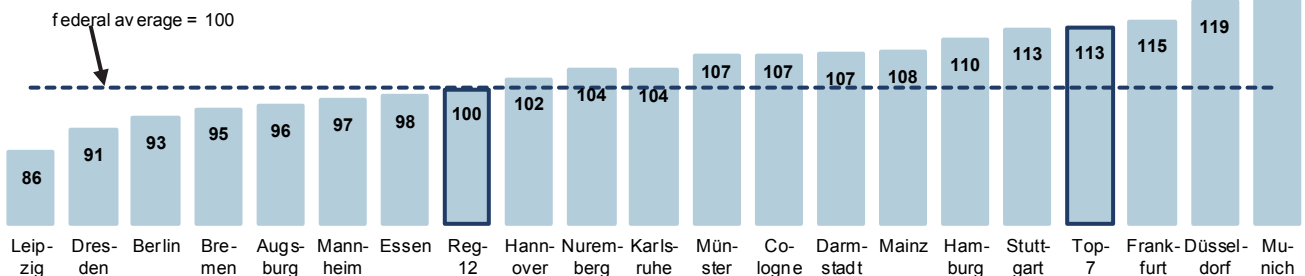
Source: Feri

One of the reasons for the more positive trend in the top locations is that average demographic growth there has been faster. Purchasing power is also consistently better than in the regional centres. For, with the exception of Berlin, the top locations continuously achieve high to very high levels of purchasing power. This applies particularly to Munich: the Bavarian capital tops the league of the 19 locations by some considerable distance. However, some regional centres such as Darmstadt, Münster, and Mainz also show good levels of purchasing power. Despite a sustained economic upturn, the two east German climbers Dresden and Leipzig perform worst. In Augsburg, Bremen, Mannheim and Essen, purchasing power is slightly below the German average of 100. The common feature of these four cities is that structural change over many years has hampered their economic development.

Apart from Berlin, top locations show high to very high levels of purchasing power

TOP LOCATIONS OUTPERFORM REGIONAL CENTRES IN TERMS OF PURCHASING POWER

purchasing power index in points (2017)

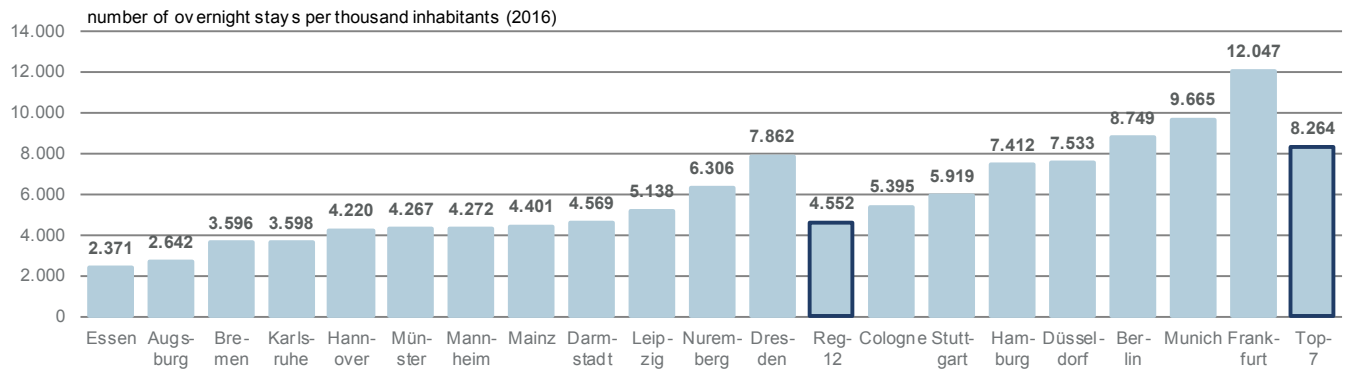


Source: BulwienGesa

In addition to population growth and varying levels of regional economic performance, tourism is becoming an increasingly important factor for demand in the retail sector in cities. Some of the locations reviewed here are benefiting significantly from strong growth in city tourism. Shopping by visitors is having a particularly positive impact on the city centre destinations on which we focus here. While the top locations show consistently high visitor numbers, not all the regional centres are benefiting to the same extent. Augsburg, Bremen and Essen bring up the rear. This is all the more of a disadvantage for Bremen and Essen because both major cities also lag behind in terms of general demographic growth and the economic development.

High visitor numbers lead to strong growth in city-centre customer volumes, not only in top locations

IN SOME CITIES, THE LARGE NUMBER OF VISITORS IS CLEARLY STRENGTHENING REGIONAL PURCHASING POWER

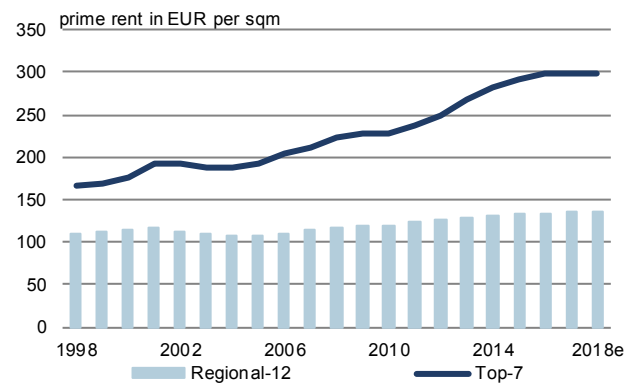


Source: BulwienGesa, Feri, DZ BANK Research

For many years, prime rents in top city-centre locations increased strongly. A “two-tier system” was clearly evident here: while prime rents in the regional centres have increased by an average of 20 per cent in 20 years, growth has been much more pronounced in the top locations at 80 per cent. The result has been the current wide divergence in rents; while prime rents in the regional centres are EUR 135 per sqm, the average figure in the top locations has risen to nearly EUR 300 per sqm. The range of rents in the regional centres thus extends from EUR 100 per sqm in Darmstadt to EUR 203 per sqm in Hannover. The divergence between this most expensive of the regional centres and Stuttgart, the cheapest top location at EUR 250 per sqm, is thus relatively small compared to the wide gap between average rents in the two groups. Rents are still highest by far in Munich at EUR 345 per sqm.

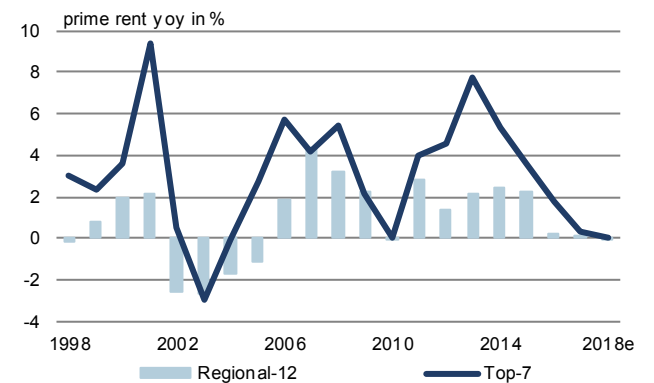
Top locations leave regional centres far behind in terms of prime rents

PRIME RENTS IN PRIME SITES IN TOP LOCATIONS HAVE INCREASED MUCH MORE STRONGLY THAN IN REGIONAL CENTRES



Source: BulwienGesa

RENTS IN TOP CITY CENTRE RETAIL LOCATIONS NO LONGER RISING

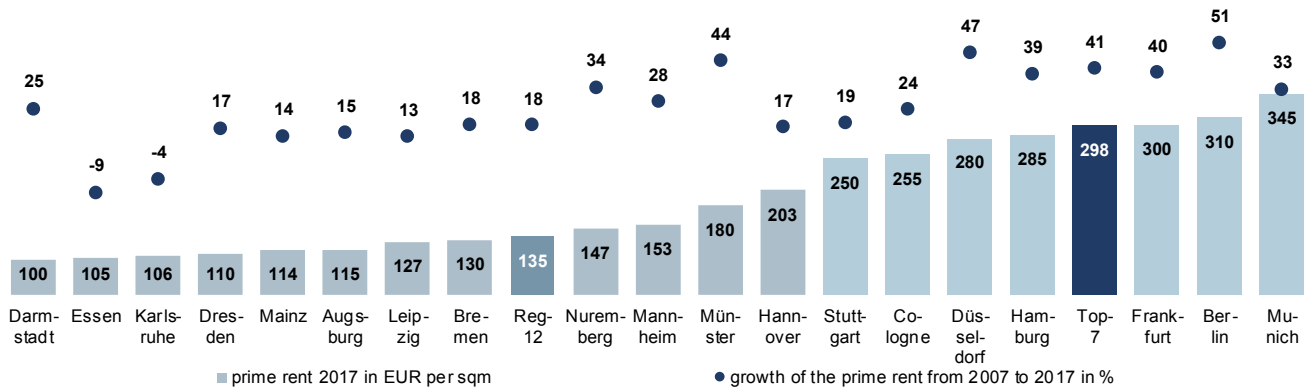


Source: BulwienGesa

There are various reasons for the marked divergence in rent growth. These include the higher sales floor productivity and purchasing power of the top locations we have already mentioned, but also their much larger numbers of customers including many foreign visitors. These locations consequently act as test markets for new retail concepts which are to be rolled out in the German market. Demand for retail space in prime sites in top locations is correspondingly higher. Conversely, regional centres are particularly suitable in terms of space expansion, but are also more interchangeable: of the 80 or so large cities whose populations exceed 100,000, only 7 have the status of a top location.

Greater interchangeability of regional centres limits potential for rent growth

PRIME RENTS HAVE FALLEN IN 2 OF 19 LOCATIONS IN THE LAST 10 YEARS



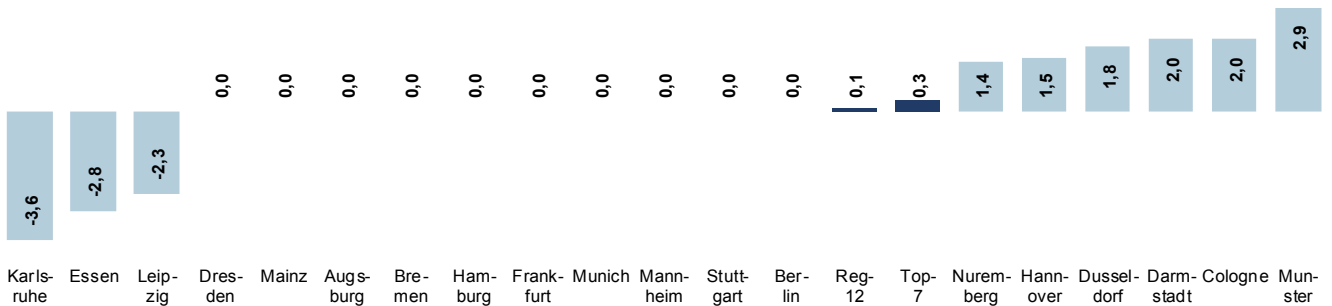
Source: BulwienGesa

However, the steady upward trend in prime rents has come to an end in the top locations as well as in the regional centres. While prime rents in the regional centres increased up to 2014, the rally in retail rents in the top locations continued into the following year. Last year, prime retail rents stagnated in 10 of the 19 locations reviewed. Six cities continued to report growth, and three showed a decline. It is striking that, of the four regional centres where rents increased, three are among those with above-average rent levels: Hannover, Münster and Nuremberg. The further rent growth is thus based on the strength of these locations rather than on pent-up demand.

Prime rents in 10 of 19 locations unchanged in 2017

PRIME RETAIL RENTS IN ROUGHLY HALF OF THE LOCATIONS STAGNATED IN 2017

prime rent 2017 yoy in %

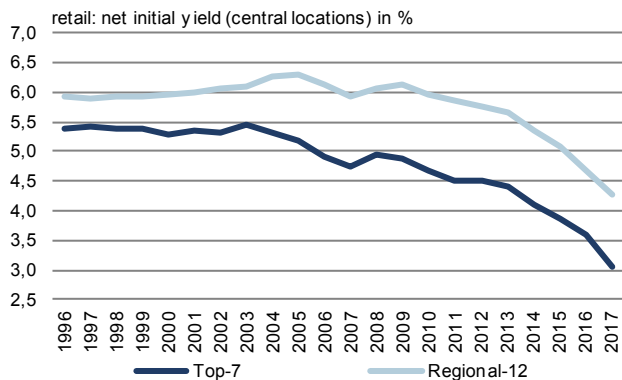


Source: BulwienGesa

However, neither weaker demand from retailers for space, nor the stagnation of rent growth, halted the upward price trend for retail properties. This led to a further decline in initial rental yields for retail properties in central locations. Levels fell below the historically low yields of the previous year again. For the regional centres this was the eighth successive decline in yields, and the ninth for the top locations. On average, levels of 4.3 per cent can still be achieved for a good retail property in the regional centres, and 3.1 per cent in the top locations. The divergence in initial rental yields between the regional centres and the top locations has thus remained stable for more than ten years at 1.1 to 1.3 percentage points.

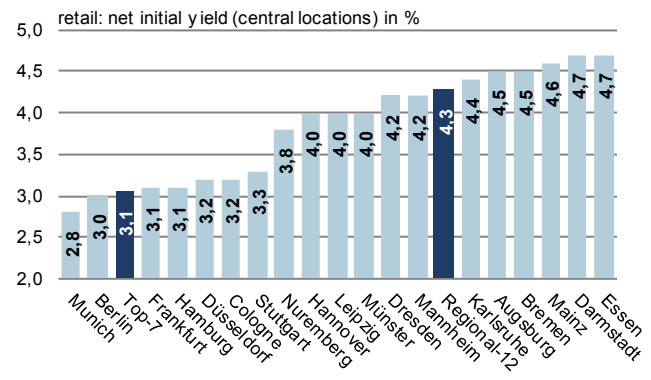
Initial rental yields in retail sector continue to fall

DECLINE IN RETAIL YIELDS HALTED AGAIN IN 2016



Source: BulwienGesa

FROM AN INVESTOR'S PERSPECTIVE, MUNICH IS THE MOST EXPENSIVE AND MAINZ THE CHEAPEST



Source: BulwienGesa

The lack of alignment in yield curves shows that the shift by investors to B locations in reaction to high property prices in the top locations, which has often been a topic of discussion in recent years, has not in fact taken place. Over all locations, the range of yields compared to 2016 has remained unchanged at around two percentage points. The lowest yields are still to be found in Munich at less than three per cent. In Essen, the initial rental yield has fallen to below five per cent. The yield divergence between what is, relatively speaking, the cheapest top location of Stuttgart (3.3 per cent), and the most expensive regional centre Nuremberg (3.8 per cent), was half a percentage point in 2017.

Summary of retail properties and forecast

While rents for office properties and homes continue to increase sharply, the upward trend in prime retail rents has come to a standstill – amid the second “economic miracle” in Germany. The retail sector as a whole cannot complain about poor business levels. A recent shift in sales channels has nevertheless had negative consequences for city-centre businesses. However, while it is not ultimately crucial for chain stores whether sales are generated in prime locations, out-of-town factory outlet centres, or online, the gradual erosion of sales potential in top locations is restricting the scope for rent payments there. This makes it less likely that rents will rise any higher above levels which have already increased sharply, or that the volume of retail space will grow significantly.

The pressure on landlords of retail properties is being mitigated by growing demand on the other side of the classic retail mix in 1A locations, as more supermarkets and drugstores or restaurant chains move into city centres. However, this does not mean that property owners are out of the woods; they are having to adjust to rising costs because intervals between renovations are becoming shorter. Upgrades are necessary to make retail properties more attractive in order to meet the high expectations of consumers – and of retailers seeking space.

The changes taking place in the retail sector are currently being played out in an economic upturn. Nor there are any signs at the moment of an economic slowdown. However, no economic cycle lasts for ever – and the current one has been under way for quite a while. From the perspective of the property market, it therefore does no harm to simulate the stress test scenario of an economic slowdown. This also raises the question of what impact weaker economic conditions would have on the two categories of regional centres and top locations which we have reviewed. Can the

Yield trend shows no sign of a shift to B locations

Broader range of sales channels restricts scope for retailers to pay rent

But: the range of demand for space in city centres is widening

Still no sign of any economic downturn

regional centres benefit from their comparatively low rent levels? Or would the strength of location which has driven significant rent growth in the top locations also help to cushion the impact of economic stagnation?

RETAIL – FORECAST FOR PRIME RENTS

	2016	2017	2018e
12 regional centres			
Prime rents in EUR/sqm (vs. prev. yr. in %)	134.7 (+0.2)	134.9 (+0.1)	134.8 (-0.1)
7 top locations			
Prime rents in EUR/sqm (vs. prev. yr. in %)	297.5 (+1.8)	298.4 (+0.3)	298.5 (+0.0)

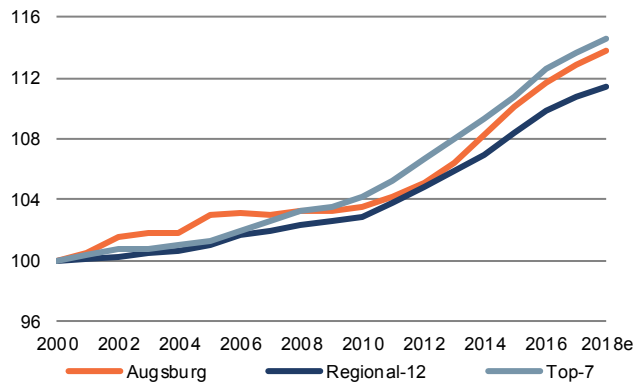
Source: BulwienGesa, DZ BANK Research forecast

all averages are adjusted for space

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

AUGSBURG

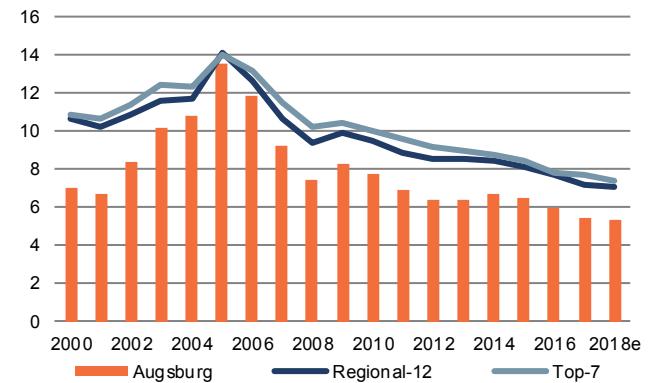
POPULATION GROWTH



Source: Feri

Index 2000 = 100

UNEMPLOYMENT RATE (%)



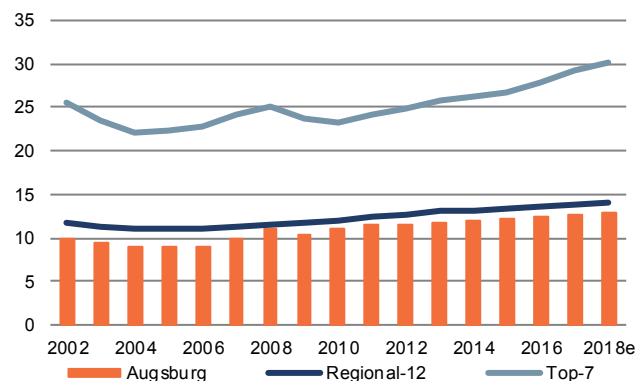
Source: BulwienGesa, DZ BANK Research forecast

Built by the Romans, Augsburg is well known for its City Hall, the Goldener Saal and the Fuggerei alms houses. Good connections to Munich 60 kilometres away are leading to strong population growth. The third largest city in Bavaria in terms of population has grown by 7 per cent or nearly 20,000 people to just under 290,000 in five years, which would not have happened based on its economic situation. Structural change is still ongoing, as a result of the decline of the textile industry, the withdrawal of the American armed forces, and major insolvencies such as Manroland and Walter Bau. The unemployment rate is slightly elevated for a Bavarian regional centre at 4.9 per cent (November 2017) despite many positive developments. The former Osram factory which employs around 700 people and which is owned by the Chinese lighting producer Ledvance is also about to close. 250 jobs are also at risk at Kuka. Important sectors of the economy today are environmental technology, mechatronics and aerospace, which benefit from the university and other research institutions. Positive factors for the location are its good transport infrastructure with Autobahn A8, the ICE express rail connection and proximity to Munich airport. The city plans to prepare for the future by expanding its infrastructure extensively via “Project Augsburg” – new tram lines, the modernisation of Königsplatz, and the renovation of the main railway station. New areas are also being created for housing and commercial development on brownfield and converted military sites.

Augsburg’s population growth benefits from Munich commuters

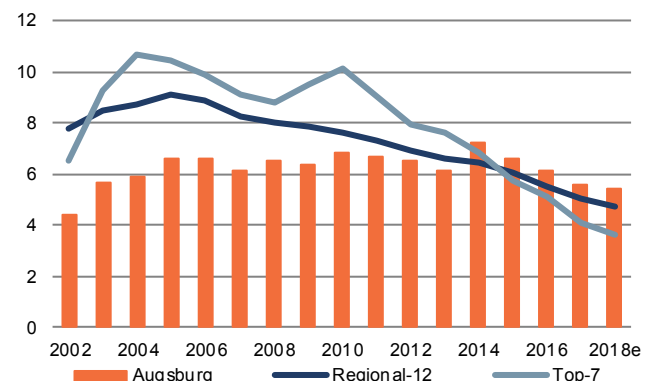
Office space in Augsburg

PRIME RENTS FOR OFFICE SPACE IN EUR PER SQM



Source: BulwienGesa, DZ BANK Research forecast

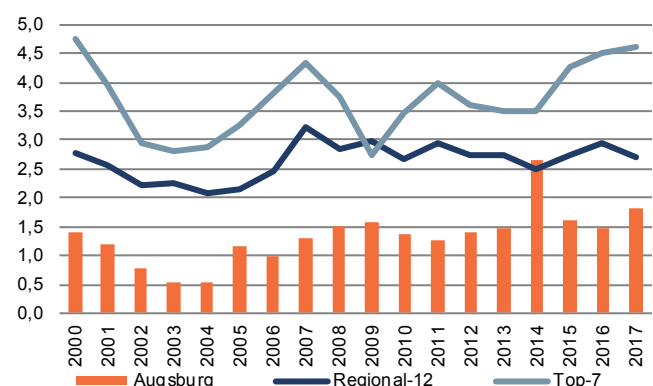
VACANCY RATE (%)



Source: BulwienGesa, DZ BANK Research forecast

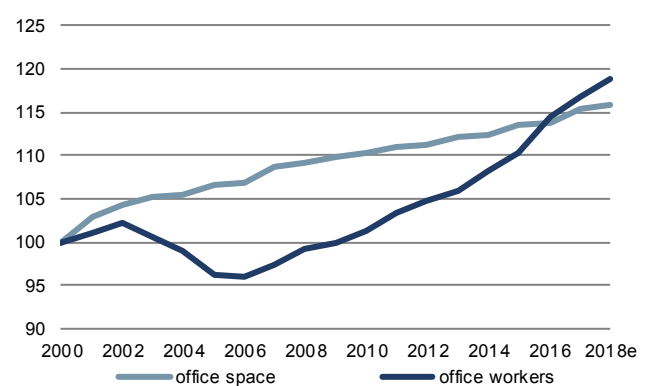
Main regional real estate markets in Germany | 2018

TAKE-UP AS % OF OFFICE SPACE



Source: BulwienGesa

TREND IN OFFICE SPACE AND EMPLOYMENT



Source: Feri, BulwienGesa

Index 2000 = 100

With office space of around 1.4 million sqm, Augsburg has a comparatively small office market for a city with a population of nearly 300,000. This is attributable, on the one hand, to the major importance of its manufacturing sector. On the other hand, renting office space has long been a fairly difficult business due to structural change. Only about ten years ago, prime rents per sqm were in single-digit euros. However, the figure increased by 20 per cent to EUR 12.80 per sqm between 2007 and 2017. The vacancy rate fell to less than 6 per cent, having risen to more than 7 per cent in 2014 as a result of the insolvency of Weltbild. Overall, the Augsburg office market is largely characterised by regional demand; its proximity to Munich has little impact on market activity and rent levels. Annual take-up in Augsburg is generally around 20,000 sqm per year. Higher levels are mainly associated with rental agreements for new developments used by the owners, most of which are outside the city centre which is fairly small-scale. One example is the new development and technology centre for robotics manufacturer Kuka, which boosted take-up to 36,000 sqm in 2014. In 2017, a positive level of 25,000 sqm was achieved without any landmark deals. Augsburg has a supply of converted space which can be used for new office developments. We expect the upward trend in the Augsburg office market to continue this year, and prime rents to increase from 1.5 to 2 per cent.

Office: relatively small office market with potential and space reserves for project development

OFFICE FORECASTS

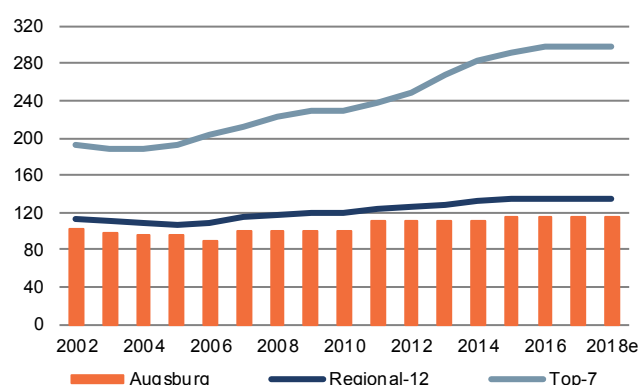
		2015	2016	2017	2018e
Demand					
GDP	% yoy	5.7	2.7	2.9	2.8
Per capita GDP	in EUR	42,771	43,264	44,048	44,932
No. of office workers	in '000	51.9	53.9	55.0	56.0
No. of office workers	% yoy	2.0	3.7	2.1	1.8
Supply					
Total office space	in sqm '000	1,370	1,375	1,394	1,400
Total office space	% yoy	1.0	0.3	1.4	0.5
Vacancy rate	%	6.6	6.1	5.6	5.4
Office rents					
Prime/secondary location	EUR/sqm	12.2 / 5.1	12.5 / 5.1	12.8 / 5.3	13.0 / 5.3
Prime/secondary location	% yoy	1.7 / 0.0	2.5 / 0.0	2.4 / 3.9	1.6 / 0.0

Source: Feri, BulwienGesa, DZ BANK Research forecast

yoy = year-on-year

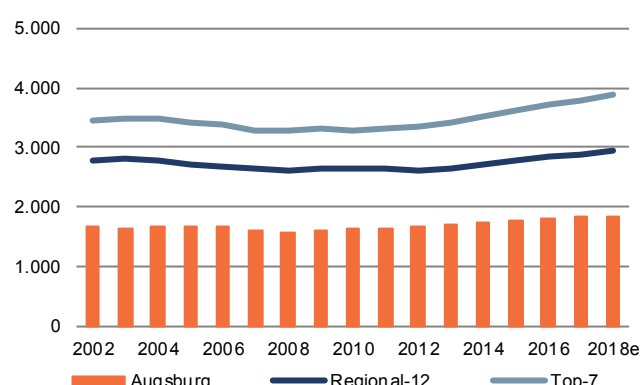
Retail space in Augsburg

PRIME RETAIL RENTS IN EUR PER SQM



Source: BulwienGesa, DZ BANK Research forecast

RETAIL SALES IN EUR PER SQM



Source: Feri

With more than 3 sqm of retail space per capita, Augsburg has a very high volume of retail space. Its supply function for a large catchment area of more than 600,000 people is crucial here. Nor are there any shopping locations of similar importance close to the city which lies midway between Munich and Ulm. One minus point is the below-average purchasing power of only 96 points in the Fuggerstadt area. Tourism, which is not particularly strong, cannot balance out weak purchasing power. Another negative factor for retail is the large building site for the “Augsburg City” urban development project which will probably continue until 2020. Prime rents in the prime locations of Annastraße and Bürgermeister-Fischer-Straße have been EUR 115m per sqm since 2015. Previously the figure was EUR 110 for more than four years. There have been a number of changes in the city in recent years: while Peek & Cloppenburg invested in the former Woolworth building, Galeria Kaufhof moved out. The former Kaufhof building is now being used by Schuh-Schmid. The City-Galerie with around 34,000 sqm of shopping space to the east of the city represents competition for city centre retail. The Fuggerstadt centre is being renovated, having been sold to Activum Capital Management in 2015. After delays it will probably open in 2018 as “Helio”. We expect prime rents to remain stable in the coming year.

Retail: attractive shopping location updated with revamped pedestrian zones

RETAIL FORECASTS

		2015	2016	2017	2018e
Demand					
Per cap. disposable income	EUR/month	1,646	1,668	1,700	1,733
Unemployment rate	%	6.5	6.0	5.4	5.3
Retail sales	EUR m/% yoy	1,647 / 3.5	1,689 / 2.5	1,728 / 2.3	1,763 / 2.0
Retail sales	EUR/sqm retail space	1,788	1,800	1,826	1,840
Supply					
Retail space	in sqm '000	921	938	946	958
Retail space	% yoy	1.7	1.9	0.9	1.2
Retail rent					
Prime/secondary location	EUR/sqm	115 / 8.0	115 / 8.0	115 / 9.0	115 / 9.0
Prime/secondary location	% yoy	4.5 / 0.0	0.0 / 0.0	0.0 / 12.5	0.0 / 0.0

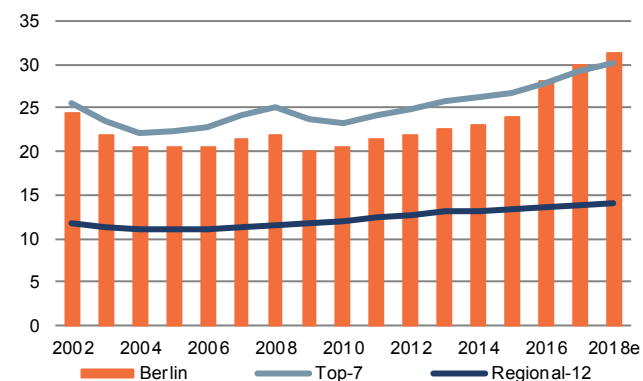
Source: Feri, BulwienGesa, DZ BANK Research forecast

yoy = year-on-year

BERLIN

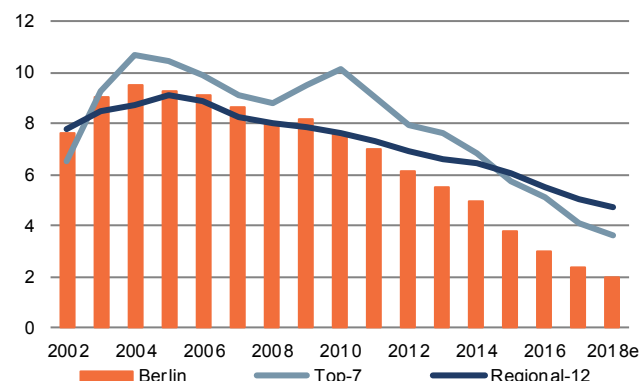
Office space in Berlin

PRIME RENTS FOR OFFICE SPACE IN EUR PER SQM



Source: BulwienGesa, DZ BANK Research forecast

VACANCY RATE (%)



Source: BulwienGesa, DZ BANK Research forecast

Economic conditions in Berlin have improved steadily. This is evident from the continuous decline in unemployment which reached 8.5 per cent in November 2017 compared to nearly 20 per cent in 2005. Today the German capital is a sought-after location for e-commerce providers and fintechs, as well as established companies. Berlin's attractions as a residential location are having a beneficial effect in light of the shortage of qualified workers. The ongoing upturn has driven up prime rents by half to EUR 30 per sqm compared to EUR 20 per sqm in 2010 when they still lagged well behind average for the top locations. Berlin thus ranks third after Frankfurt and Munich as the most expensive German office locations. Berlin has also become the first German office location to achieve annual take-up of 1 million sqm. The already high level of the previous year has thus been exceeded by another 15 per cent. With a vacancy rate of just over 2 per cent, Berlin therefore has virtually no available office space. It is striking that the booming Berlin office market has the lowest level of new office space among the top 7 based on the total stock of space. The average figure in the last ten years was only 0.75 per cent p.a., whereas the other six top locations have reported levels of between 0.9 and 1.3 per cent. Given the buoyant state of the German economy, we expect further strong growth in prime rents and a continuing fall in the vacancy rate.

Office: Berlin office market running out of space as upturn continues

OFFICE FORECASTS

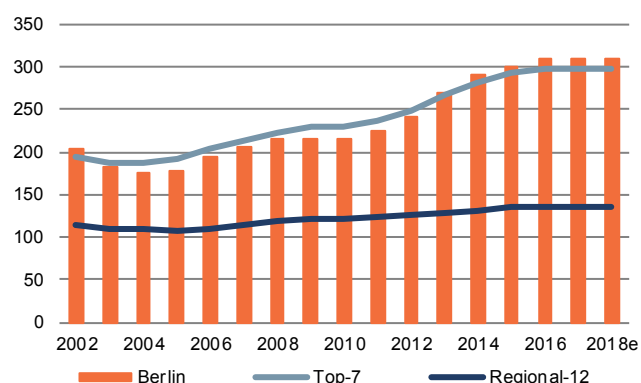
		2015	2016	2017	2018e
Demand					
GDP	% yoy	5.1	4.1	3.9	3.4
Per capita GDP	in EUR	31,396	32,072	32,950	33,812
No. of office workers	in '000	542.0	568.8	583.0	597.0
No. of office workers	% yoy	3.4	4.9	2.5	2.4
Supply					
Total office space	in sqm '000	18,929	18,932	19,026	19,200
Total office space	% yoy	1.0	0.0	0.5	0.9
Vacancy rate	%	3.8	3.0	2.4	2.0
Office rents					
Prime/secondary location	EUR/sqm	24.0 / 9.5	28.0 / 11.0	30.0 / 11.5	31.2 / 11.5
Prime/secondary location	% yoy	4.3 / 11.8	16.7 / 15.8	7.1 / 4.5	4.0 / 0.0

Source: Feri, BulwienGesa, DZ BANK Research forecast

yoy = year-on-year

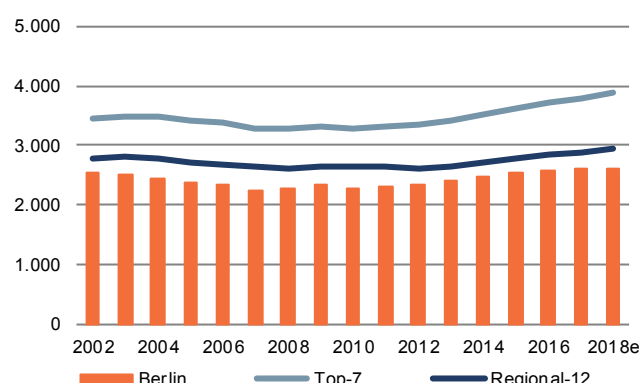
Retail space in Berlin

PRIME RETAIL RENTS IN EUR PER SQM



Source: BulwienGesa, DZ BANK Research forecast

RETAIL SALES IN EUR PER SQM



Source: Feri

Berlin has performed extremely well as a shopping location. For a long time the city has been popular with investors and retailers due to its large catchment area, population growth, and its role as a trendsetter and a magnet for tourists - with currently more than 30 million overnight stays per year - but has been hampered by persistent economic weakness. However, Berlin's economy has now picked up visibly, although purchasing power is still well below the German average of 100 points at 93 points. In the last ten years, the positive trend in the German capital and in the retail sector has been reflected in the strongest growth in prime rents among the top locations with EUR 310 per sqm and growth of more than 50 per cent; this is 10 percentage points higher than average for the top 7. However, rents have also stopped rising in Berlin: prime rents stagnated last year. This situation is likely to continue this year, although demand for Berlin retail space is continuing to benefit from a generally positive climate, one feature of which is the city's function as a test market for new retail concepts. This makes Berlin interesting to foreign retailers seeking to enter the German market. Another special feature of the Berlin retail sector is the various prime locations in different parts of the city with different characteristics. Examples are Ku'damm/ Tauentzienstraße, Alexanderplatz, Friedrichstraße and the aspirational Hackescher Markt. Added to this are a large number of shopping centres, for example the huge Mall of Berlin.

Berlin has also become a top retail location in Europe

RETAIL FORECAST

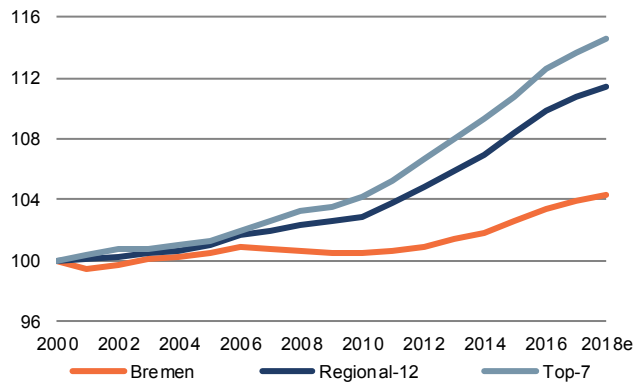
		2015	2016	2017	2018e
Demand					
Per cap. disposable income	EUR/month	1,628	1,648	1,682	1,714
Unemployment rate	%	10.7	9.8	9.0	8.8
Retail sales	EUR m/% yoy	15,960 / 3.9	16,405 / 2.8	16,877 / 2.9	17,346 / 2.8
Retail sales	EUR/sqm retail space	2,535	2,588	2,599	2,628
Supply					
Retail space	in sqm '000	6,296	6,339	6,495	6,600
Retail space	% yoy	1.1	0.7	2.5	1.6
Retail rent					
Prime/secondary location	EUR/sqm	300 / 14.5	310 / 14.5	310 / 15.5	310 / 15.5
Prime/secondary location	% yoy	3.4 / 3.6	3.3 / 0.0	0.0 / 6.9	0.0 / 0.0

Source: Feri, BulwienGesa, DZ BANK Research forecast

yoy = year-on-year

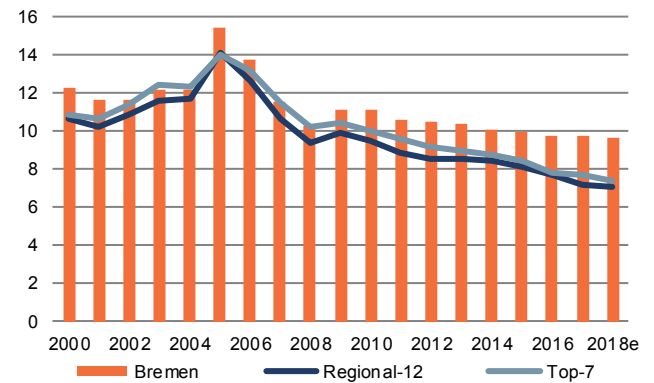
BREMEN

POPULATION GROWTH



Source: Feri Index 2000 = 100

UNEMPLOYMENT RATE (%)



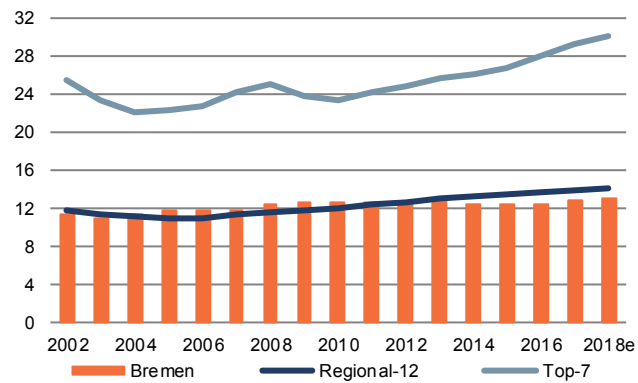
Source: BulwienGesa, DZ BANK Research forecast

Bremen, the capital city of the smallest German federal state, ranks eleventh among the most densely populated cities in Germany with close to 560,000 inhabitants. Stronger population growth would be necessary for a higher ranking. For, while growth in regional centres has averaged nearly 9 per cent in the last ten years, the figure was only 3 per cent in Bremen. The economic and cultural centre of North West Germany does offer a high quality of life. The main factor for the subdued economic growth is the still visible structural change associated with a high unemployment rate of 9.4 per cent in November 2017. Bremen also lags behind other regional centres in terms of population growth. Its economic performance certainly shows success. In the vehicle construction, aerospace technology, food and beverages and biotechnology sectors in particular, many companies have opted for Bremen as a location. The port remains a major economic factor, and transport and logistics are therefore very important. The city's evolution as a technology location benefits from cooperation with the University of Bremen. Excellent transport links via road, rail, the seaport and the airport have a positive impact. Tourism is also becoming increasingly important for the port city, with 2 million overnight stays per year, an increase of 60 per cent within ten years.

Important economic centre in North West Germany

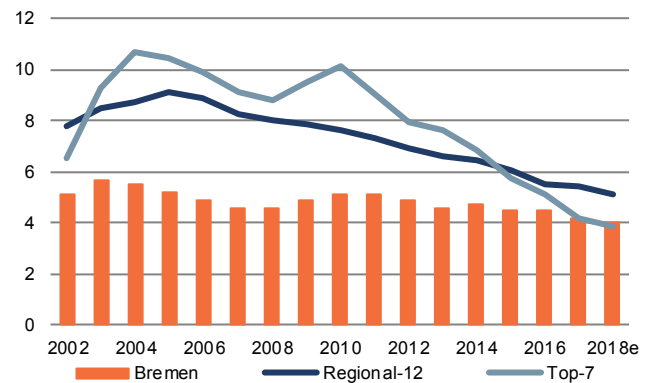
Office space in Bremen

PRIME RENTS FOR OFFICE SPACE IN EUR PER SQM



Source: BulwienGesa, DZ BANK Research forecast

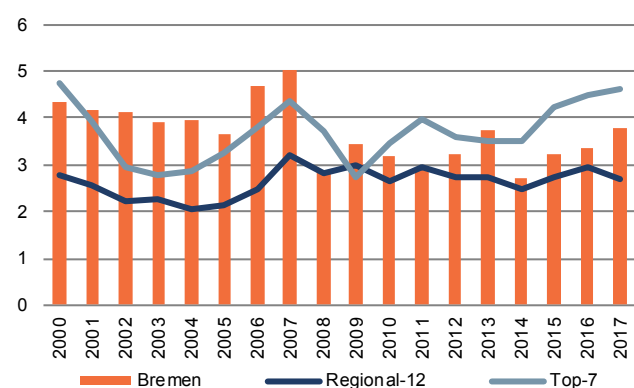
VACANCY RATE (%)



Source: BulwienGesa, DZ BANK Research forecast

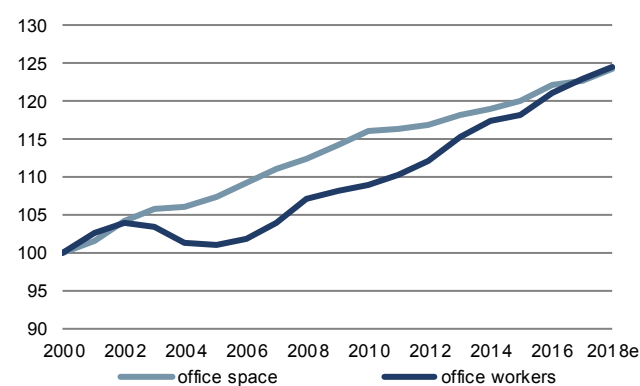
Main regional real estate markets in Germany | 2018

TAKE-UP AS % OF OFFICE SPACE



Source: BulwienGesa

TREND IN OFFICE SPACE AND EMPLOYMENT



Source: Feri, BulwienGesa

Index 2000 = 100

With 2.6 million sqm of office space, Bremen is a small office location based on its population, due to its industrial character. Modern office space in the city centre is in short supply. A large proportion of office buildings are now outdated. Conversely, contemporary office properties such as Airport City, have been built in the periphery, and particularly in the docklands area (Überseestadt). This is also where rent levels are highest in Bremen. Office space has grown by 11 per cent in the last ten years, 4 percentage points higher than average for the top locations, while the number of office jobs has increased by 18 per cent, which is slightly below the benchmark level. Prime rents have recently reached EUR 12.80 per sqm, which is around one euro lower than average for the regional centres. It has also taken longer to reduce vacant office space. However, the office vacancy rate in Bremen is also consistently low, at 4.2 per cent in 2017. Take-up was relatively high last year at 99,500 sqm; this was due to fairly lively market activity rather than a high volume of large-scale transactions. The single largest transaction was 9.500 sqm for Kühne & Nagel, as part of the rebuilding of the company's headquarters which will probably be completed in 2019. New space is expected to be slightly below-average this year at around 30,000 sqm. This could lead to a further slight reduction in the vacancy rate and prime rents could therefore pick up marginally.

High take-up in Bremen office market at the end of 2017

OFFICE FORECASTS

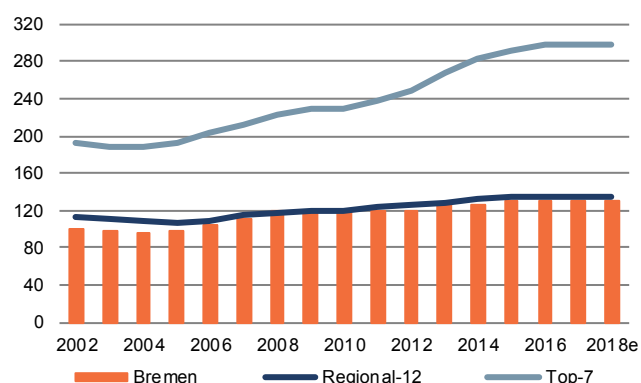
		2015	2016	2017	2018e
Demand					
GDP	% yoy	4.3	3.1	3.4	3.3
Per capita GDP	in EUR	44,188	45,178	46,478	47,855
No. of office workers	in '000	101.5	104.0	105.5	107.0
No. of office workers	% yoy	0.7	2.4	1.5	1.4
Supply					
Total office space	in sqm '000	2,575	2,621	2,636	2,670
Total office space	% yoy	0.8	1.8	0.6	1.3
Vacancy rate	%	4.5	4.5	4.2	4.0
Office rents					
Prime/secondary location	EUR/sqm	12.5 / 6.7	12.5 / 6.7	12.8 / 7.0	13.0 / 7.0
Prime/secondary location	% yoy	0.0 / 3.1	0.0 / 0.0	2.4 / 4.5	1.6 / 0.0

Source: Feri, BulwienGesa, DZ BANK Research forecast

yoy = year-on-year

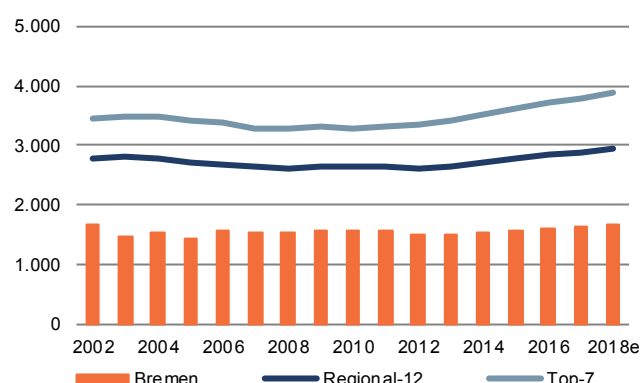
Retail space in Bremen

PRIME RETAIL RENTS IN EUR PER SQM



Source: BulwienGesa, DZ BANK Research forecast

RETAIL SALES IN EUR PER SQM



Source: Feri

The general conditions for the Bremen retail sector are mixed. On the one hand, the shopping location benefits from a large catchment area of more than 1 million people and the attractions of Bremen city centre. The only significant competition in terms of location is Oldenburg which has a much smaller population. On the other hand, the purchasing power figure of 95 points is below the national average. And although tourism activity is progressing well, the number of overnight stays of 3,600 per 1,000 inhabitants is still comparatively low. Nevertheless, given the regional importance of the shopping location, higher rents would be expected. The fact that prime rents have virtually stagnated in recent years and are not overly high at EUR 130 per sqm, is essentially due to “domestic” reasons. The main factor is intense competition from various large-scale peripheral shopping centres, such as Waterfront, Roland-Center, and the Weserpark - where retail space has recently been increased to more than 60,000 sqm. Conversely, the proportion of retail space in the city centre is now well below 20 per cent. There is also a shortage of attractive large-scale retail space in the city. After plans for Sonae Sierra to develop a city centre shopping centre at Ansgarikirchhof failed to go ahead several years ago, there are now signs of two promising city centre retail developments: the Jacobs-Höfe and the City Galerie Bremen. The Parkhaus Mitte car park is to be demolished to facilitate the latter, with the loss of around 1,000 parking spaces. We expect a stable trend in prime rents in 2018.

Retail: will the Bremen City Galerie provide the long awaited major impetus for further development of the shopping location?

RETAIL FORECASTS

		2015	2016	2017	2018e
Demand					
Per cap. disposable income	EUR/month	1,820	1,854	1,896	1,936
Unemployment rate	%	10.0	9.7	9.7	9.6
Retail sales	EUR m/% yoy	2,399 / 3.8	2,482 / 3.5	2,572 / 3.6	2,661 / 3.5
Retail sales	EUR/sqm retail space	1,564	1,603	1,640	1,679
Supply					
Retail space	in sqm '000	1,534	1,549	1,568	1,585
Retail space	% yoy	1.4	1.0	1.3	1.1
Retail rent					
Prime/secondary location	EUR/sqm	130 / 10.0	130 / 10.0	130 / 10.0	130 / 10.0
Prime/secondary location	% yoy	4.0 / 0.0	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0

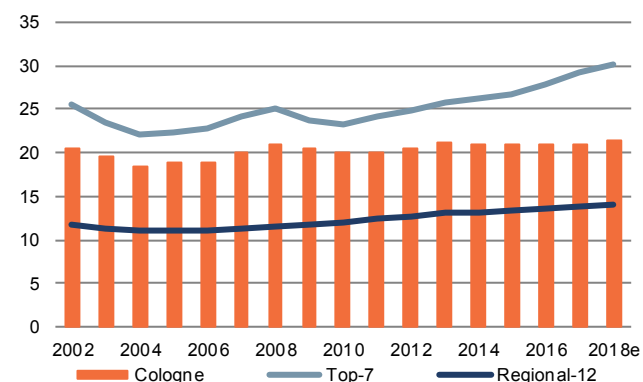
Source: Feri, BulwienGesa, DZ BANK Research forecast

yoy = year-on-year

COLOGNE

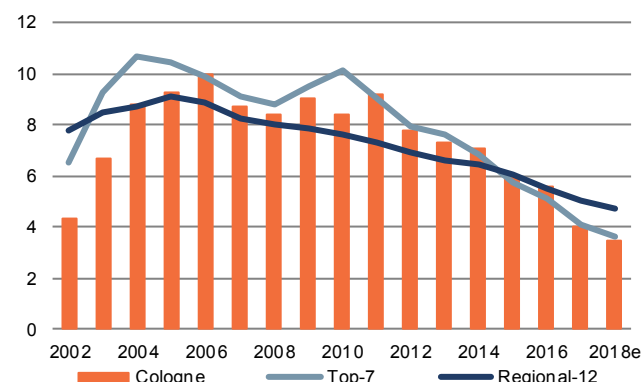
Office space in Cologne

PRIME RENTS FOR OFFICE SPACE IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

VACANCY RATE (%)



Source: BulwienGesa, DZ BANK AG forecasts

At first glance, the Cologne office market had to cope with a 20 per cent reduction in take-up in 2017. This reflected a very high take-up the previous year, mostly on the back of the signing of a lease by Zurich Insurance for almost 60,000 sqm of offices to be built in the MesseCity. In fact, Cologne's office market had its best ever result in 2017 – with the exception of the previous year – with take-up of 325,000 sqm. Until 2015, take-up was never more than 300,000 sqm. In addition, the high volume was driven by broad demand. There were only two deals above the 10,000 sqm mark, the first involving the Federal Office for Family Affairs and Voluntary Services and the second the construction group Strabag. Once again, lively demand for offices has led to a sharp reduction in vacant space. The vacancy rate fell to 4 per cent in 2017 whereas it was still 10 per cent in 2006. However, this did not benefit prime rents which have remained consistently at EUR 21 per sqm since 2013. The one-million strong city of Cologne has therefore fallen just behind the much smaller city of Stuttgart (in terms of population) which was previously the cheapest office location among the top 7. In view of a limited increase in new space this year, the scarcity of office space is likely to continue, leading to a decline in the vacancy rate to well under 4 per cent. This also increases the likelihood that prime rents will rise slightly above their existing level.

Upturn in the Cologne office market has not yet translated into a rise in the prime rents

OFFICE FORECAST

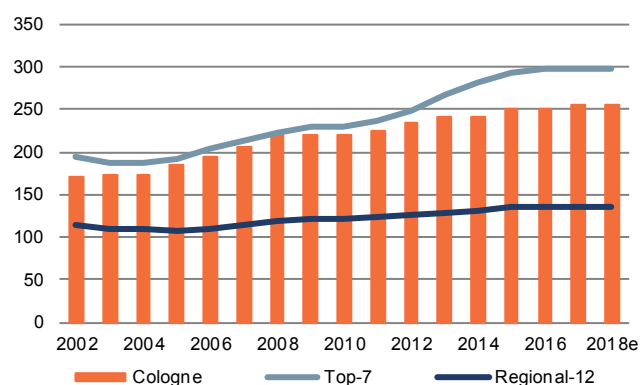
		2015	2016	2017	2018e
Demand					
GDP	% yoy	8.4	3.0	3.3	3.2
Per capita GDP	in EUR	53,121	53,525	54,538	55,756
No. of office workers	in '000	234.9	241.0	246.0	251.0
No. of office workers	% yoy	2.1	2.6	2.1	2.0
Supply					
Total office space	in sqm '000	7,527	7,599	7,657	7,700
Total office space	% yoy	0.6	1.0	0.8	0.6
Vacancy rate	%	6.0	5.6	4.0	3.5
Office rents					
Prime/secondary location	EUR/sqm	21.0 / 8.0	21.0 / 8.3	21.0 / 8.3	21.4 / 8.3
Prime/secondary location	% yoy	0.0 / -1.2	0.0 / 3.8	0.0 / 0.0	2.0 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

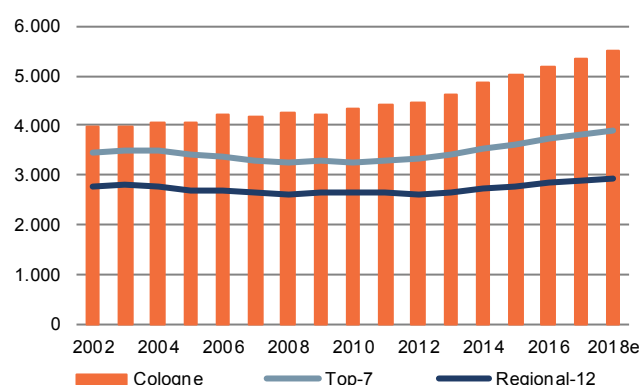
Retail space in Cologne

PRIME RETAIL RENTS IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

RETAIL SALES IN EUR PER SQM



Source: Feri

The million-strong city of Cologne is the second most important shopping location in western Germany with a clear emphasis on the mass market. This is especially true of the Schildergasse with its high footfall and a chain store penetration rate of 90 per cent. However, the city also has trendy areas which stand out from the typical retailer mix in the busiest shopping locations. A smaller luxury segment has established itself around the Domkloster/ Wallraffplatz which is likely to expand in future once the Dom Hotel has been redeveloped; work will begin by gutting the building in 2018. The attraction of Cologne's city centre for retailers is undimmed. Contributory factors include a catchment area of three million inhabitants, and many shoppers coming from the Benelux countries nearby along with a fairly large number of tourists and trade fair visitors, which all helps mitigate the fact that purchasing power in Cologne is not all that high in relation to the other top locations. The city centre benefits from a three-kilometre long shopping circuit of prime retail locations and from the fact that has so much to offer for those who want to spend time there. The city centre has been spared the kind of major development which other big shopping locations have undergone and there is no such development in sight. The only larger exception is the remodelling of the DuMont Carré. The building previously occupied by the well-known Cologne retailer, Jacobi, on the Hohe Straße is to be comprehensively modernised by this year, after which Saturn will open a flagship store taking up all five floors. Contrary to generally stagnating prime retail rents in 2017, prime rents in Cologne managed a small increase of EUR 5 to EUR 255 per sqm. However, we do not expect any further increase in prime rents this year.

Top mass-market shopping location in western Germany

RETAIL FORECASTS

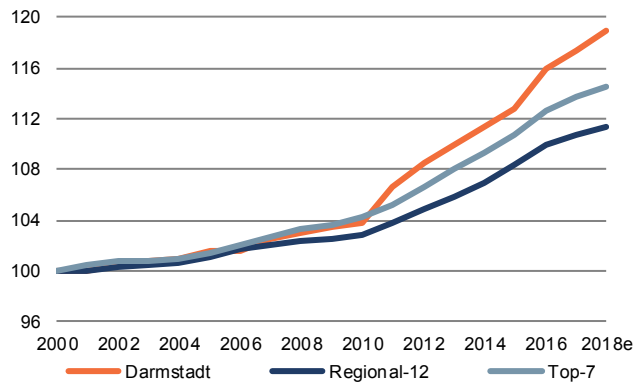
		2015	2016	2017	2018e
Demand					
Per cap. disposable income	EUR/month	1,829	1,836	1,859	1,886
Unemployment rate	%	9.4	8.7	8.4	8.1
Retail sales	EUR m/% yoy	7,067 / 4.3	7,304 / 3.4	7,542 / 3.3	7,784 / 3.2
Retail sales	EUR/sqm retail space	5,012	5,187	5,355	5,521
Supply					
Retail space	in sqm '000	1,410	1,408	1,409	1,410
Retail space	% yoy	0.8	-0.1	0.0	0.1
Retail rent					
Prime/secondary location	EUR/sqm	250 / 15.0	250 / 15.0	255 / 15.0	255 / 15.0
Prime/secondary location	% yoy	4.2 / 11.1	0.0 / 0.0	2.0 / 0.0	0.0 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

DARMSTADT

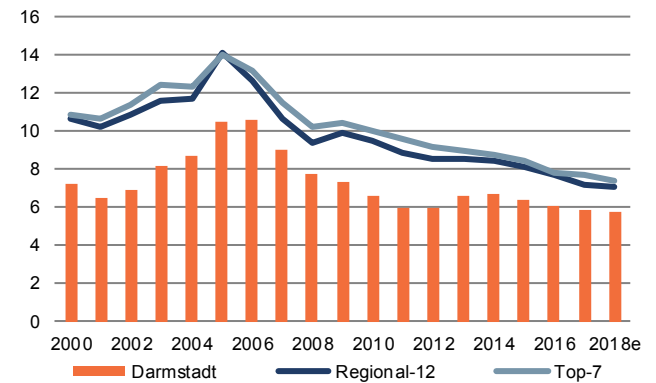
POPULATION GROWTH



Source: Feri

Index 2000 = 100

UNEMPLOYMENT RATE (%)



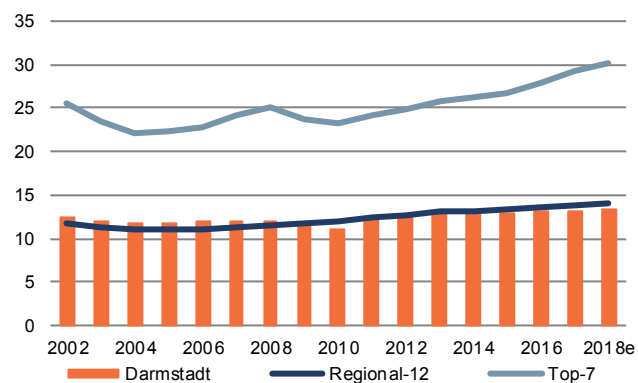
Source: BulwienGesa, DZ BANK Research forecast

With a population of nearly 160,000, Darmstadt is the smallest, but also one of the fastest growing cities in this report. Within ten years, the population has grown by a good 15 per cent. Thanks to its favourable location on the southern edge of the Rhine-Main area, it is a sought-after property location, with steady demand for housing and commercial space. Four public administration bodies are based in Darmstadt. The “City of Science” is also an important science and research centre, and a successful business location. Core sectors are IT, chemicals/pharmaceuticals, mechanical engineering, space technology, and cosmetics represented by a number of important companies. The largest is the chemical and pharmaceutical company Merck. However, the Carl Schenck mechanical engineering company, the speciality chemicals producer Evonik/Röhm, the cosmetics companies Goldwell/Kao and Wella/Coty, Software AG and Deutsche Telekom are also of importance. Many start-ups are located in the technology and innovation centre of the Technical University (TU). More than 41,000 students are registered at the TU and other higher education institutions. Research facilities include the space operations centre ESOC, and the “FAIR” particle acceleration facility currently under construction. The unemployment rate was around 5.7 per cent in November 2017. However, due to budget constraints, Darmstadt will miss out on the urban development potential associated with a major agricultural show planned for 2022. This large project was cancelled in spring 2017.

The “City of Science” is an important business and research location in Rhine-Main area

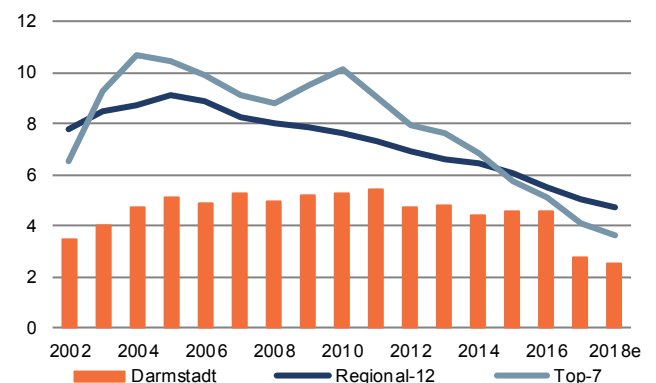
Office space in Darmstadt

PRIME RENTS FOR OFFICE SPACE IN EUR PER SQM



Source: BulwienGesa, DZ BANK Research forecast

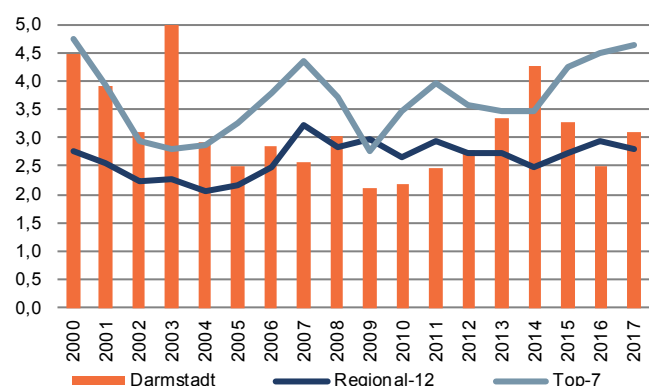
VACANCY RATE (%)



Source: BulwienGesa, DZ BANK Research forecast

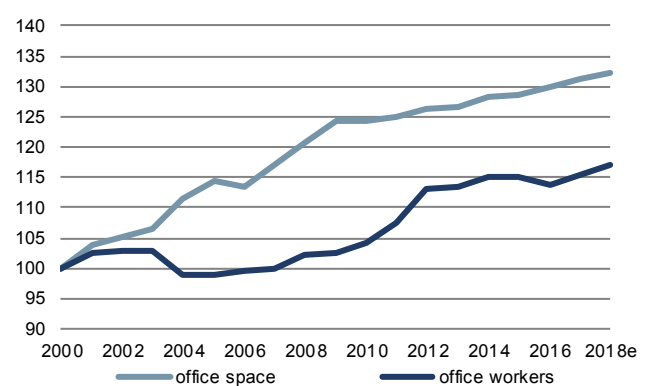
Main regional real estate markets in Germany | 2018

TAKE-UP AS % OF OFFICE SPACE



Source: BulwienGesa

TREND IN OFFICE SPACE AND EMPLOYMENT



Source: Feri, BulwienGesa

Index 2000 = 100

Based on its economic importance and the large number of scientific facilities, Darmstadt has office space of more than 1.6 million sqm, which is more than Augsburg whose population is nearly twice as large. Demand for office jobs has led to strong expansion of office space (+12 per cent) in the last ten years. The number of office jobs grew by a slightly higher rate of 15 per cent. The proportion of vacant office space has thus fallen sharply to less than 3 per cent. Ten years ago the vacancy rate was still nearly twice this level. Take-up is usually around 45,000 sqm per year. The level of 50,000 sqm in 2017 was thus broadly average. The single largest transaction was around 7,000 sqm for the technical consultancy KREBS + KIEFER. Despite the supply shortage, prime rents have shown only relatively low growth in recent years. Compared to 2007 they increased by only 9 per cent to EUR 13.10 per sqm. However, this level has been maintained since 2013. Prime rents relative to the size of the location are nevertheless already fairly high. The potential for strong rental growth is therefore limited despite the location's good prospects. Darmstadt is also prepared for higher demand for space thanks to substantial reserves from the conversion of former military sites. While the Lincoln-Siedlung will be used for residential purposes, the Kelley-Barracks and the Nathan-Hale-Depot are earmarked for commercial development.

Office: small, but relatively expensive location with low vacancy rate

OFFICE FORECASTS

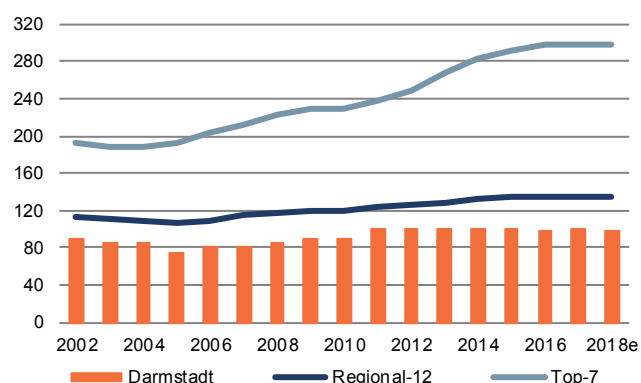
		2015	2016	2017	2018e
Demand					
GDP	% yoy	2.4	3.1	3.3	3.2
Per capita GDP	in EUR	60,809	61,055	62,268	63,442
No. of office workers	in '000	50.1	49.6	50.3	51.0
No. of office workers	% yoy	-0.1	-1.0	1.4	1.4
Supply					
Total office space	in sqm '000	1,579	1,595	1,613	1,625
Total office space	% yoy	0.1	1.0	1.2	0.7
Vacancy rate	%	4.6	4.6	2.8	2.5
Office rents					
Prime/secondary location	EUR/sqm	13.0 / 7.5	13.1 / 7.5	13.1 / 7.6	13.5 / 7.6
Prime/secondary location	% yoy	0.0 / 0.0	0.8 / 0.0	0.0 / 1.3	3.1 / 0.0

Source: Feri, BulwienGesa, DZ BANK Research forecast

yoy = year-on-year

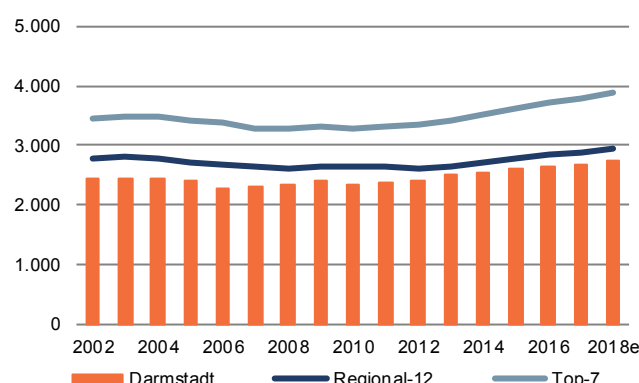
Retail space in Darmstadt

PRIME RETAIL RENTS IN EUR PER SQM



Source: BulwienGesa, DZ BANK Research forecast

RETAIL SALES IN EUR PER SQM



Source: Feri

Retail conditions are generally good in Darmstadt: these include strong population growth, moderate unemployment, and relatively high purchasing power of 107 points. Added to this is the large catchment area, particularly to the south of the city, containing more than 600,000 people. The city centre is also an attractive shopping location with a broad offer, a good range of restaurants, and short distances. The two prime locations of Schuchardstraße and Ernst-Ludwig-Straße are supplemented by two city centre shopping centres - the Luisen-Center and the Carree - and the Markthalle which reopened at the end of 2015 after renovation. The regeneration of the Wilhelminenpassage is also upgrading the area. Interest from retailers is fairly high, although rental agreements are made more difficult by the low level of fluctuation in the city. Despite favourable conditions, prime rents have not increased above EUR 100 per sqm, a level which has remained steady since 2011. In 2016 there was a minor setback to EUR 98 per sqm, but this was reversed again last year. Two negative factors are mainly responsible for the stagnation of prime rents: firstly, the location is only 30 kilometres from top location Frankfurt. And secondly, the Loop 5 shopping centre outside the city gates which opened in 2009, and which has itself struggled in the past with vacancy problems. The centre therefore aims to become more attractive to younger customers in particular. We expect prime rents to remain at their current level in 2018.

Retail: Darmstadt well positioned as a shopping location in south of Rhine-Main region

RETAIL FORECASTS

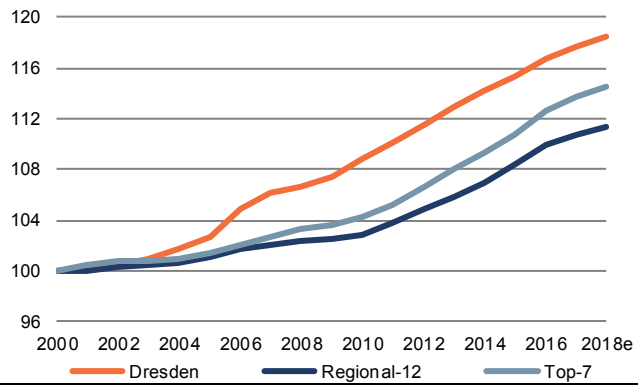
		2015	2016	2017	2018e
Demand					
Per cap. disposable income	EUR/month	1,866	1,874	1,907	1,931
Unemployment rate	%	6.4	6.1	5.9	5.8
Retail sales	EUR m/% yoy	1,001 / 3.9	1,032 / 3.1	1,061 / 2.8	1,087 / 2.4
Retail sales	EUR/sqm retail space	2,624	2,634	2,691	2,730
Supply					
Retail space	in sqm '000	382	392	394	398
Retail space	% yoy	0.3	2.7	0.6	1.0
Retail rent					
Prime/secondary location	EUR/sqm	100 / 11.0	98 / 10.5	100 / 11.0	99 / 11.0
Prime/secondary location	% yoy	0.0 / 0.0	-2.0 / -4.5	2.0 / 4.8	-1.0 / 0.0

Source: Feri, BulwienGesa, DZ BANK Research forecast

yoy = year-on-year

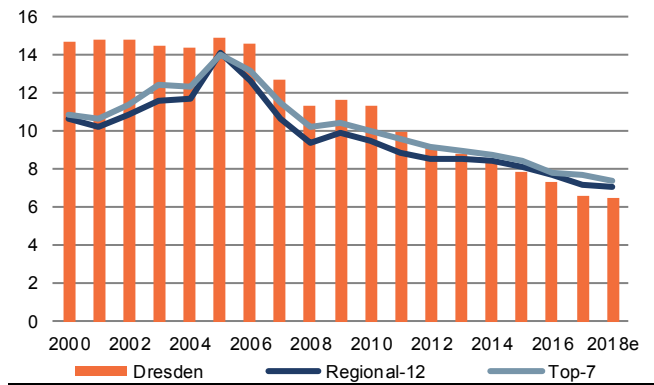
DRESDEN

POPULATION GROWTH



Source: Feri Index 2000 = 100

UNEMPLOYMENT RATE (%)



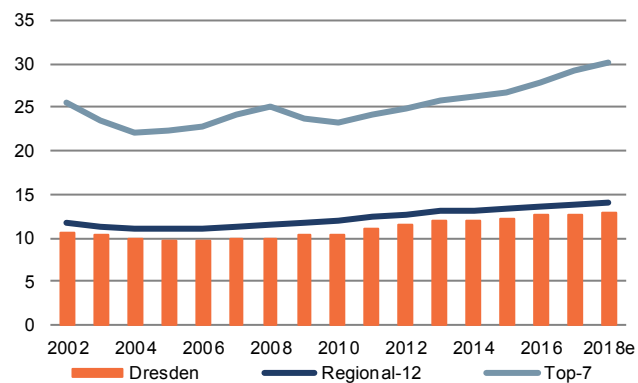
Source: BulwienGesa, DZ BANK Research forecast

The capital of Saxony is the third largest city in eastern Germany with a population of nearly 550,000 which has grown strongly by 50,000 within ten years. The continuing influx of people to this attractive city is associated with its sustained economic success. The cost of living is also still comparatively low, although the advantage of cheaper residential rents compared to major cities in western Germany has already contracted sharply. Positive economic development is reflected in a visible decline in unemployment, which is particularly striking given the strong population growth. The unemployment rate thus reached a low 6.1 per cent in November 2017. Given the many administrative functions based there, the public sector is an important employer. The university – with its 35,000 students – and many research institutions also create a large number of jobs. The strong high-tech sector has led to the designation of “Silicon Saxony”. Overall, more than 40,000 people are employed in the IT and communications technology sectors. Many companies from the automotive, aerospace and pharmaceutical industries also contribute to the dynamic growth of the local economy. In 2017, Philip Morris announced the construction of a new factory in Dresden. The city has also become a hotspot for city tourism with its outstanding architecture and many art treasures. With nearly 8,000 overnight stays per 1,000 inhabitants, Dresden is outstripped in this report only by Berlin, Munich and Frankfurt.

Strong population growth in capital of Saxony

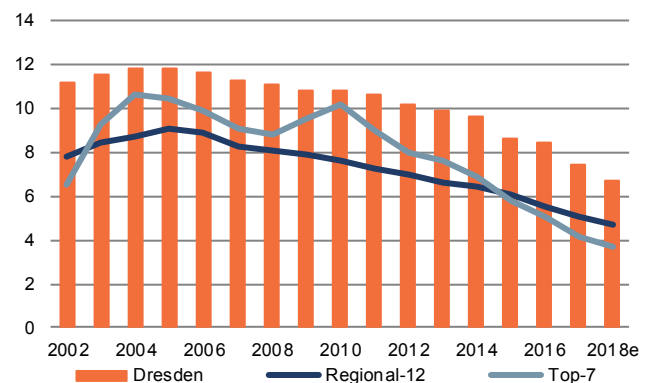
Office space in Dresden

PRIME RENTS FOR OFFICE SPACE IN EUR PER SQM



Source: BulwienGesa, DZ BANK Research forecast

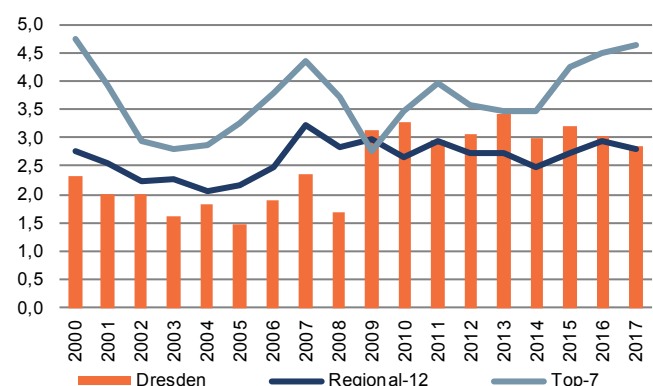
VACANCY RATE (%)



Source: BulwienGesa, DZ BANK Research forecast

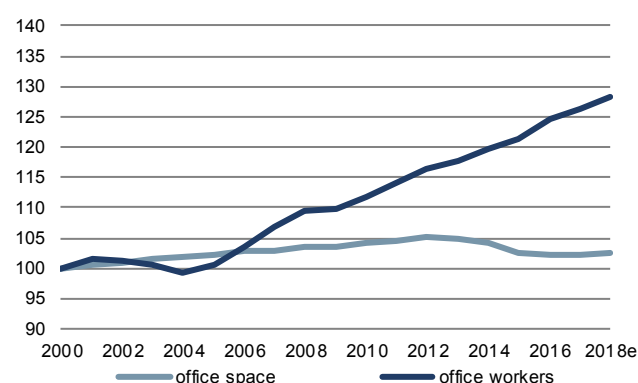
Main regional real estate markets in Germany | 2018

TAKE-UP AS % OF OFFICE SPACE



Source: BulwienGesa

TREND IN OFFICE SPACE AND EMPLOYMENT



Source: Feri, BulwienGesa

Index 2000 = 100

With 2.6 million sqm of office space, Dresden is the third largest office market in eastern Germany. After office space was expanded beyond actual demand in the construction boom of the 1990s, the stock of office space has not grown any further since the millennium. Contemporary office space is therefore in short supply. As a result of solid job creation, the vacancy rate has fallen from nearly 20 per cent (1998) to recently 7.4 per cent. The vacancy level nevertheless remains about 2 percentage points above average for the regional centres we have reviewed. This could also be the reason why prime rents – which increased to EUR 12.80 per sqm last year - are around 1 euro per sqm below average. With growth of 28 per cent within ten years, the rate of increase has been around 5 percentage points above average. Take-up in the office market has remained very stable over time, at close to 80,000 sqm since 2009. Last year was slightly weaker at 75,000 sqm. As in 2016, there have been virtually no large-volume transactions: the biggest contract for 7,500 sqm was for itelligence, a supplier of SAP solutions. However, this is not unusual, since the Dresden office market is generally dominated by small-scale revenues. This could also be due to the general absence of large company quarters. Since the volume of new space is also expected to be small this year, we assume that the upward trend in the Dresden office market will continue, with a further reduction in the vacancy rate and moderate rent growth.

Office: high vacancy rate of post-reunification construction boom reduced by positive economic development

OFFICE FORECASTS

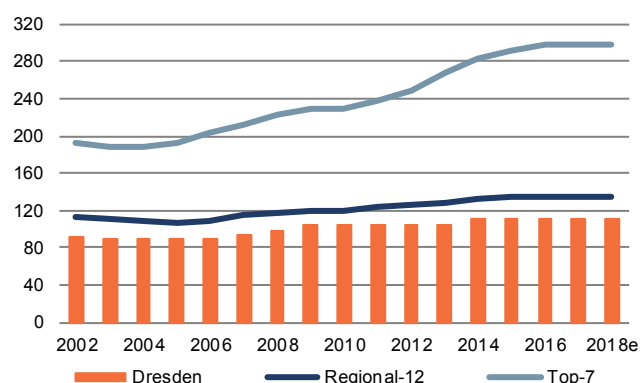
		2015	2016	2017	2018e
Demand					
GDP	% yoy	10.0	3.2	3.5	3.4
Per capita GDP	in EUR	33,347	34,007	34,900	35,846
No. of office workers	in '000	101.1	103.9	105.5	107.0
No. of office workers	% yoy	1.2	2.8	1.5	1.4
Supply					
Total office space	in sqm '000	2,638	2,632	2,635	2,645
Total office space	% yoy	-1.7	-0.3	0.1	0.4
Vacancy rate	%	8.6	8.4	7.4	6.7
Office rents					
Prime/secondary location	EUR/sqm	12.3 / 5.4	12.6 / 5.5	12.8 / 5.5	13.0 / 5.5
Prime/secondary location	% yoy	1.7 / 8.0	2.4 / 1.9	1.6 / 0.0	1.6 / 0.0

Source: Feri, BulwienGesa, DZ BANK Research forecast

yoy = year-on-year

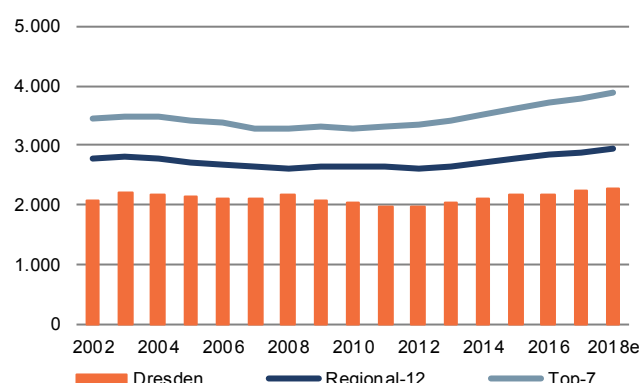
Retail space in Dresden

PRIME RETAIL RENTS IN EUR PER SQM



Source: BulwienGesa, DZ BANK Research forecast

RETAIL SALES IN EUR PER SQM



Source: Feri

Together with Berlin and Leipzig, Dresden completes the trio of top shopping locations in eastern Germany. Conditions are good in the Dresden retail sector. The catchment of 1.2 million people is very large. Other positive factors are the economic upturn and the visible decline in unemployment, strong population growth and a large number of tourists. On this basis, prime rents are fairly low at EUR 110 per sqm. Rents have also failed to keep pace with the longstanding strong upward trend in the retail sector. There are several reasons for this: Saxony has two top-class shopping locations - the other being Leipzig some 100 kilometres away - which leads to a certain amount of competitive pressure. Purchasing power is also below average for Germany at 91. There is also a good supply of retail space in the city, with three prime locations – Prager Straße, Seestraße/Altmarkt and Neumarkt – and two large shopping centres, each of which has more than 50,000 sqm of retail space. Retail space is also being expanded further with project developments such as PRAGER CARRÉE which opened at the end of 2016, which is also associated with the upgrading of the city. Supply is also being enhanced by a whole series of peripheral shopping opportunities, often specialist retailers. As in other locations, a shift is currently taking place in the demand structure: while demand from traditional retailers is weakening, there is growing interest from restaurants, usually chains. One factor which reflects Dresden's strength as a city is that prime rents have remained stable despite growth in retail space and a weakening of retail demand. We expect this to remain the case this year.

Retail: top shopping location in eastern Germany – but relatively low rent level

RETAIL FORECASTS

		2015	2016	2017	2018e
Demand					
Per cap. disposable income	EUR/month	1,581	1,609	1,647	1,684
Unemployment rate	%	7.9	7.3	6.6	6.5
Retail sales	EUR m/% yoy	2,250 / 3.2	2,315 / 2.9	2,385 / 3.0	2,453 / 2.9
Retail sales	EUR/sqm retail space	2,165	2,190	2,233	2,273
Supply					
Retail space	in sqm '000	1,039	1,057	1,068	1,079
Retail space	% yoy	0.5	1.7	1.0	1.1
Retail rent					
Prime/secondary location	EUR/sqm	110 / 9.0	110 / 9.0	110 / 9.0	110 / 9.0
Prime/secondary location	% yoy	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0

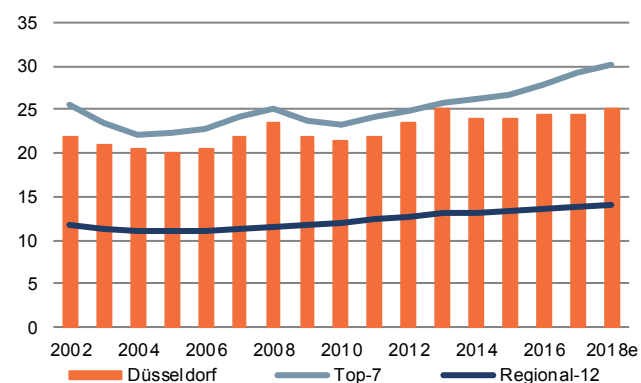
Source: Feri, BulwienGesa, DZ BANK Research forecast

yoy = year-on-year

DÜSSELDORF

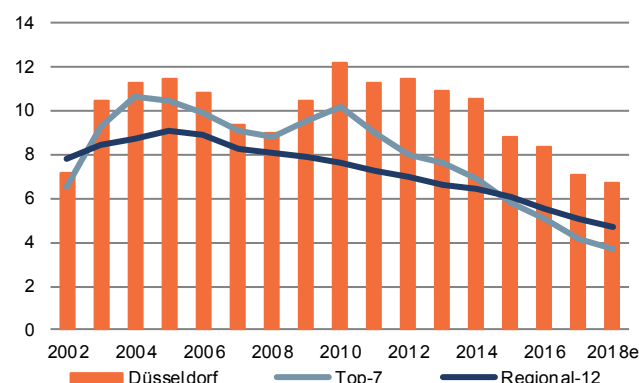
Office space in Düsseldorf

PRIME RENTS FOR OFFICE SPACE IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

VACANCY RATE (%)



Source: BulwienGesa, DZ BANK AG forecasts

The performance of the Düsseldorf office market in 2017 was only marginally better than in 2016 with take-up of 315,000 sqm, and increases in take-up in the four biggest office markets in Germany, namely Berlin, Frankfurt, Hamburg and Munich, were not replicated in Düsseldorf. This was less a reflection of lack of major deals than weaker smaller and medium-sized transactions. Of the three biggest signings of over 10,000 sqm, two involved banks (Trinkaus & Burkhardt and Bankhaus Lampe); the third involved the Professional Association of Wood and Metal Workers (BGHM). As in the case of neighbouring Cologne, there was no increase in prime rents in Düsseldorf in 2017, unlike in the case of the remaining top five locations. At EUR 24.50 per sqm at present, the gap in relation to the top location average has once again grown to almost EUR 5. The vacancy rate could have a dampening effect on the rise in rents: although it fell noticeably last year, at over 7%, it is still relatively high. The reduction in vacant space is likely to continue in 2018, although it is likely to be smaller in view of the probability of a larger amount of new space becoming available. However, given the shortage of office space, there is a greater chance that prime rents will start rising again. We believe it could reach EUR 25 per sqm, a level already reached briefly in 2013. In addition, conditions are favourable for a positive rent trend in view of the ongoing strength of the German economy.

Düsseldorf office market did not do quite as well in 2017 as the markets in Berlin, Frankfurt, Hamburg and Munich

OFFICE FORECASTS

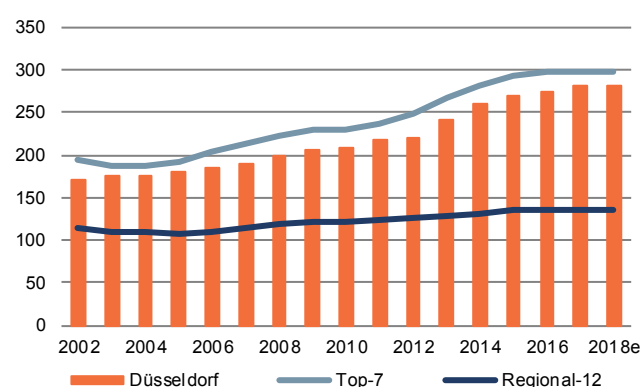
		2015	2016	2017	2018e
Demand					
GDP	% yoy	3.3	3.5	3.8	3.7
Per capita GDP	in EUR	70,538	72,491	74,904	77,415
No. of office workers	in '000	202.6	206.7	210.0	213.0
No. of office workers	% yoy	3.7	2.0	1.6	1.4
Supply					
Total office space	in sqm '000	7,549	7,554	7,597	7,660
Total office space	% yoy	0.0	0.1	0.6	0.8
Vacancy rate	%	8.8	8.3	7.1	6.7
Office rents					
Prime/secondary location	EUR/sqm	24.0 / 10.0	24.5 / 10.3	24.5 / 10.3	25.0 / 10.3
Prime/secondary location	% yoy	0.0 / 5.3	2.1 / 3.0	0.0 / 0.0	2.0 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

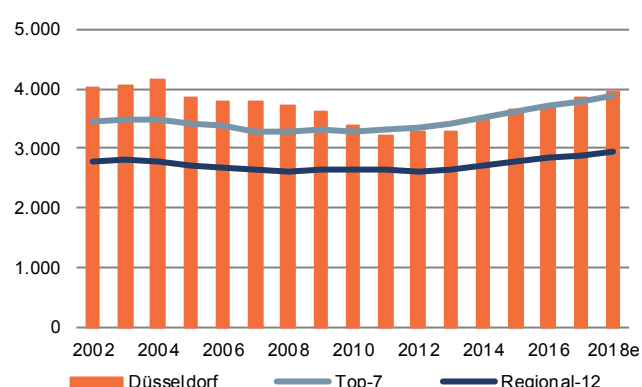
Retail space in Düsseldorf

PRIME RETAIL RENTS IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

RETAIL SALES IN EUR PER SQM



Source: Feri

Düsseldorf is among the leading German shopping destinations, leading to correspondingly high demand for space from retailers. The city's strength as a location comes from a large catchment area of 2 million inhabitants and high purchasing power, beaten only by Munich among the top 7. Düsseldorf's luxury shopping mile, the "Kö", is well-known around the world. The city's attraction is being enhanced hugely by many construction projects in the city, ranging from the development of new retail space and renovation of existing space such as the Kö Galerie, the Sevens or Kö-Karree. In addition, Düsseldorf's Kaufhof store will be the first in Germany to benefit from a EUR 32 million revamp by the new owner, Hudson's Bay Company. In the immediate vicinity, HBC has opened the first German branch of the fashion store Saks Off 5th in the former Carsch-Haus. Düsseldorf's city centre has also been enhanced by the Kö-Bogen, designed by Daniel Libeskind, which opened in 2013. The city's shopping offer will now be boosted by the Kö-Bogen II, once the major project is completed, probably in 2019/2020. Only then will work start on remodelling the rather unsightly prime shopping location which is the Schadowstraße, which will involve turning it into a pedestrian area. After more than ten years of road works, traffic disruption in the city caused by pulling down the elevated road and construction of the Hofgarten tunnel along with an underground station at Schadowstraße will be at an end. On balance, the measures are likely to help Düsseldorf remain in the lead as the top shopping destination in western Germany. However, a marked increase in prime rents beyond the level of EUR 280 per sqm reached in 2017 seems unlikely.

Comprehensive city facelift progressing

RETAIL FORECASTS

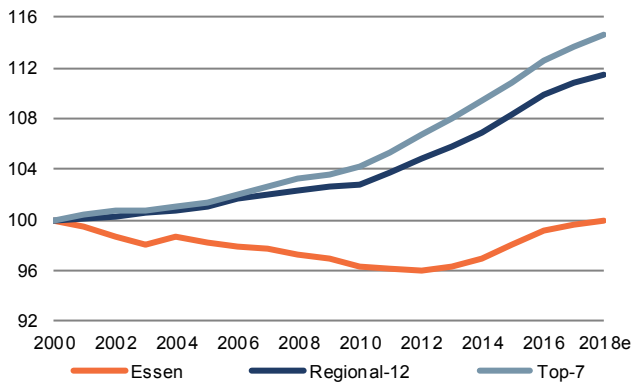
		2015	2016	2017	2018e
Demand					
Per cap. disposable income	EUR/month	2,108	2,145	2,189	2,233
Unemployment rate	%	8.5	7.8	7.4	7.2
Retail sales	EUR m/% yoy	4,473 / 4.3	4,628 / 3.5	4,782 / 3.3	4,944 / 3.4
Retail sales	EUR/sqm retail space	3,638	3,731	3,843	3,953
Supply					
Retail space	in sqm '000	1,229	1,240	1,244	1,251
Retail space	% yoy	-0.1	0.9	0.3	0.5
Retail rent					
Prime/secondary location	EUR/sqm	270 / 16.0	275 / 16.0	280 / 16.0	280 / 16.0
Prime/secondary location	% yoy	3.8 / 14.3	1.9 / 0.0	1.8 / 0.0	0.0 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

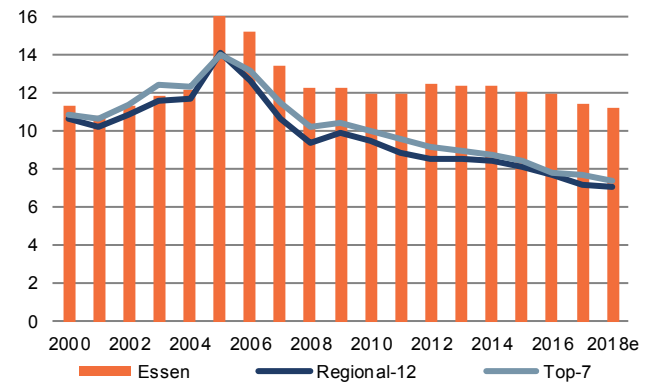
ESSEN

POPULATION GROWTH



Source: Feri Index 2000 = 100

UNEMPLOYMENT RATE (%)



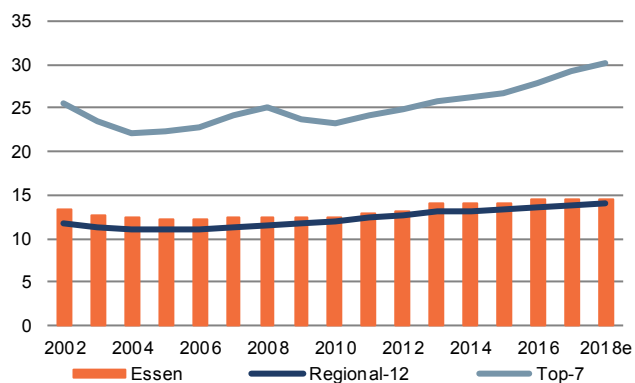
Source: BulwienGesa, DZ BANK AG forecasts

After many years of falling numbers, Essen's population has now been growing again since 2014; at the last count, it was slightly above 580,000. This puts Essen in ninth place among Germany's largest cities, although it is far from its former size and importance as a result of the decline of the coal and steel industry. At the time of Germany's economic miracle, Essen still had a population of up to 730,000 inhabitants. The fact that things are now picking up again mostly reflects a successful structural change. The only reminders of the "good old days" today are industrial monuments such as the Zollverein Coal Mine, which was closed down in 1986. The city's economic focus is now on services and administration. Today, the city which was once synonymous with the name Krupp is home to an impressive list of group headquarters, including three DAX-listed companies (E.ON, RWE, ThyssenKrupp) and four MDAX members (Brenntag, Evonik, Hochtief and Innogy). Other household names which have their head office in Essen include Aldi-Nord, Deichmann, E.ON-RuhrGas, Funke Medien (formerly WAZ), Karstadt, Schenker and STEAG. Trade fairs are also an important component of Essen's economic life; the relatively new Duisburg-Essen University which has over 40,000 students is another major factor for the local economy. However, the disappearance of many jobs in the past is still having an impact. At 10.8 per cent (November 2017), unemployment is twice as high as the German average. One positive factor, however, is that the number of people in work is rising and unemployment falling, albeit slowly.

Essen's population is growing again after a sharp fall

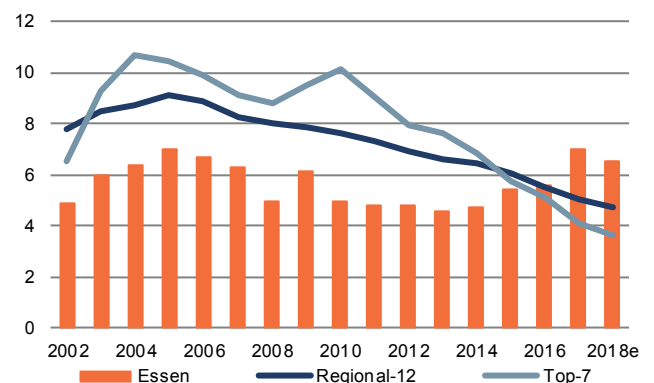
Office space in Essen

PRIME RENTS FOR OFFICE SPACE IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

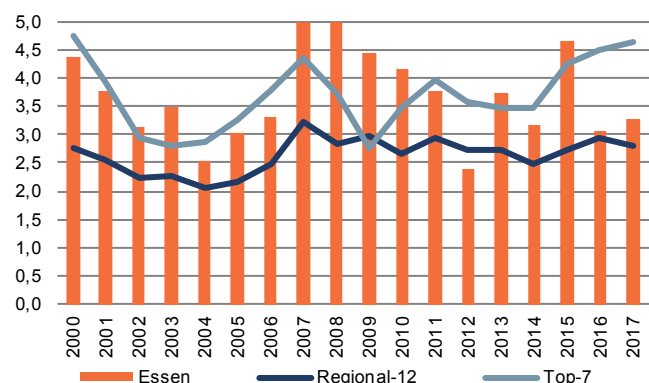
VACANCY RATE (%)



Source: BulwienGesa, DZ BANK AG forecasts

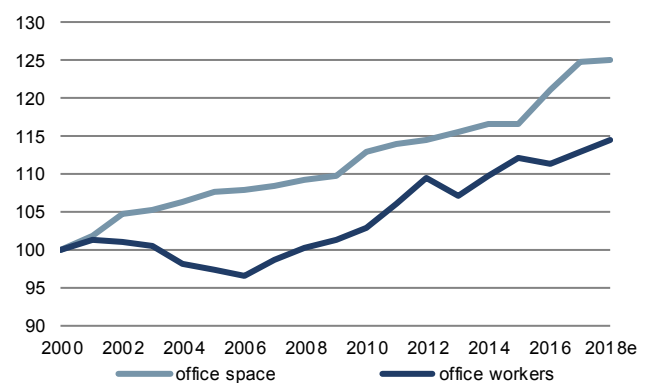
Main regional real estate markets in Germany | 2018

TAKE-UP AS % OF OFFICE SPACE



Source: BulwienGesa

TREND IN OFFICE SPACE AND EMPLOYMENT



Source: Feri, BulwienGesa

Index 2000 = 100

For a regional centre with an industrial bias, Essen has a large office market at 3.1 million sqm, and only just misses out on a place among the top 10 biggest German office locations. However, this does not mean that there is a surplus of office space, even though the vacancy rate which has moved counter to the trend in the last few years with a rise to 7 per cent could give that impression. The increase in the vacancy rate, which is retrospect was rather low, mainly reflects the fact that a number of companies have now moved into their own offices after building new offices and the refurbishment of older office space which is now going back onto the market. The vacancy rate is therefore likely to fall back below 6 per cent. Relatively high demand for office space in Essen mainly reflects the large number of company head offices which are domiciled in Essen to which two prominent names have recently been added since Brenntag and E.ON (Uniper which has the former nuclear business remains in Düsseldorf) have moved to Essen. Annual take-up has been fluctuating around the 100,000 sqm mark since 2011. In 2017, the figure was slightly higher at 105,000 sqm. Fluctuations mainly reflect the market structure with many smaller to medium-sized deals and once in a while very large transactions. Last year, for example, three deals accounted for over half of take-up, involving the City of Essen, ThyssenKrupp Real Estate and the Competence Call Center Essen, a service provider for Facebook. Prime rents rose to EUR 14.50 per sqm in 2016 and remained at that level in 2017. This year, we expect rents to be stable if anything in view of a greater availability of space.

Number of group head offices based in Essen continues to grow

OFFICE FORECASTS

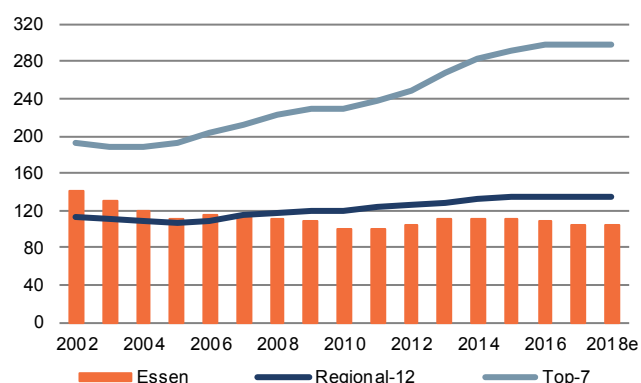
		2015	2016	2017	2018e
Demand					
GDP	% yoy	2.7	2.6	2.8	2.7
Per capita GDP	in EUR	37,526	38,042	38,901	39,874
No. of office workers	in '000	100.0	99.2	100.6	102.0
No. of office workers	% yoy	2.2	-0.7	1.4	1.4
Supply					
Total office space	in sqm '000	2,983	3,096	3,189	3,196
Total office space	% yoy	0.0	3.8	3.0	0.2
Vacancy rate	%	5.4	5.6	7.0	6.5
Office rents					
Prime/secondary location	EUR/sqm	14.0 / 6.2	14.5 / 6.1	14.5 / 6.1	14.5 / 6.1
Prime/secondary location	% yoy	0.0 / 3.3	3.6 / -1.6	0.0 / 0.0	0.0 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

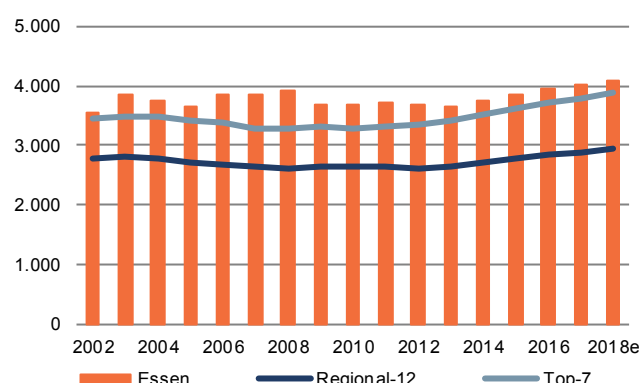
Retail space in Essen

PRIME RETAIL RENTS IN EUR PER SQM



Source: Feri, BulwienGesa, DZ BANK AG forecasts

RETAIL SALES IN EUR PER SQM



Source: Feri

Although Essen is among the top shopping locations in western Germany, it is no longer the number shopping destination in Germany's industrial heartland that it once was as a result of the structural change and rise in unemployment that it brought with it. Growing competition from cities in the surrounding area such as Düsseldorf, Dortmund and Oberhausen with its CentrO, have made life difficult for retailers in Essen. This is reflected in prime rents which have moved counter to the rising trend in rents in retail since the beginning of the last decade: prime rents in Essen are now a quarter below their level at the turn of the millennium. By 2013, they had recovered slightly to EUR 110 per sqm, but have fallen again by EUR 5 per sqm over the period 2016 and 2017. Although Essen has become more attractive again as a shopping destination in the last few years, above all through the opening in 2009 of the big city-centre shopping centre on the Limbecker Platz, it has also been hit by regional competition, a decline in demand for space from retailers and through an increase of 70,000 sqm of retail space with the new shopping centre. In addition, there was the revamp of the RATHAUS GALERIE in 2010 and the remodelling of the Haus am Kettwiger Tor shopping centre in 2013. As a result, the city now not only has the Limbecker Platz and Kettwiger Straße as top retail locations, but also three modern shopping centres. Persistent vacancies in the city centre highlight the fact that, apart from in prime locations, marketing retail space has become more difficult. Prime rents are likely to remain stable this year, although a further dip would not come as any surprise.

Essen now more attractive once again as a shopping destination, but prime rents dampened by greater supply of retail space combined with declining demand

RETAIL FORECASTS

		2015	2016	2017	2018e
Demand					
Per cap. disposable income	EUR/month	1,695	1,710	1,734	1,759
Unemployment rate	%	12.1	11.9	11.4	11.2
Retail sales	EUR m/% yoy	3,298 / 3.4	3,382 / 2.6	3,473 / 2.7	3,561 / 2.6
Retail sales	EUR/sqm retail space	3,865	3,958	4,006	4,076
Supply					
Retail space	in sqm '000	853	855	867	874
Retail space	% yoy	0.4	0.2	1.4	0.8
Retail rent					
Prime/secondary location	EUR/sqm	110 / 11.5	108 / 12.0	105 / 12.0	105 / 12.0
Prime/secondary location	% yoy	0.0 / -4.2	-1.8 / 4.3	-2.8 / 0.0	0.0 / 0.0

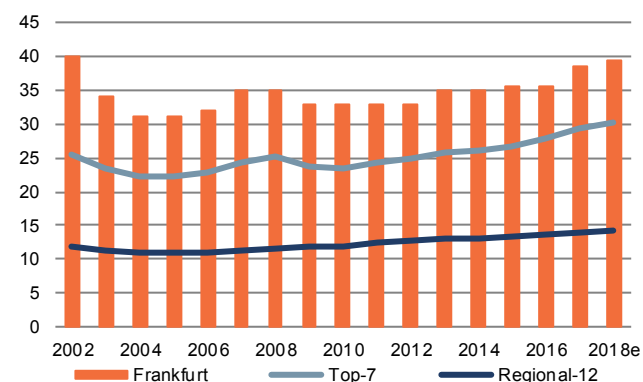
Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

FRANKFURT

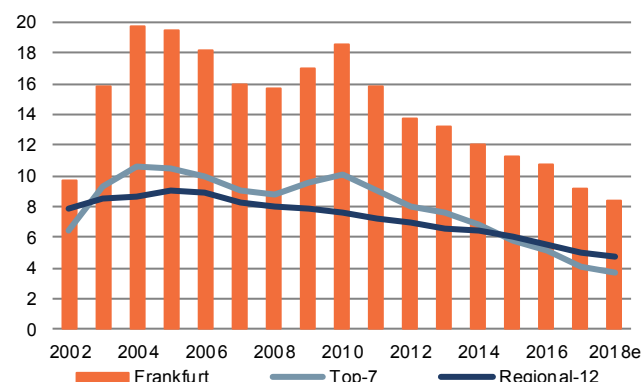
Office space in Frankfurt

PRIME RENTS FOR OFFICE SPACE IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

VACANCY RATE (%)



Source: BulwienGesa, DZ BANK AG forecasts

After two poor years in 2014 and 2015 with office space take-up of only around 350,000 sqm, Germany's most expensive office market Frankfurt has picked up sharply. Take-up in 2016 and 2017 rose by around 100,000 sqm respectively to 550,000 sqm, the best result since the dot-com boom. Although prime rents are still far from the figure of almost EUR 50 per sqm at that time, they have nevertheless risen sharply: after four years at a stable level of around EUR 35 per sqm meter, prime rents rose by over 8 per cent to EUR 38.50 per sqm in 2017. At the same time, demand for space led to a marked reduction in vacant space. The vacancy rate fell back into single-digits again for the first time in 14 years and has more than halved since 2004 to just over 9 per cent. The fact that the office market is doing well in spite of regulation, low interest rates and the digitalisation which are dampening the banking sector can also be ascribed to Brexit. The transfer of jobs from London is now becoming a reality, as illustrated by the fact that banks are reserving places for the children of the employees in international schools in the Rhine-Main area. However, a strong economic trend in the financial metropolis with employment at a peak level is also having a positive impact. Demand for office space in Frankfurt has also increased as a result of the renovation of the Bundesbank's headquarters; at the end of 2017, the bank rented an entire office block near the railway station as temporary premises. We believe that the positive trend in the office market is set to continue. However, any rise in prime rents and reduction in the vacancy rate in 2018 are likely to be smaller than in 2017.

Brexit and economic tail wind helping Frankfurt office market get over weakness in the financial sector

OFFICE FORECASTS

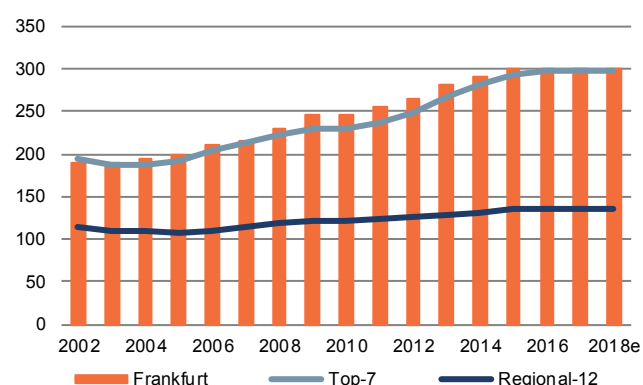
		2015	2016	2017	2018e
Demand					
GDP	% yoy	2.6	3.2	3.4	3.3
Per capita GDP	in EUR	81,932	83,823	85,794	88,009
No. of office workers	in '000	284.1	289.0	294.0	299.0
No. of office workers	% yoy	2.5	1.7	1.7	1.7
Supply					
Total office space	in sqm '000	10,295	10,250	10,272	10,345
Total office space	% yoy	-0.5	-0.4	0.2	0.7
Vacancy rate	%	11.3	10.7	9.2	8.4
Office rents					
Prime/secondary location	EUR/sqm	35.5 / 9.5	35.5 / 9.5	38.5 / 9.6	39.5 / 9.6
Prime/secondary location	% yoy	1.4 / 1.1	0.0 / 0.0	8.5 / 1.1	2.6 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

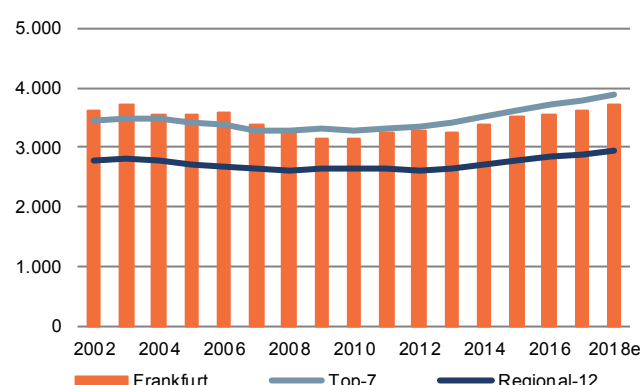
Retail space in Frankfurt

PRIME RETAIL RENTS IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

RETAIL SALES IN EUR PER SQM



Source: Feri

Frankfurt is one of the strongest locations in the German retail sector, not least because of a catchment area of 2.3 million people with high purchasing power. The city also benefits from a growing number of inhabitants, workers and visitors which mean undimmed interest on the part of retailers and food and drink outlets in Frankfurt's city centre. In the last few years, the market has responded to high demand for space with a number of large developments such as the Skyline Plaza which opened near the trade fair ground in 2013. However, there is also a lot of building work going on along Frankfurt's busy shopping mile, the Zeil, in order to meet shoppers' more sophisticated requirements. The first big construction project is the revamp of the MyZeil shopping centre which was only opened in 2009, and which is to be upgraded with the inclusion of a new restaurant area and an exclusive arthouse cinema. The second building project involves a new development, the UpperZeil on the site of the Zeilgalerie which has now been pulled down, and which neighbouring Kaufhof wants to use to extend from the first floor upwards. One indication that things are getting more difficult in retail real estate, even at top locations, is likely to be the fact that the top three floors of the new building are to be used as co-working space, i.e. for short-term office lets. In addition, Kaufhof is planning to shut down its Nordwestzentrum branch (one of three in Frankfurt) when the lease runs out in 2019. In contrast, the planned extension of the Hessen-Center on the eastern edge of the city by 14,000 sqm is still awaiting the green light. There are no signs of any change in prime rents: after a long uptrend to EUR 300 per sqm in 2015, rents have remained unchanged. We do not expect any change this year either.

Frankfurt benefits from a large catchment area, high purchasing power and many visitors

RETAIL FORECASTS

		2015	2016	2017	2018e
Demand					
Per cap. disposable income	EUR/month	1,823	1,861	1,898	1,936
Unemployment rate	%	6.8	6.3	5.9	5.7
Retail sales	EUR m/% yoy	5,278 / 3.9	5,455 / 3.3	5,639 / 3.4	5,813 / 3.1
Retail sales	EUR/sqm retail space	3,513	3,553	3,625	3,702
Supply					
Retail space	in sqm '000	1,503	1,536	1,556	1,570
Retail space	% yoy	0.3	2.2	1.3	0.9
Retail rent					
Prime/secondary location	EUR/sqm	300 / 18.0	300 / 17.5	300 / 17.5	300 / 17.5
Prime/secondary location	% yoy	3.4 / 0.0	0.0 / -2.8	0.0 / 0.0	0.0 / 0.0

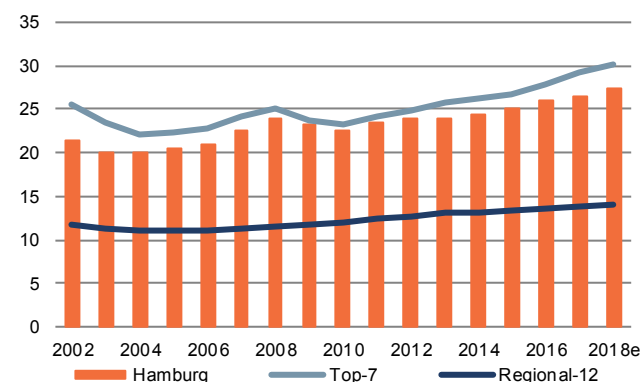
Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

HAMBURG

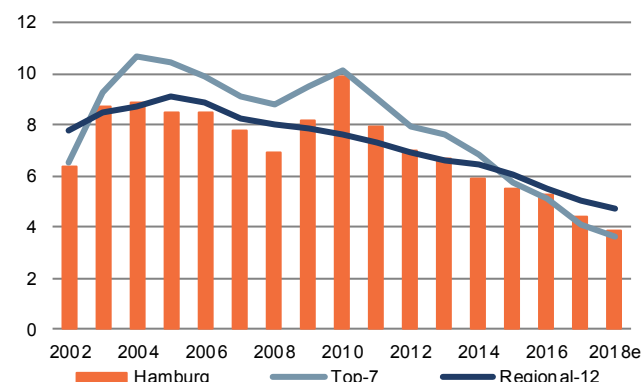
Office space in Hamburg

PRIME RENTS FOR OFFICE SPACE IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

VACANCY RATE (%)



Source: BulwienGesa, DZ BANK AG forecasts

The upward trend in the Hamburg office market continued in 2017 for the fifth year in a row. Take-up reached its highest level since the previous record year (2007) at 580,000 sqm. The high volume was bolstered by two very big deals of 34,000 sqm each – Olympus and Gruner + Jahr – as well as two further transactions of over 10,000 sqm. The upturn in the office market has moreover led to a steady increase in prime rents in Hamburg to EUR 26.50 per sqm lately. However, with increment of 2 to 4 per cent p.a., the rise was generally slower than the average for the top locations: whereas prime rents in Hamburg were still in line with the benchmark in 2010, they are now around EUR 3 per sqm below that. Lively demand for office space has led to a reduction in the vacancy level which was still high a few years ago as a result of a substantial increase in space in the HafenCity. The vacancy rate, which fell to 4.4 per cent in 2017, has more than halved since 2010. Prospects for the Hamburg office market remain positive. The broadly based economy in the hanseatic city should continue to benefit from favourable conditions, and demand for office space is therefore likely to remain buoyant. Since only a moderate amount of new office space is likely to become available in 2018, supply is set to become even tighter and this should push the vacancy rate below 4 per cent. We therefore expect an increase in prime rents to just over EUR 27 per sqm.

Hamburg office market grows for the fifth year in a row

OFFICE FORECASTS

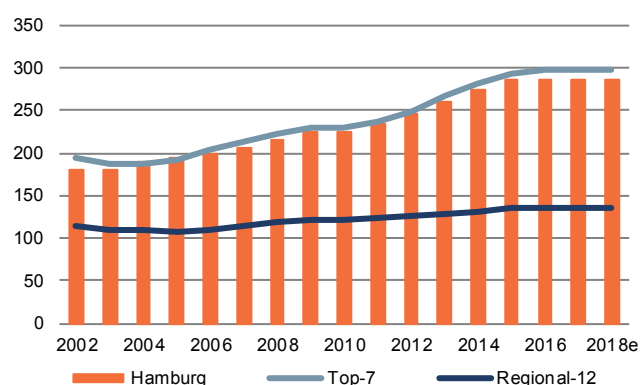
		2015	2016	2017	2018e
Demand					
GDP	% yoy	3.4	2.6	4.1	3.4
Per capita GDP	in EUR	55,493	56,043	57,758	59,281
No. of office workers	in '000	418.8	426.2	433.0	440.0
No. of office workers	% yoy	1.7	1.8	1.6	1.6
Supply					
Total office space	in sqm '000	13,575	13,718	13,733	13,850
Total office space	% yoy	0.2	1.1	0.1	0.9
Vacancy rate	%	5.5	5.3	4.4	3.9
Office rents					
Prime/secondary location	EUR/sqm	25.0 / 10.5	26.0 / 10.8	26.5 / 11.5	27.3 / 11.5
Prime/secondary location	% yoy	2.0 / 8.2	4.0 / 2.9	1.9 / 6.5	3.0 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

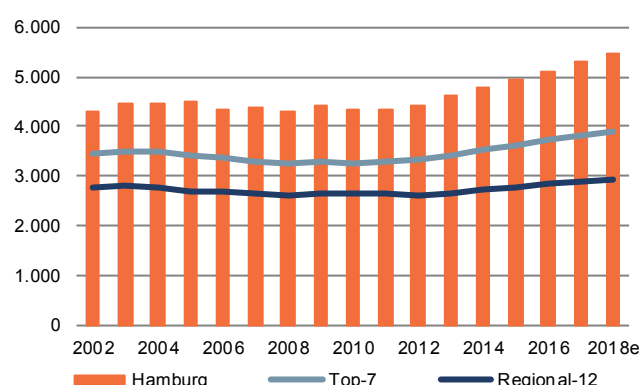
Retail space in Hamburg

PRIME RETAIL RENTS IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

RETAIL SALES IN EUR PER SQM



Source: Feri

The leading shopping location in northern Germany is backed by a solid economic trend, population growth, high purchasing power and a large catchment area. The city is also seeing a sharp increase in tourism, buoyed by the new concert hall on the Elbe and a rising number of cruise ship passengers (the hanseatic city has three cruise ship terminals). In all, there are over 13 million overnight stays p.a. The city offers a broad range of shopping options from conventional mass consumer locations such as the Spitalerstraße to the luxury end of the market such as the Neuer Wall. However, retail space in the city is tight, accounting for only around one seventh of the total retail space. Nevertheless, retail space is increasing through many developments which are also extending the most popular shopping locations into peripheral areas. The city's attraction as a shopping destination is likely to be improved by measures to revamp the shopping centres: the Alsterhaus is undergoing a comprehensive renovation. The former HSH Nordbankpassage – now PERLE Hamburg – has also seen a major investment. The choice of places to eat in the Europa Passage has been extended with Food Sky. The shopping centre planned in the southern Überseequartier in Hafencity which would house 200 stores and 80,000 sqm of retail space and which is meant to be completed by 2021 is the subject of strong debate because of its dimensions: as an island solution, it would make up around one quarter of the total retail space in the inner city. As in the office market, prime rents have risen slightly slower than the top 7 average, and have been at EUR 285 per sqm since 2015; they are unlikely to change this year either.

Favourable conditions for consumption at North Germany's top shopping location, reflecting the economy, population size and tourism

RETAIL FORECASTS

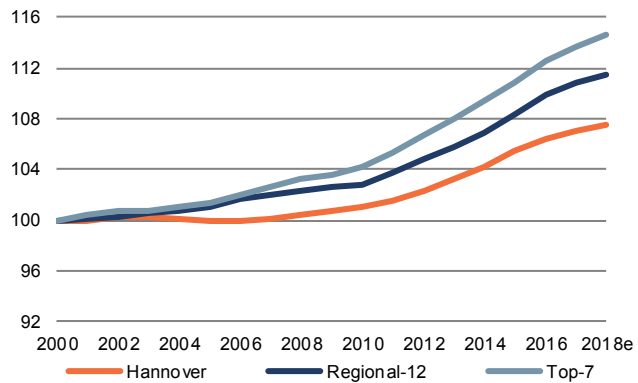
		2015	2016	2017	2018e
Demand					
Per cap. disposable income	EUR/month	2,034	2,052	2,083	2,113
Unemployment rate	%	7.4	7.1	6.8	6.7
Retail sales	EUR m/% yoy	14,706 / 4.0	15,279 / 3.9	15,891 / 4.0	16,488 / 3.8
Retail sales	EUR/sqm retail space	4,945	5,119	5,302	5,461
Supply					
Retail space	in sqm '000	2,974	2,985	2,998	3,019
Retail space	% yoy	0.4	0.4	0.4	0.7
Retail rent					
Prime/secondary location	EUR/sqm	285 / 40.0	285 / 40.0	285 / 40.0	285 / 40.0
Prime/secondary location	% yoy	3.6 / 0.0	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

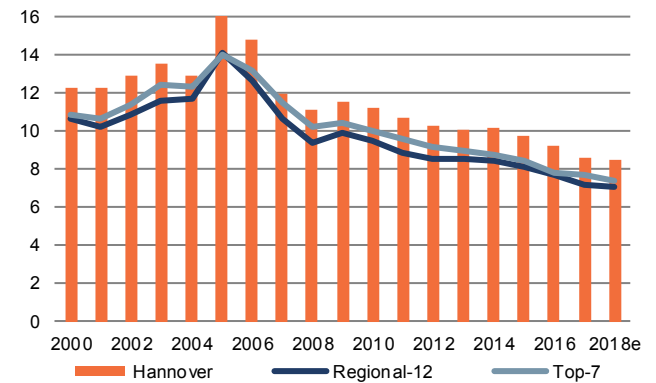
HANNOVER

POPULATION GROWTH



Source: Feri Index 2000 = 100

UNEMPLOYMENT RATE (%)



Source: BulwienGesa, DZ BANK AG forecasts

Hannover is by far the largest city in Lower Saxony with a population of around 535,000; it is the 13th largest city in Germany. It is the regional capital, an administrative centre and pre-eminent centre for science and technology in Germany as the heart of the metropolitan Hannover-Braunschweig-Göttingen-Wolfsburg region. Hannover is also a major trade fair centre through the CeBIT, Hannover Messe and IAA Commercial Vehicles. In the year 2000, it hosted the World Expo 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 activity. Traditionally, industry has been represented by mechanical engineering and automobile manufacturing along with related suppliers. The city is also an important centre for financial services, above all for the insurance sector: Hannover Re and Talanx, both listed in the MDAX, have their head office here. However, Hannover also has a DAX company, the automotive supplier Continental. Hannover is also an important seat of learning with around a dozen higher education institutions with over 45,000 students in all. The biggest of these institutions is the Leibniz University which has 28,500 students. The city is also home to various research institutions. Unemployment is relatively high at around 9 per cent in spite of a broadly based labour market.

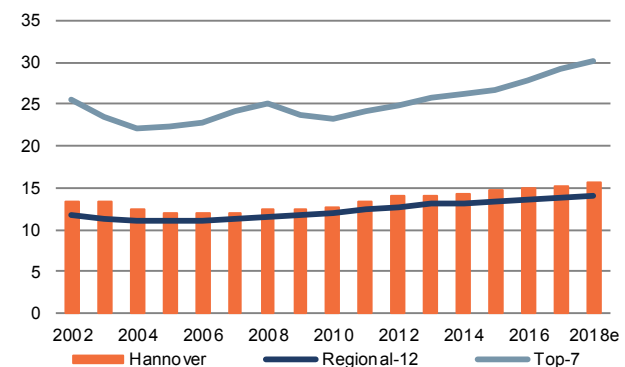
Economic, scientific and administrative centre in Lower Saxony

Office space in Hannover

Hannover is the biggest office location after the top 7 with 4.6 million sqm of space, around 1 million sqm more than the next biggest market, Nuremberg which is

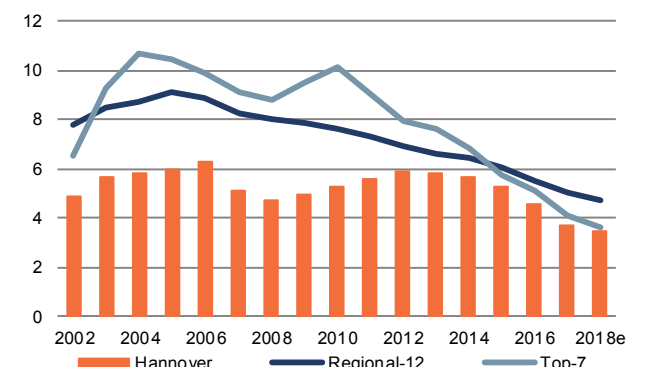
Hannover the biggest office market after the top 7

PRIME RENTS FOR OFFICE SPACE IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

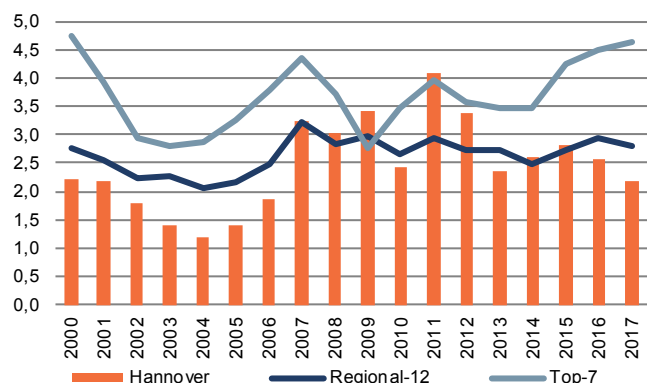
VACANCY RATE (%)



Source: BulwienGesa, DZ BANK AG forecasts

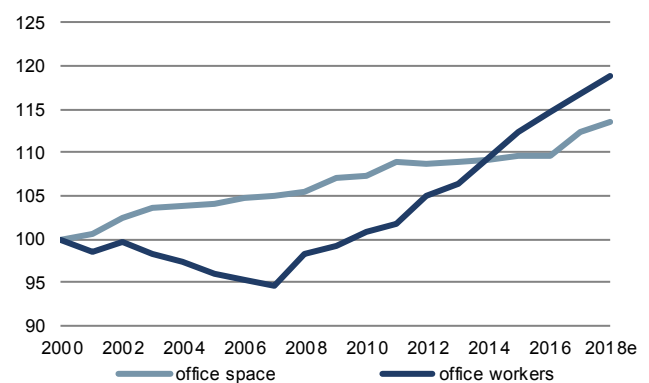
Main regional real estate markets in Germany | 2018

TAKE-UP AS % OF OFFICE SPACE



Source: BulwienGesa

TREND IN OFFICE SPACE AND EMPLOYMENT



Source: Feri, BulwienGesa

Index 2000 = 100

followed by Bonn and Essen with 3.2 and 3.1 million sqm respectively. All the other German office markets have less than 3 million sqm of space. However, a large pool of office space does not in any way mean that the city has surplus supply: in fact, the vacancy rate has fallen steadily to a low level of 3.7 per cent in the last few years, and prime rents have risen continuously to EUR 15.30 per sqm in 2017. This puts them well above the average of EUR 13.90 per sqm for the regional centres under consideration. Strong demand for office space reflects combined demand from businesses, academic institutions and administration. In 2017, however, take-up was slightly lower than in the years before that at an estimated 100,000 sqm. What is striking is that the larger deals last year mostly involved the public sector. At around 60,000 sqm, transactions involving the city of Hannover, the state criminal office, police and hospital accounted for half the total take-up. The first transaction outside the public sector only comes in eighth place. After only a limited amount of new office space was completed in 2016 und 2017 at 23,000 and 12,000 sqm respectively, the amount of new space this year is likely to be above average at around 65,000 sqm. This will probably slow down the reduction in vacant space. Prime rents could again increase by around 2 per cent as in 2017.

Public sector is a major factor in office take-up in 2017

OFFICE FORECASTS

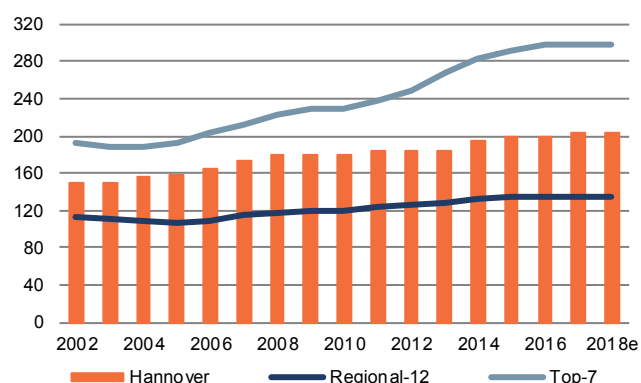
		2015	2016	2017	2018e
Demand					
GDP	% yoy	4.1	3.5	3.6	3.5
Per capita GDP	in EUR	56,847	58,308	60,028	61,822
No. of office workers	in '000	135.4	138.0	140.5	143.0
No. of office workers	% yoy	2.8	1.9	1.8	1.8
Supply					
Total office space	in sqm '000	4,490	4,486	4,600	4,650
Total office space	% yoy	0.4	-0.1	2.5	1.1
Vacancy rate	%	5.3	4.6	3.7	3.5
Office rents					
Prime/secondary location	EUR/sqm	14.8 / 7.4	15.0 / 7.6	15.3 / 7.6	15.6 / 7.6
Prime/secondary location	% yoy	4.2 / 2.8	1.4 / 2.7	2.0 / 0.0	2.0 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

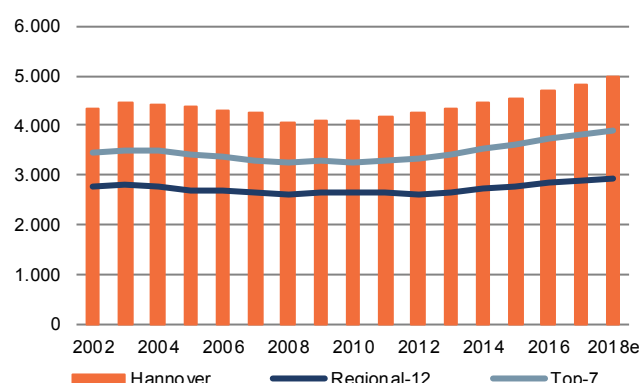
Retail space in Hannover

PRIME RETAIL RENTS IN EUR PER SQM



Source: Feri, BulwienGesa, DZ BANK AG forecasts

RETAIL SALES IN EUR PER SQM



Source: Feri

Hannover is exceptionally well placed not just in terms of its office market, but also for retail. Current prime rents are at EUR 203 per sqm, beaten only by Dortmund among secondary locations with EUR 215. In relation to the regional centres under consideration, prime rents in Hannover are 50 per cent above the average of EUR 135 per sqm. This pearl among secondary locations benefits from a large catchment area of 1.9 million inhabitants. In addition, the main business ratios are solid: at 102, purchasing power is slightly above the German average, while the centrality score of 120 points is in the top third of the 19 locations analysed. In addition, although Hannover is not among Germany's top tourist attractions, at 4,200 overnight stays per 1,000 inhabitants, it is at least average in relation to the regional centres. What makes the city attractive for visitors is a comprehensive choice of shops in the city which has four top shopping streets: the Bahnhofstraße with the Niki-de-Saint-Phalle-Promenade, the Georgstraße, Große Packhofstraße and Karmarschstraße, which was given a significant lift a few years ago with the opening of the Kröpcke-Centre. These prime locations are complimented by the Ernst-August-Galerie, a large, inner city shopping centre with 35,000 sqm of retail space. On balance, around one third of total retail sales in Hannover are generated in the city centre. The city has coped well with large out-of-town retail developments such as the A2-Center (2014) or Möbel-Höffner (2015), and in fact, prime rents even rose slightly further in 2017. Bearing in mind an already very high level, however, we do not expect any further rise in 2018.

Hannover outstandingly placed as a retail location

RETAIL FORECASTS

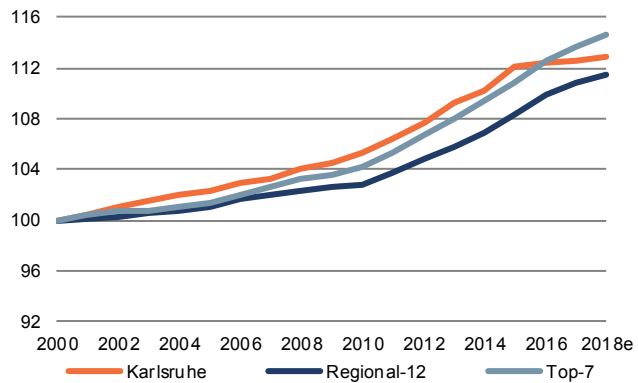
		2015	2016	2017	2018e
Demand					
Per cap. disposable income	EUR/month	1,909	1,944	1,986	2,023
Unemployment rate	%	9.7	9.2	8.6	8.5
Retail sales	EUR m/% yoy	4,334 / 3.2	4,463 / 3.0	4,600 / 3.1	4,726 / 2.7
Retail sales	EUR/sqm retail space	4,561	4,702	4,842	4,971
Supply					
Retail space	in sqm '000	950	949	950	951
Retail space	% yoy	1.2	-0.1	0.1	0.1
Retail rent					
Prime/secondary location	EUR/sqm	200 / 13.5	200 / 13.5	203 / 14.0	203 / 14.0
Prime/secondary location	% yoy	2.6 / 0.0	0.0 / 0.0	1.5 / 3.7	0.0 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

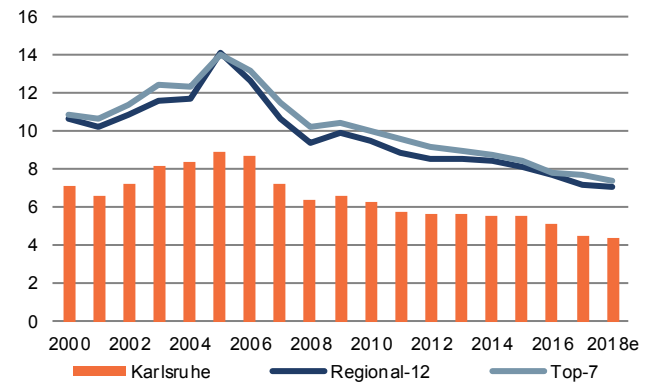
KARLSRUHE

POPULATION GROWTH



Source: Feri Index 2000 = 100

UNEMPLOYMENT RATE (%)



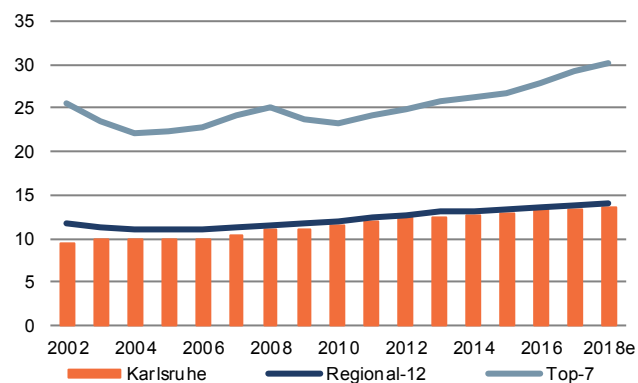
Source: BulwienGesa, DZ BANK AG forecasts

Karlsruhe and Mannheim, the two most populated cities in Baden-Württemberg after Stuttgart, both have around 305,000 inhabitants. Until just a few years ago, Karlsruhe was growing faster than Mannheim. However, while Mannheim is still expanding, the number of inhabitants in Karlsruhe has been stagnating since 2015. Another difference relates to the character of the cities. Unlike the more industrial city of Mannheim, Karlsruhe is primarily a centre of administration, science and technology and services. The city is located on the Upper Rhine and is also 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 for science and technology, 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), which was formed in 2009 from the Karlsruhe Research Centre and the university. Karlsruhe is also home to many research institutions. As a centre of commerce, Karlsruhe benefits from favourable transport links via the A5, A6 and A65 motorways and an ICE high-speed train connection, along with an airport and a river port. Apart from the public administration sector and education and research institutions, Karlsruhe is mostly home to companies from the computer and IT sector, the chemical industry and mechanical engineering. Well-know employers include EnBW and the dm pharmacy chain. Unemployment is low at 4.2 per cent (November 2017).

Important centre for research and administration in the South West

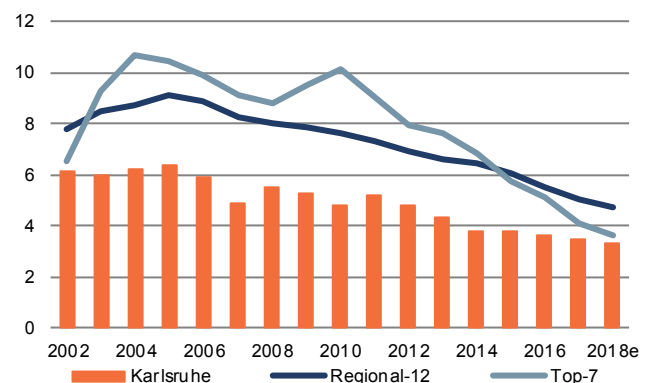
Office space in Karlsruhe

PRIME RENTS FOR OFFICE SPACE IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

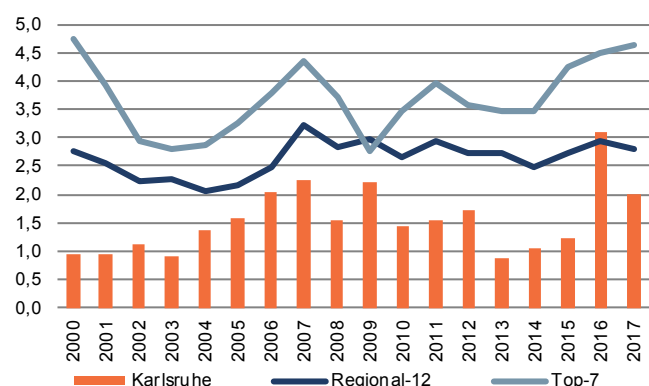
VACANCY RATE (%)



Source: BulwienGesa, DZ BANK AG forecasts

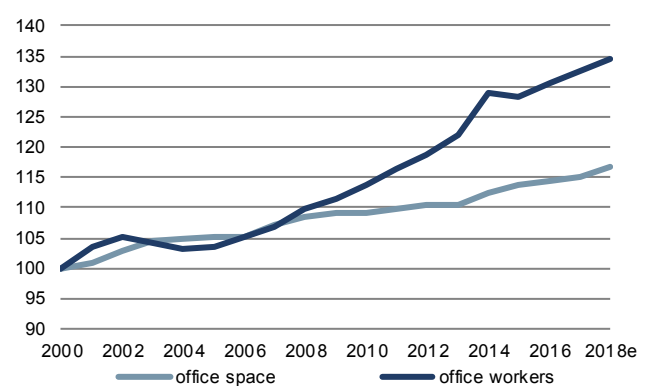
Main regional real estate markets in Germany | 2018

TAKE-UP AS % OF OFFICE SPACE



Source: BulwienGesa

TREND IN OFFICE SPACE AND EMPLOYMENT



Source: Feri, BulwienGesa

Index 2000 = 100

Major deals in 2016 and 2017 led to high take-up

Karlsruhe has a relatively large office market of 2.4 million sqm through its function as an administrative hub and a centre for the services sector and for science and technology. Bremen, Dresden and Leipzig hardly have any more office space but are all three much bigger cities of well over 500,000 inhabitants. The number of office workers in Karlsruhe is also growing fast on the back of a flourishing services industry, while the increase in office space is lagging behind. The vacancy rate has fallen steadily since the middle of the last decade to 3.5 per cent most recently. Of all the regional centres under consideration, only Münster has an even lower ratio. Tighter supply has led to a steady rise in prime rents to EUR 13.40 per sqm in 2017. Slightly below-average prime rents are likely to reflect a large proportion of office space rented to the public sector. In 2016, take-up surged to 74,000 on the back of two big deals for a combined 50,000 sqm of space, more than double the usual figure. As expected, take-up fell back again in 2017, although it again reached a high level of 48,000 sqm thanks to a series of fairly large, mid-four-digit transactions. Apart from the few large deals, the market is mostly characterised by smaller lettings to research and services companies. This year, the vacancy rate is unlikely to come down since a fairly large completion volume is expected. However, prime rents could increase further. A large complex with 65,000 sqm of office space which is due to be built on the site of the main railway by 2020 could bring some movement in the Karlsruhe office market. The main tenant is expected to be the internet provider 1&1.

OFFICE FORECAST

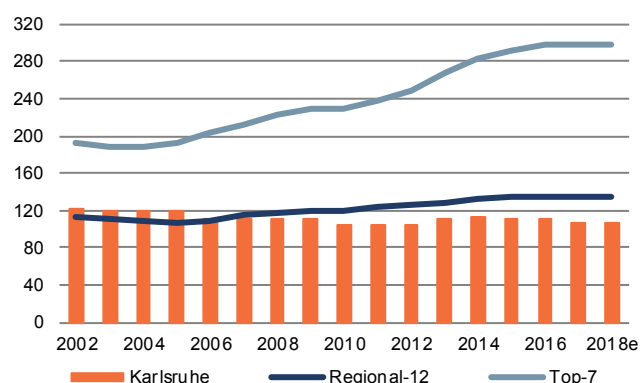
		2015	2016	2017	2018e
Demand					
GDP	% yoy	6.0	3.1	3.3	3.3
Per capita GDP	in EUR	55,406	56,982	58,779	60,592
No. of office workers	in '000	83.0	84.5	85.8	87.1
No. of office workers	% yoy	-0.3	1.7	1.6	1.5
Supply					
Total office space	in sqm '000	2,367	2,381	2,395	2,430
Total office space	% yoy	1.0	0.6	0.6	1.5
Vacancy rate	%	3.8	3.6	3.5	3.3
Office rents					
Prime/secondary location	EUR/sqm	13.0 / 6.2	13.3 / 6.2	13.4 / 6.3	13.7 / 6.3
Prime/secondary location	% yoy	2.4 / 0.0	2.3 / 0.0	0.8 / 1.6	2.2 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

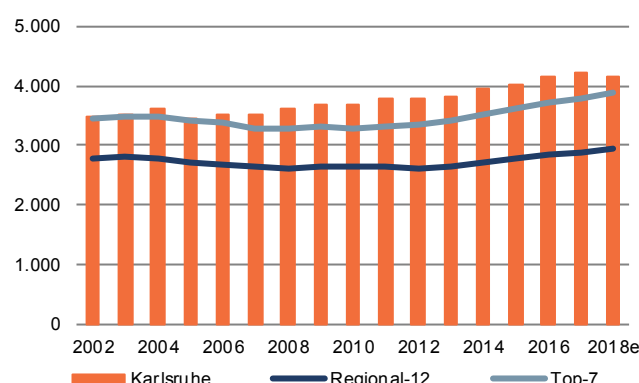
Retail space in Karlsruhe

PRIME RETAIL RENTS IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

RETAIL SALES IN EUR PER SQM



Source: Feri

Karlsruhe is one of the most attractive shopping destinations in Baden-Württemberg. On the plus side, there has been strong population growth for a number of years (+12 per cent since the turn of the millennium), a catchment area of 1.1 million people and strong economic base with low unemployment. The city's strength as a shopping destination is bolstered by two well integrated inner-city shopping centres: the Postgalerie and Ettlinger Tor. The opening of the latter in 2005 led to a 10 per cent fall in prime rents to EUR 105 per sqm. After a temporary rise to EUR 113, prime rents fell back to EUR 106 per sqm last year. The fact that the city's potential is not leading to rising prime rents, as it is in Mannheim where prime rents are now above EUR 150 per sqm, reflects not least extensive and lengthy building work in the city centre. The negative impact on retailers and shoppers comes from a combination of major engineering works, involving the transfer of the tram line along the busy Kaiserstraße underground (a project which is not expected to be completed until 2020), which will then be followed by a major revamp of the Kaiserstraße itself. However, this promises an attractive pedestrian area without any tram traffic, which should further increase the attraction of the city centre for shoppers. Prime rents this year are likely to remain largely unchanged, although there could be a slight recovery.

Attractive shopping location in the South-West, although the city centre has been struggling for some years with ongoing construction work

RETAIL FORECASTS

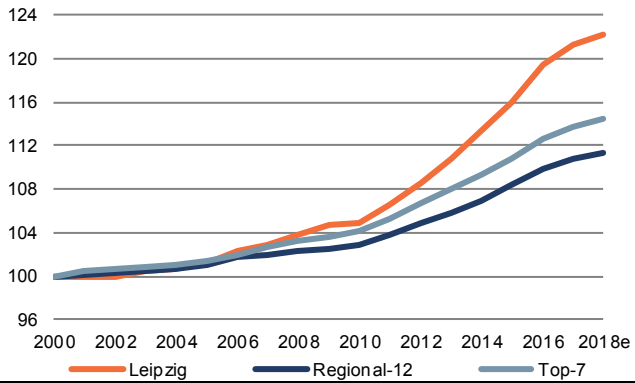
		2015	2016	2017	2018e
Demand					
Per cap. disposable income	EUR/month	1,871	1,922	1,973	2,018
Unemployment rate	%	5.5	5.1	4.5	4.4
Retail sales	EUR m/% yoy	2,154 / 4.3	2,219 / 3.0	2,280 / 2.8	2,338 / 2.6
Retail sales	EUR/sqm retail space	4,031	4,152	4,218	4,158
Supply					
Retail space	in sqm '000	534	534	540	562
Retail space	% yoy	1.9	0.0	1.1	4.0
Retail rent					
Prime/secondary location	EUR/sqm	110 / 8.5	110 / 8.5	106 / 8.5	107 / 8.5
Prime/secondary location	% yoy	-2.7 / 0.0	0.0 / 0.0	-3.6 / 0.0	1.3 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

LEIPZIG

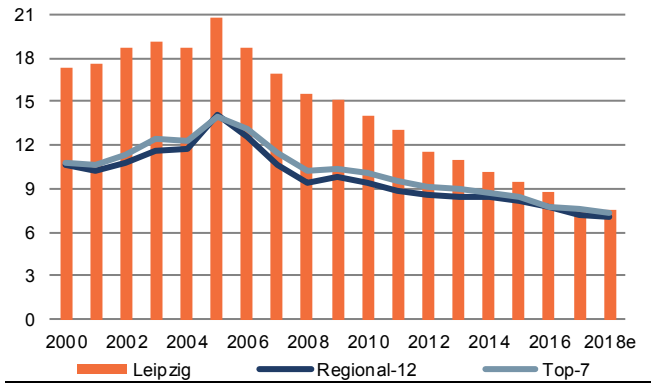
POPULATION GROWTH



Source: Feri

Index 2000 = 100

UNEMPLOYMENT RATE (%)



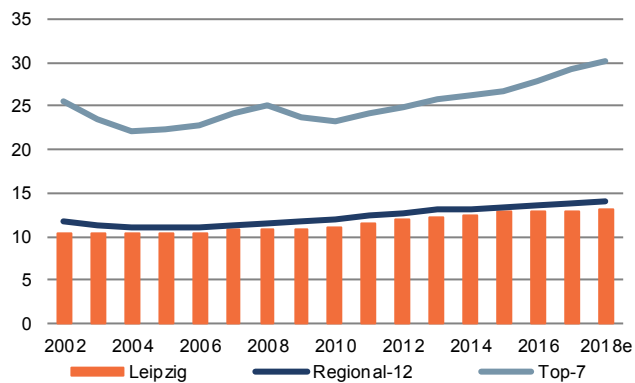
Source: BulwienGesa, DZ BANK AG forecasts

The high quality of life on offer in the attractive city of Leipzig and a favourable economic trend have led to very strong population growth, stronger even than in Frankfurt or Munich. The number of inhabitants has increased by almost 90,000 within the space of ten years (around 18 per cent) to over 570,000 inhabitants. This puts Leipzig among the top 10 most populated cities in Germany. Whereas the city still scored points with relatively cheap rents in the past, they have now risen sharply on the back of strong demand for housing, and this advantage has now dwindled. The fact that population growth has been accompanied by a sharp rise in employment has led to a reduction of two thirds in the unemployment rate against 2005 to 6.9 per cent in November 2017. Leipzig is not only an important centre of commerce; it is also an important centre for science and technology with almost a dozen higher education institutions at which almost 40,000 students are enrolled. Today's economic successes have been built on the city's longstanding position as an important centre for trade fairs, businesses and industry. After reunification, many well-known companies built plants in Leipzig such as BMW, Porsche und Siemens, although the latter is now planning to close its plant. Even so, from a long-term perspective, Leipzig – the "European city of energy" – is likely to have bet on the right horse by focusing on energy and environmental technology. A large logistics hub has also grown up around the Leipzig/Halle airport.

Ongoing economic upturn: Leipzig's population growing at record speed

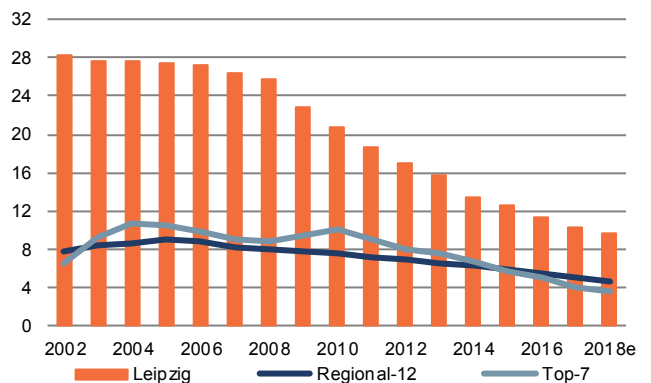
Office space in Leipzig

PRIME RENTS FOR OFFICE SPACE IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

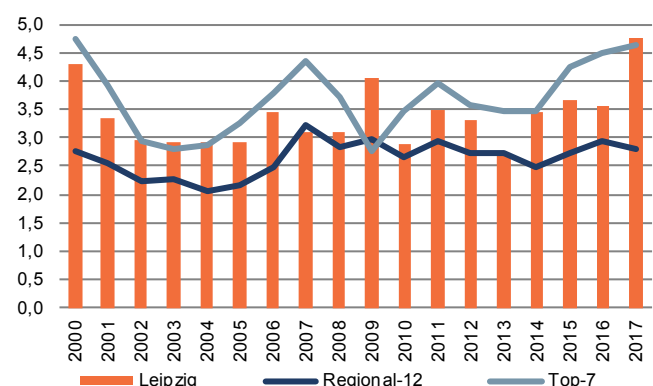
VACANCY RATE (%)



Source: BulwienGesa, DZ BANK AG forecasts

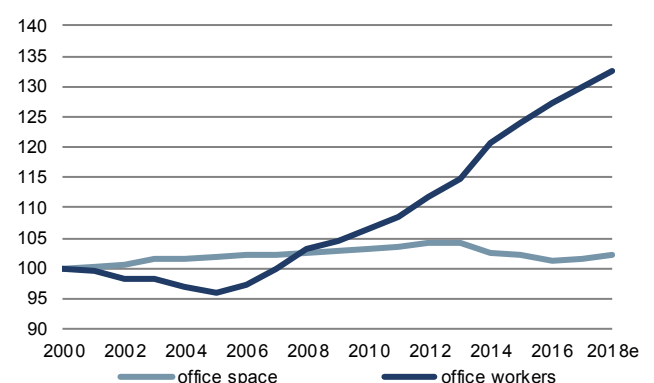
Main regional real estate markets in Germany | 2018

TAKE-UP AS % OF OFFICE SPACE



Source: BulwienGesa

TREND IN OFFICE SPACE AND EMPLOYMENT



Source: Feri, BulwienGesa

Index 2000 = 100

The ongoing economic upturn in Leipzig is evident from the evolution in the vacancy rate which has fallen by two thirds to around 10 per cent after a surge to almost 30 per cent at the end of the 1990s. The trend was helped by the fact that there has hardly been any new office building since the post-reunification construction boom, allowing the surplus which had been created to be largely absorbed, not least as a result of a sharp rise in employment. In all, Leipzig has 2.7 million sqm of office space, roughly the same as the Saxon capital, Dresden. Prime rents in the two cities are also more or less on the same level, although Dresden does better with a vacancy rate of around 7 per cent. In contrast, in spite of respectable progress on the economic front, the office market in Leipzig still has the highest vacancy rate of all the locations under consideration. This is also likely to explain why prime rents in the past have not risen faster or higher; they stood at EUR 13.00 per sqm in 2017. In light of this, any further rise in prime rents is likely to take place at best at a moderate pace. However, the vacancy rate should fall into single digits this year. The Leipzig office market had its best result in almost a quarter of a century in 2017 with take-up of 130,000. However, this was helped by a major transaction of almost 20,000 sqm involving the Development Bank of Saxony (SAB).

Ongoing economic upturn has helped significantly whittle down the office space surplus of the 1990s

OFFICE FORECASTS

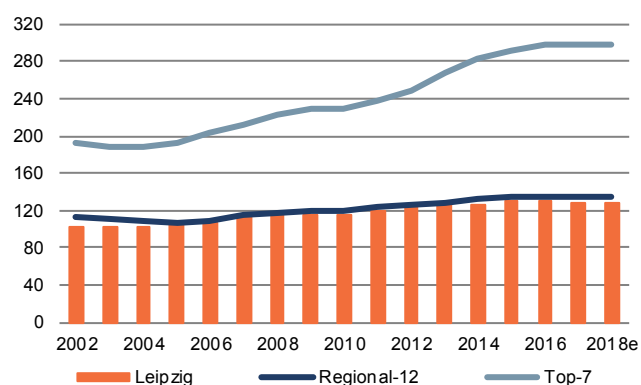
		2015	2016	2017	2018e
Demand					
GDP	% yoy	4.1	3.6	3.9	3.8
Per capita GDP	in EUR	31,137	31,354	32,084	33,017
No. of office workers	in '000	93.8	96.2	98.2	100.2
No. of office workers	% yoy	2.7	2.6	2.1	2.0
Supply					
Total office space	in sqm '000	2,734	2,714	2,723	2,735
Total office space	% yoy	-0.3	-0.7	0.3	0.4
Vacancy rate	%	12.6	11.4	10.3	9.6
Office rents					
Prime/secondary location	EUR/sqm	12.9 / 5.7	13.0 / 5.8	13.0 / 6.0	13.2 / 6.0
Prime/secondary location	% yoy	3.2 / 3.6	0.8 / 1.8	0.0 / 3.4	1.5 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

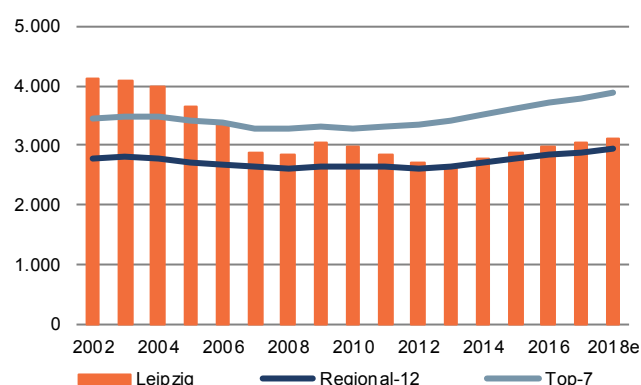
Retail space in Leipzig

PRIME RETAIL RENTS IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

RETAIL SALES IN EUR PER SQM



Source: Feri

Leipzig is one of the top shopping destinations in eastern Germany, along with Berlin and Dresden. These cities share in common the fact that they are now much more attractive as places to shop, reflecting mainly the economic upturn and marked fall in unemployment, flourishing tourism and a growing population. In addition, population growth in Leipzig has been especially pronounced. Other factors weighing in favour of Leipzig as a retail location are a 1.2 million-strong catchment area and an exceptionally attractive city centre with many historical buildings. One weak point, however, is still below-average purchasing power. The city has a broad range of shops on offer with several top shopping miles such as the Petersstraße or Grimmaische Straße and the Höfe am Brühl shopping centre which opened in 2012. It also has the Hainspitze with its Primark branch aimed at young shoppers which opened in 2016. The completion of the City tunnel at the end of 2013 which provides a rail link to the surrounding area and makes it possible to reach the Petersstraße by Overground (S-Bahn) is also having a positive impact. Leipzig can now hold its own against out-of-town shopping centres which were built at the end of the 1990s and which were still having a negative impact until a few years ago. However, the increase in retail space and generally slightly weaker demand for space have also had an impact in the form of empty stores in the city centre, which arise as a result of retailers pulling out and longer periods until space can be let again. On balance, prime rents fell slightly to EUR 127 per sqm in 2017, whereas they had increased to EUR 130 in 2015. Even though Leipzig as a location is still on the up, we do not expect any increase in prime rents this year.

Signs of saturation in Leipzig's retail market in spite of economic upturn and strong population growth

RETAIL SPACE FORECASTS

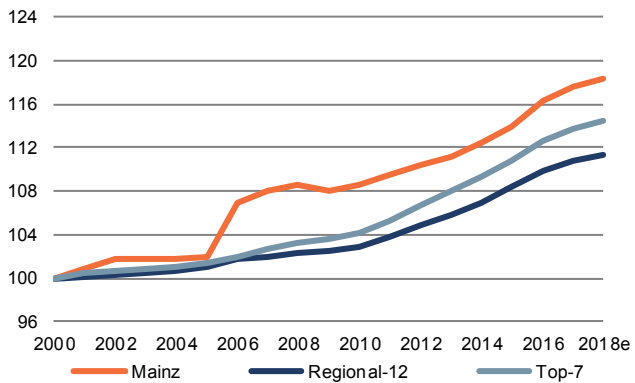
		2015	2016	2017	2018e
Demand					
Per cap. disposable income	EUR/month	1,490	1,493	1,518	1,551
Unemployment rate	%	9.5	8.8	7.7	7.6
Retail sales	EUR m/% yoy	2,021 / 4.5	2,086 / 3.2	2,152 / 3.1	2,223 / 3.3
Retail sales	EUR/sqm retail space	2,886	2,964	3,032	3,098
Supply					
Retail space	in sqm '000	700	704	710	718
Retail space	% yoy	0.7	0.5	0.8	1.1
Retail rent					
Prime/secondary location	EUR/sqm	130 / 9.5	130 / 9.5	127 / 9.5	127 / 9.5
Prime/secondary location	% yoy	4.0 / 5.6	0.0 / 0.0	-2.3 / 0.0	0.0 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

MAINZ

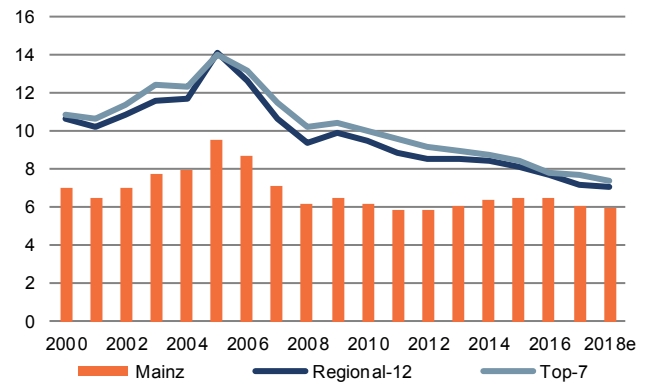
POPULATION GROWTH



Source: Feri

Index 2000 = 100

UNEMPLOYMENT RATE (%)



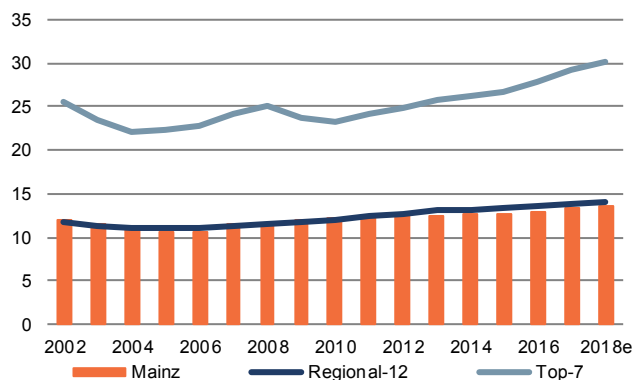
Source: BulwienGesa, DZ BANK AG forecasts

The origins of Mainz go back to Roman times. The city's location on the Rhine and Main was as attractive then as it is now. Today, the city also benefits from its position in the West of the Rhine-Main region and from good transport links. Wiesbaden is immediately opposite on the other bank of the Rhine. Moreover, unlike Wiesbaden, Mainz is an important university town with almost 40,000 students, most of whom study at the Johannes Gutenberg University. Its proximity to Frankfurt which has a growing shortage of housing and high quality of life makes Mainz a sought-after location. As a result, the city has one of the highest levels of rent of all the regional centres under consideration. One major factor in this respect has been strong population growth. The number of inhabitants has increased by 9 per cent within the space of ten years to around 215,000. Apart from the regional administration and academic institutions, radio and TV which are strongly represented by ZDF, SWR and 3sat also play an important role for the local economy. The service sector, which focuses mainly on health and social services, is also a major employer. Although the manufacturing sector is only of marginal importance, Mainz is still home to prominent companies such as the glass manufacturer Schott. The unemployment rate in November 2017 was at a moderate 5.5 per cent.

Capital of the Rhineland-Palatinate benefits from its position in the west of the Rhine-Main region

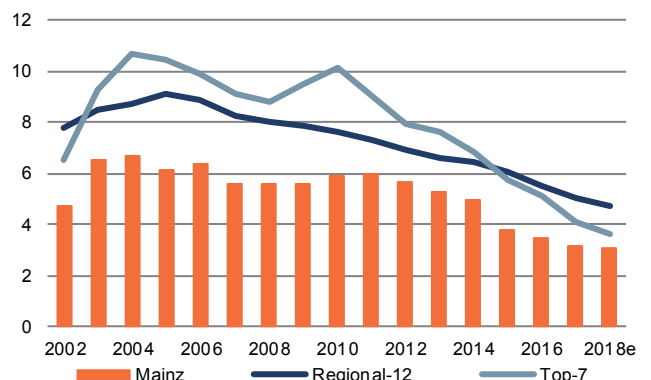
Office space in Mainz

PRIME RENTS FOR OFFICE SPACE IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

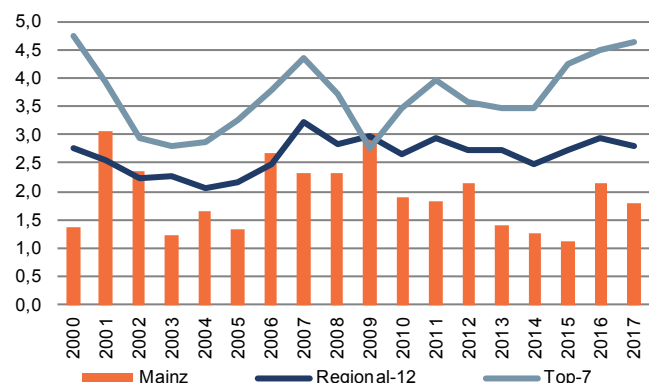
VACANCY RATE (%)



Source: BulwienGesa, DZ BANK AG forecasts

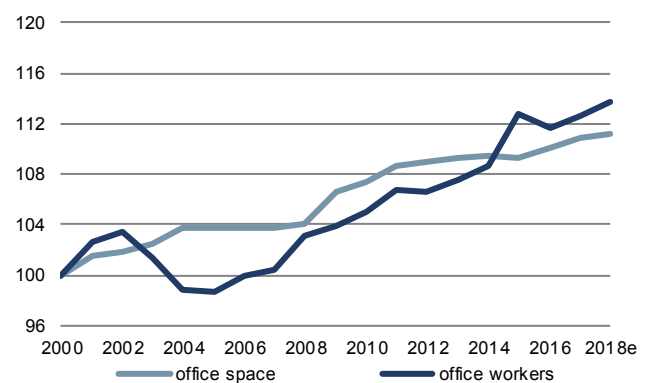
Main regional real estate markets in Germany | 2018

TAKE-UP AS % OF OFFICE SPACE



Source: BulwienGesa

TREND IN OFFICE SPACE AND EMPLOYMENT



Source: Feri, BulwienGesa

Index 2000 = 100

Mainz has a fairly small office market of 1.6m sqm. The city's links to the Rhine-Main region hardly have any impact on demand for office space which is mainly local and hardly influenced by the surrounding towns and cities. The public sector is a major factor behind demand and it means that demand is largely non-cyclical; at the same time, it has only a limited impact on growth. This is reflected in moderate prime rents of EUR 13.50 per sqm. Relatively quiet market conditions are also evident from a low annual take-up of around 30,000 sqm which is well below the normal level for regional centres. Last year was average with office space take-up of 29,000 sqm; in 2016, the figure was 5,000 sqm more. The biggest deal in 2017 did not even amount to 2,000 sqm. As in most office markets, the vacancy rate has fallen sharply in the last few years; the most recent figure of 3.1 per cent is almost half the level in 2010. Demand could pick up with the new office space currently being completed in the major Zollhafen project. After all, contemporary office space has become scarce in the Rhine-Main region in the last few years in view of only limited building. However, if this is not the case, the vacancy rate could increase slightly. We nevertheless expect sustained demand for office space and a rather tight supply in view of a low vacancy rate to lead to a moderate increase in prime rents in Mainz.

Relatively small and mostly local office market – contemporary space currently being developed as part of the major Zollhafen project

OFFICE FORECASTS

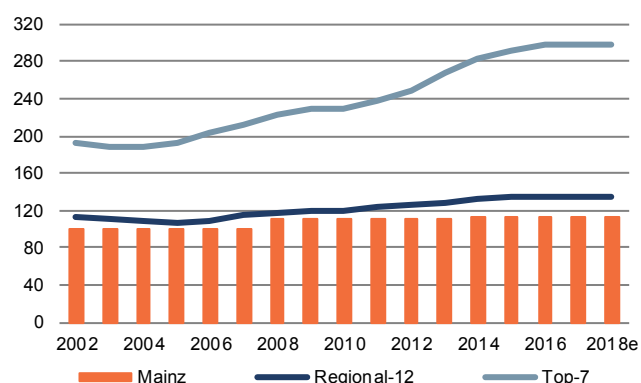
		2015	2016	2017	2018e
Demand					
GDP	% yoy	4.3	2.6	2.9	2.8
Per capita GDP	in EUR	49,307	49,562	50,418	51,498
No. of office workers	in '000	52.5	52.0	52.5	53.0
No. of office workers	% yoy	3.7	-1.0	0.9	1.0
Supply					
Total office space	in sqm '000	1,581	1,592	1,603	1,610
Total office space	% yoy	-0.1	0.7	0.7	0.4
Vacancy rate	%	3.8	3.5	3.2	3.1
Office rents					
Prime/secondary location	EUR/sqm	12.6 / 7.5	13.0 / 7.5	13.5 / 7.7	13.7 / 7.7
Prime/secondary location	% yoy	0.0 / 0.0	3.2 / 0.0	3.8 / 2.7	1.5 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

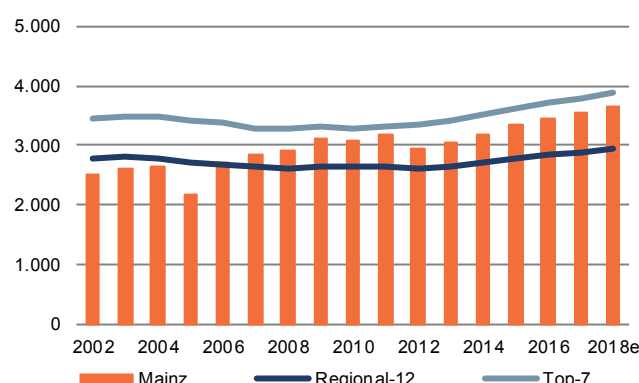
Retail space in Mainz

PRIME RETAIL RENTS IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

RETAIL SALES IN EUR PER SQM



Source: Feri

As a shopping location, Mainz benefits from a catchment area of 800,000 inhabitants, although it has strong competition from Wiesbaden on the other side of the Rhine. The situation was exacerbated further by the opening of two shopping centres in Wiesbaden in 2007 and 2008 – although one of them is being converted into a convenience store. In contrast, Mainz has no inner-city shopping centre to attract shoppers. This also means that the city lacks the demand from many retailers for larger spaces. However, there is little likelihood of a shopping centre being built in Mainz's city centre in the foreseeable future. The long planned construction of an ECE shopping centre on the former Karstadt site has fallen through, as have plans to build offices on the site. The latest plans envisage a complete refurbishment of the Karstadt building and of the adjoining multi-storey car park by the local property company Molitor. This would at last mean an upgrade for the Ludwigstraße. Irrespective of this, Mainz's city centre still has a good range of shops with its three top shopping streets, Am Brand, along with the Schuster- and Stadthausstraße. Consequently, vacant space only comes up now and again. In the last ten years, prime rents have only risen by 14 per cent to EUR 114 per sqm most recently in view of the developments of the last few years which we have described. We assume that the figure will remain unchanged this year.

Attractive location hit by competition from Wiesbaden and wrangling surrounding the future of the former Karstadt site

OFFICE FORECASTS

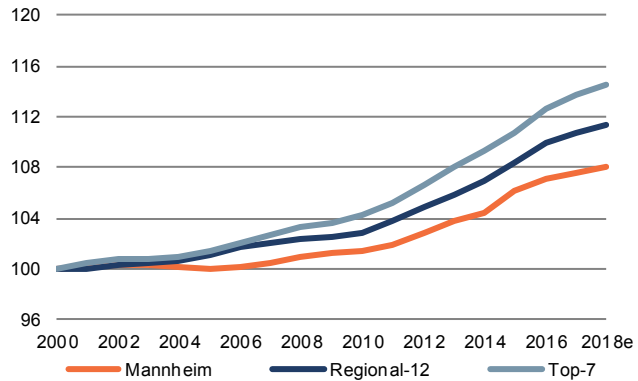
		2015	2016	2017	2018e
Demand					
Per cap. disposable income	EUR/month	1,823	1,837	1,871	1,908
Unemployment rate	%	6.5	6.5	6.1	6.0
Retail sales	EUR m/% yoy	1,671 / 5.2	1,738 / 4.0	1,805 / 3.9	1,870 / 3.6
Retail sales	EUR/sqm retail space	3,357	3,444	3,555	3,651
Supply					
Retail space	in sqm '000	498	505	508	512
Retail space	% yoy	0.0	1.4	0.6	0.9
Retail rent					
Prime/secondary location	EUR/sqm	114 / 9.5	114 / 9.5	114 / 9.5	114 / 9.5
Prime/secondary location	% yoy	0.0 / -5.0	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

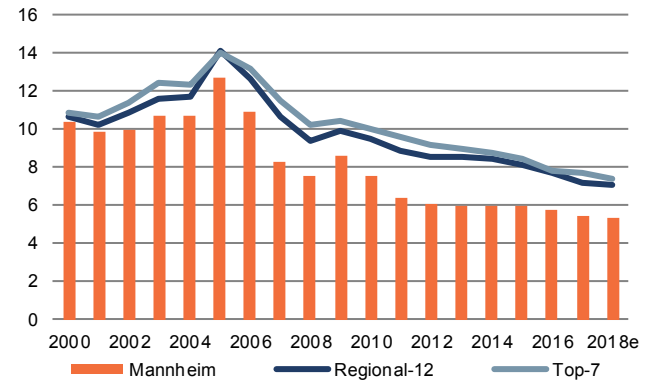
MANNHEIM

POPULATION GROWTH



Source: Feri Index 2000 = 100

UNEMPLOYMENT RATE (%)



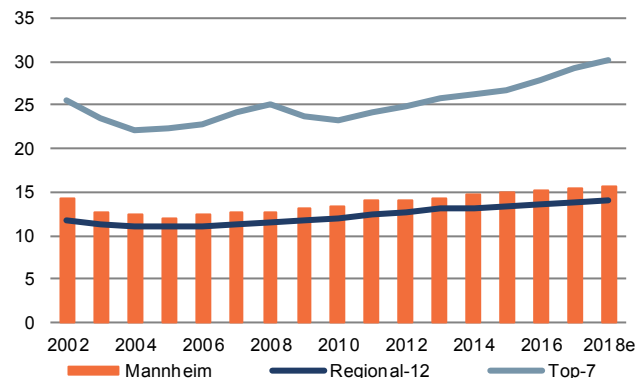
Source: BulwienGesa, DZ BANK AG forecasts

Mannheim with a 305,000-strong population and Karlsruhe which is of a similar size are the second most populated cities in the state of Baden-Württemberg after Stuttgart. Unlike Karlsruhe though, Mannheim's population stagnated for a long time as the city struggled with economic problems, high unemployment and image problems. For the last ten years or so, however, Mannheim's population has been rising – up by 20,000 – along with the economy. Unemployment fell from over 14% in 2005 to 5.1 per cent in November 2017. Whereas the structural change in many more industrially-biased cities continues to dampen the labour market significantly to this date, Mannheim has fared better. The city is not only an important centre of commerce, but also a renowned centre for science and technology with a university and several higher education institutions. Companies benefit from the city's favourable location on the Rhine and Neckar. The A5/A6 motorways make for good transport links in the direction of Frankfurt, Stuttgart or Paris. Mannheim is also served by the high-speed ICE train and a major river port. The city still has an important industrial activity, mainly chemicals and metal processing. As the birth place of the motor car, Mannheim is an important production location for Daimler. Other major sectors are insurance and financial services along with logistics. Mannheim is well equipped for further growth: housing and commercial real estate can now be built on former military, railway and industrial land as the example of the Glückstein quarter demonstrates. The 2023 Federal Garden Show will take place on this reclaimed land and the land will then become green space to improve the quality of life in Mannheim.

The industrial city of Mannheim has become an important centre of commerce, science and technology with outstanding transport links

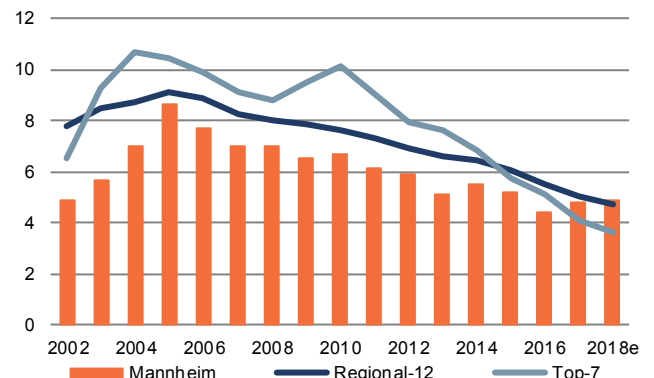
Office space in Mannheim

PRIME RENTS FOR OFFICE SPACE IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

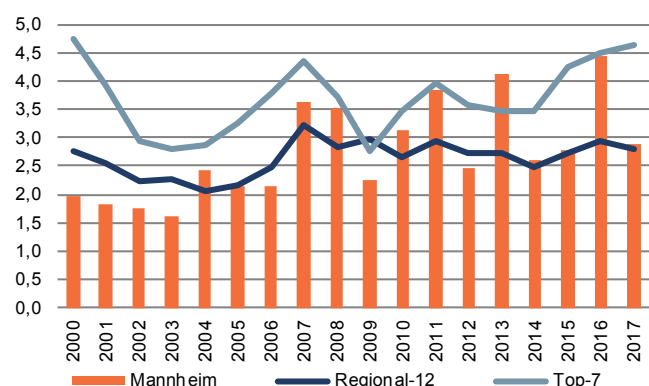
VACANCY RATE (%)



Source: BulwienGesa, DZ BANK AG forecasts

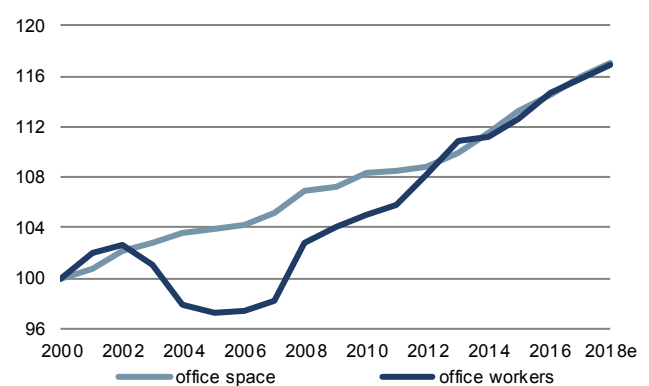
Main regional real estate markets in Germany | 2018

TAKE-UP AS % OF OFFICE SPACE



Source: BulwienGesa

TREND IN OFFICE SPACE AND EMPLOYMENT



Source: Feri, BulwienGesa

Index 2000 = 100

Although at 2.1 million sqm, Mannheim's office market is not that large, it is nevertheless a successful location in the economically strong Rhine-Neckar region. One of the contributing factors has been a sharp rise in the number of office workers, as a result of which the vacancy rate more than halved to 4.4 per cent between 2005 and 2016. In 2017, however, the proportion of vacant office space rose again slightly, pushing the rate back up to 4.8 per cent. This reflects the fact that a strong economic trend has led to an increase in construction activity in the office sector since 2013. The vacancy rate is unlikely to fall this year since another slightly above-average increase in office space is likely in 2018. New offices space is mostly being built by future occupiers, and therefore there is no widespread speculative development. This is also reflected in the trend in prime rents, which rose to a high level of EUR 15.40 per sqm in 2017 on the back of a lack of supply of contemporary office space. This means that Mannheim, together with the larger city of Hannover (over 200,000 inhabitants), is among the most expensive office locations in Germany after the top 7. At 20 per cent, the increase in rents over the last ten years is just under the regional centre average. Take-up was 60,000 sqm, which is a normal level for Mannheim. As such, take-up fell by around one third in relation to an exceptionally strong previous year – 2016 saw a record take-up of 91,000 sqm – although SparkassenVersicherung signed a large rental contract for almost 17,000 sqm. Prime rents could rise even further in 2018 even though they are already high, but any increase is likely to be moderate.

Mannheim is one of the most expensive office markets in Germany after the top 7

OFFICE FORECASTS

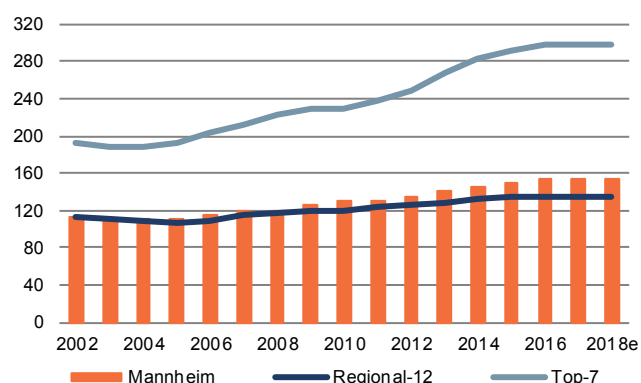
		2015	2016	2017	2018e
Demand					
GDP	% yoy	4.7	3.0	3.3	3.2
Per capita GDP	in EUR	55,917	57,101	58,627	60,242
No. of office workers	in '000	71.7	73.0	73.7	74.4
No. of office workers	% yoy	1.3	1.7	1.0	0.9
Supply					
Total office space	in sqm '000	2,024	2,044	2,070	2,090
Total office space	% yoy	1.6	1.0	1.3	1.0
Vacancy rate	%	5.2	4.4	4.8	4.9
Office rents					
Prime/secondary location	EUR/sqm	15.0 / 8.0	15.2 / 8.1	15.4 / 8.1	15.6 / 8.1
Prime/secondary location	% yoy	2.0 / 2.6	1.3 / 1.3	1.3 / 0.0	1.3 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

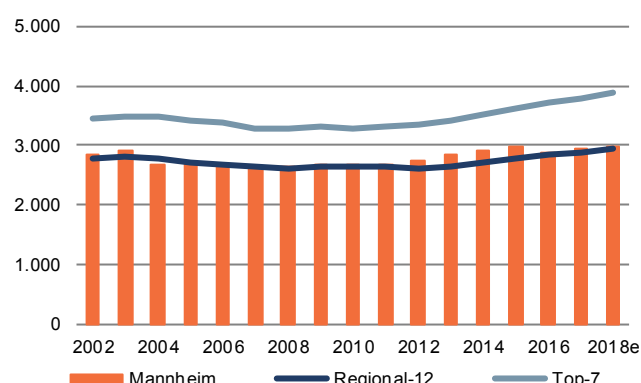
Retail space in Mannheim

PRIME RETAIL RENTS IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

RETAIL SALES IN EUR PER SQM



Source: Feri

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 city's attraction as a shopping destination has led to an increase in prime rents to EUR 153 per sqm, making the city into one of the most expensive shopping locations after the top 7. Only Dortmund, Hannover, Münster and Freiburg have even higher rents. Neither the increase in supply from the opening of the Rhein-Galerie on the other bank of the Rhine in 2010 nor the opening of the new Q6Q7 shopping mall have had an impact on the prime rents, underlining the strength of the location. If anything, the addition 20,000 sqm of sales and hospitality space has given a lift to the town centre with its central shopping mile along the Planken. However, the Breite Straße has not benefited from the new mall. The sports retailer Decathlon and furniture chain Mömax moved out again after only a short time. A complete redevelopment of the former Karstadt store which until just recently was still being used by Mömax now aims to bring about the urgently needed upgrade of this shopping location. It will add an additional 21,000 sqm of attractive marketable space, which will include shops, restaurants and a fitness centre (McFit). Building began at the end of 2017. At the same time, the situation has eased along the Planken which has been a major building site since March 2017 and even the trams are running again. However, completion of the building work there is not scheduled until 2019. Prime rents are likely to remain unchanged this year.

Outstanding and expensive shopping location in the Rhine-Neckar region

RETAIL FORECASTS

		2015	2016	2017	2018e
Demand					
Per cap. disposable income	EUR/month	1,719	1,750	1,786	1,819
Unemployment rate	%	6.0	5.7	5.4	5.3
Retail sales	EUR m/% yoy	2,292 / 3.3	2,363 / 3.1	2,438 / 3.2	2,506 / 2.8
Retail sales	EUR/sqm retail space	2,988	2,883	2,944	2,973
Supply					
Retail space	in sqm '000	767	820	828	843
Retail space	% yoy	0,3	6,8	1,0	1,8
Retail rent					
Prime/secondary location	EUR/sqm	150 / 12.5	153 / 12.5	153 / 12.5	153 / 12.5
Prime/secondary location	% yoy	3.4 / 4.2	2.0 / 0.0	0.0 / 0.0	0.0 / 0.0

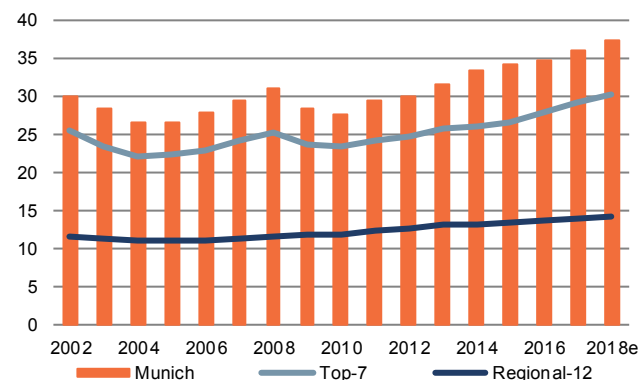
Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

MUNICH

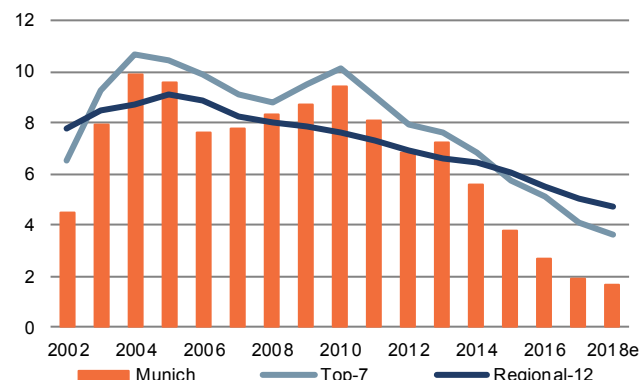
Office space in Munich

PRIME RENTS FOR OFFICE SPACE IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

VACANCY RATE (%)



Source: BulwienGesa, DZ BANK AG forecasts

Last year, amazingly, office space take-up in Munich reached 650,000 sqm, its second best performance since 2000, the record year to date, even though there is hardly any available space left. Although two big deals amounting to almost 100,000 sqm in total helped – the tenants are BMW with 60,000 sqm and the Free State of Bavaria with 36,000 sqm – the result is more than respectable. After all, the vacancy rate fell to just under 2 per cent in 2017; the figure in 2010 was still over 9 per cent. Vacant office space has dwindled from almost 1.3 million sqm to around 250,000 sqm. This shows that demand for larger amounts of office space in Munich is most likely to be met by new developments. Seven of the ten biggest deals involve office space which is not yet completed and there is no sign of any improvement in the Munich office market this year either. Even though more space is likely to be completed in 2018 than in 2017, it will not help a further dwindling of an already scarce supply; at best, it can only be slowed down. A booming Bavarian economy means that prime rents will probably continue to rise. Without Brexit pushing up rents in Frankfurt, prime rents in Munich would probably have overtaken the level in Frankfurt sooner or later. We assume that prime rents will increase roughly by the same amount this year as they did last year, and they should therefore rise to slightly over EUR 37 per sqm.

As a business location, Munich is characterised by a growing shortage of office space, flats and qualified personnel

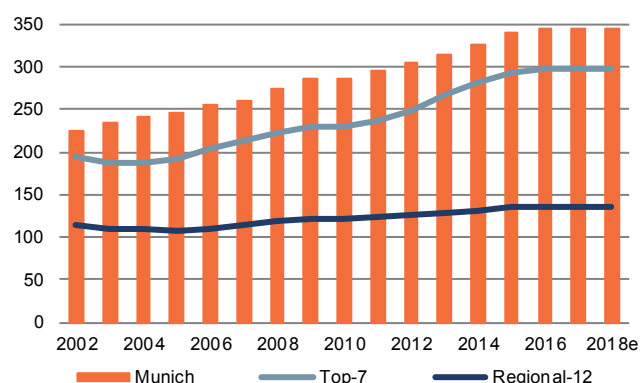
		2015	2016	2017	2018e
Demand					
GDP	% yoy	4.3	3.5	3.8	3.7
Per capita GDP	in EUR	65,724	67,397	69,374	71,379
No. of office workers	in '000	405.8	419.0	430.0	441.0
No. of office workers	% yoy	2.6	3.2	2.6	2.6
Supply					
Total office space	in sqm '000	13,704	13,728	13,759	13,830
Total office space	% yoy	0.4	0.2	0.2	0.5
Vacancy rate	%	3.8	2.7	1.9	1.7
Office rents					
Prime/secondary location	EUR/sqm	34.1 / 12.5	34.7 / 13.5	36.0 / 14.5	37.3 / 14.5
Prime/secondary location	% yoy	1.8 / 0.0	1.8 / 8.0	3.7 / 7.4	3.5 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

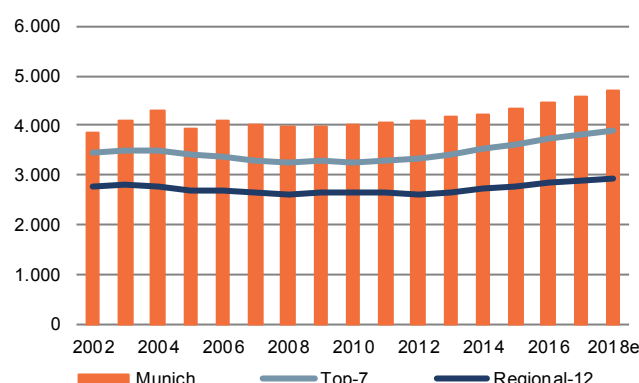
Retail space in Munich

PRIME RETAIL RENTS IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

RETAIL SALES IN EUR PER SQM



Source: Feri

Munich is the top German shopping location. The Kaufingerstraße often comes out as the number one shopping mile in terms of footfall. Retail-space productivity and purchasing power are also top of the rankings; with a purchasing power figure of over 130, Munich has left the remaining top locations well behind. Munich's catchment area includes 1.4 million inhabitants in Munich itself, plus a further 1.6 million in the affluent surrounding area. The number of shoppers is being boosted substantially from year to year by strong population growth. Munich ranks second after Berlin with 14 million overnight stays p.a. by business travellers and tourists. The city centre's attraction as a shopping destination is also backed by a very pleasant environment and broad range of shops. Munich does not just have the usual retailers but also a whole range of local shops, resulting in a relatively low level of chain store penetration in the prime shopping locations with rates of between 50 and 80 per cent. Taken as a whole, all these factors justify what is by far the highest prime rents in the German retail sector at EUR 345 per sqm. However, conditions are getting tougher: after a continuous rise for 18 years, prime rents did not increase any further in 2017 and this is likely to be the case again this year. In view of still high demand for retail space, the project pipeline is well filled, including for example the redevelopment of the Hettlage/Old Academy or of the Sattlerplatz after the demolition of the Hirmer multi-storey car park. The way is now clear for the developer to make something completely new out of the space. The biggest project with relevance in terms of retailing is the rebuilding of Munich's main train station, although it is likely to drag on until 2029.

No further increase in prime retail rents, even in this leading German shopping location

RETAIL FORECASTS

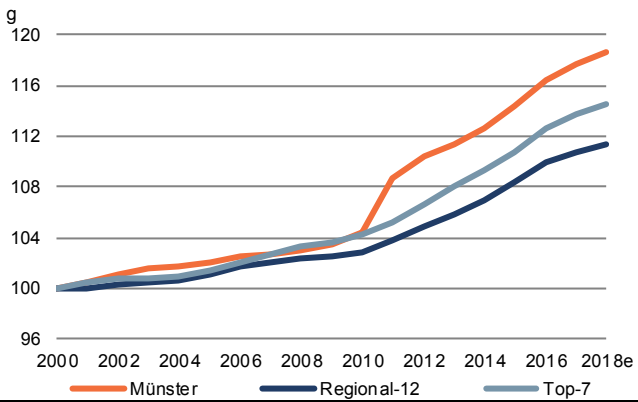
		2015	2016	2017	2018e
Demand					
Per cap. disposable income	EUR/month	2,315	2,362	2,414	2,465
Unemployment rate	%	4.9	4.6	4.2	4.0
Retail sales	EUR m/% yoy	8,968 / 3.6	9,310 / 3.8	9,674 / 3.9	10,026 / 3.6
Retail sales	EUR/sqm retail space	4,334	4,467	4,587	4,699
Supply					
Retail space	in sqm '000	2,069	2,084	2,109	2,133
Retail space	% yoy	0.9	0.7	1.2	1.1
Retail rent					
Prime/secondary location	EUR/sqm	340 / 37.0	345 / 38.0	345 / 39.0	345 / 39.0
Prime/secondary location	% yoy	4.6 / 0.0	1.5 / 2.7	0.0 / 2.6	0.0 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

MÜNSTER

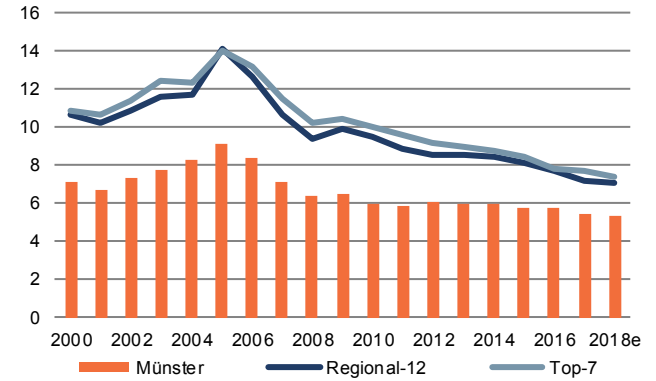
POPULATION GROWTH



Source: Feri

Index 2000 = 100

UNEMPLOYMENT RATE (%)



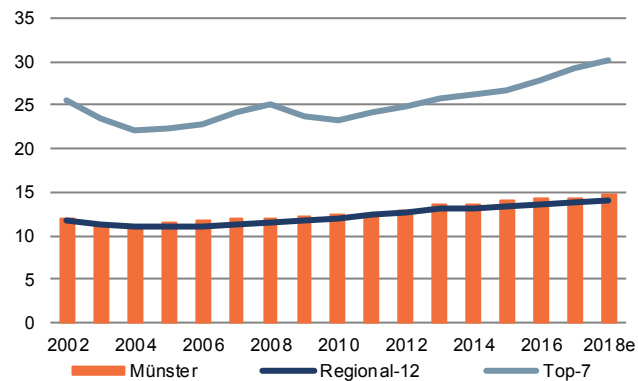
Source: BulwienGesa, DZ BANK AG forecasts

Whereas many large towns in North Rhine-Westphalia, above all in the Ruhrgebiet, are facing economic problems, Westphalian Münster remains firmly on an upward trend. Since the beginning of the 1990s, the population has grown by almost 50,000 to the present 310,000. In addition, the regional economy stands out with a strong rise in the number of people in employment. The fact that the unemployment rate – which has been low for many years – has not fallen well below the figure of 5.2 per cent reported in November 2017, is therefore likely to be a reflection of strong population growth in the city. One particular feature of the economic trend is that it has not been driven by big companies, but rather by a largely SME-led corporate landscape. In addition, higher education facilities are major employers – the most important of these is the University of Münster which has almost 60,000 students – and public administration since the city is the administrative centre of Westphalia, a region which has a larger population than most German states with over eight million inhabitants. On balance, Münster is strongly service-oriented with less than 6 per cent of the workforce employed in manufacturing, the lowest figure of all the locations analysed in this publication. Münster mostly produces paints and coatings. Tourism is an important sector of the economy; the city attracts many visitors with the medieval charm of the old city which has been rebuilt with its famous Prinzipalmarkt.

Ongoing upturn: rapid population growth undimmed

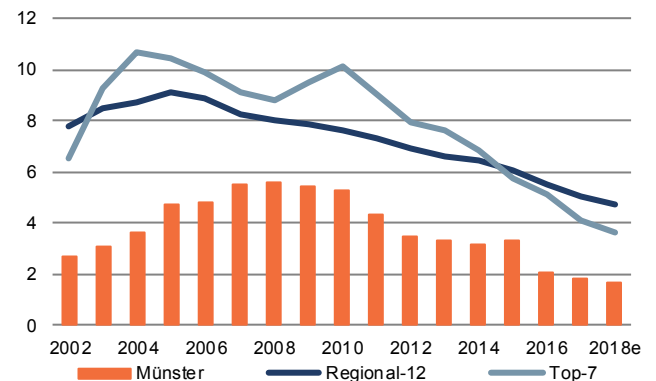
Office space in Münster

PRIME RENTS FOR OFFICE SPACE IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

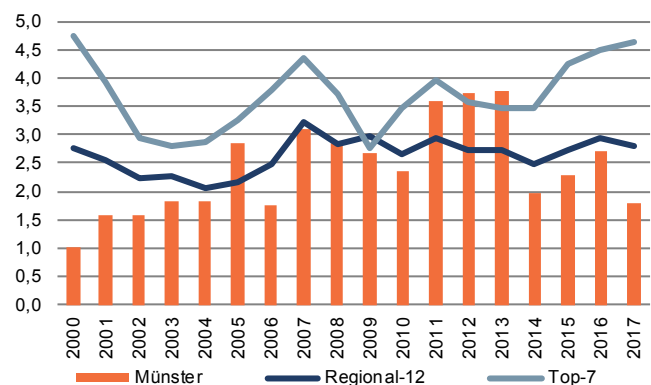
VACANCY RATE (%)



Source: BulwienGesa, DZ BANK AG forecasts

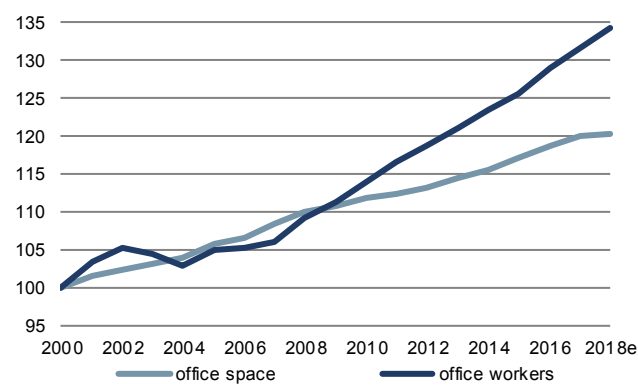
Main regional real estate markets in Germany | 2018

TAKE-UP AS % OF OFFICE SPACE



Source: BulwienGesa

TREND IN OFFICE SPACE AND EMPLOYMENT



Source: Feri, BulwienGesa

Index 2000 = 100

Münster is the most important regional office market with 2.2 million sqm, and it could definitely do with slightly more space since the fast rise in the number of office workers has clearly outstripped the increase in office space on offer. The vacancy rate fell below 2 per cent in 2017, making it difficult to rent larger interconnecting office space. In light of this, it does not come as any surprise that companies have to resort to developing space themselves if they have larger requirements. More recent examples include the Sparkassen-Campus, the IHK training centre, new premises for the University Hospital administration and a new building for the Landschaftsverband Westfalen-Lippe. In contrast, the actual rental market mostly consists of small spaces. The biggest deal in 2017 was for just 2,100 sqm; in these conditions, higher take-up figures cannot be expected. In reality, however, in the last ten years, at 2.8 per cent, the ratio of take-up to total office space was exactly in line with the average of the regional centres covered. At the same time, the annual take-up range fluctuates from 40,000 – as was the case in 2017 – to up to 80,000 sqm, depending on whether larger deals take place. High demand for space and the lack of availability are leading to an above-average rent level. Last year, prime rents reached EUR 14.40 per sqm and they are likely to rise further in 2018 in view of the shortage of available space. The already low vacancy rate is likely to fall further.

Medium-sized office market with high demand for space, but tight supply

OFFICE FORECASTS

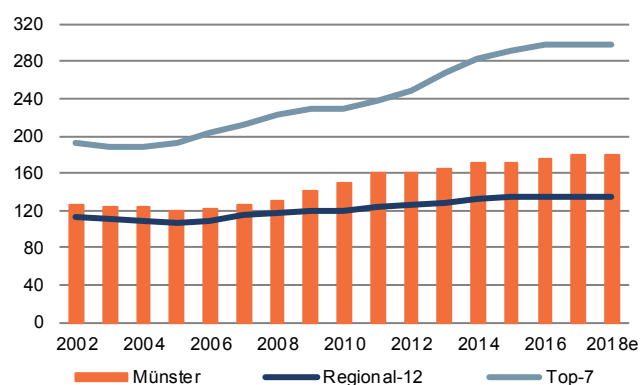
		2015	2016	2017	2018e
Demand					
GDP	% yoy	1.7	3.4	3.6	3.5
Per capita GDP	in EUR	48,980	49,757	50,990	52,358
No. of office workers	in '000	70.0	71.9	73.4	74.8
No. of office workers	% yoy	1.7	2.7	2.0	1.9
Supply					
Total office space	in sqm '000	2,170	2,202	2,224	2,230
Total office space	% yoy	1.3	1.4	1.0	0.3
Vacancy rate	%	3.3	2.1	1.8	1.7
Office rents					
Prime/secondary location	EUR/sqm	14.1 / 6.1	14.2 / 6.2	14.4 / 6.4	14.7 / 6.4
Prime/secondary location	% yoy	2.9 / 1.7	0.7 / 1.6	1.4 / 3.2	2.1 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

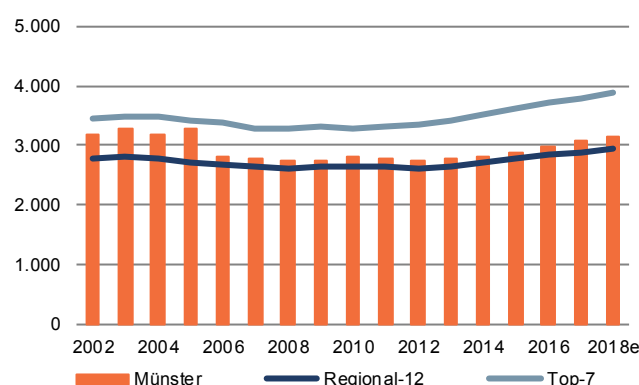
Retail space in Münster

PRIME RETAIL RENTS IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

RETAIL SALES IN EUR PER SQM



Source: Feri

Conditions for the retail sector in Münster are outstanding. There is a relatively large catchment area of over 800,000 inhabitants and moreover the population in the Westphalian city is growing much faster than average. At 107, purchasing power is also high in relation to other regional centres. Demand is also boosted by the many visitors to the city with around 1.3 million overnight stays every year. The city centre offers customers an attractive range of shops, with mass-market, high-street shopping on offer in the Ludgeristraße rounded off by more exclusive, family-run stores on the Prinzipalmarkt. Münster 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 prizewinning Hanse-Carré/Stubengasse project. The city centre's strength is illustrated by the fact that one third of total retail sales are generated there. The mix of positive location factors means high demand on the part of retailers. Given tight supply, this has pushed up prime rents to EUR 180 per sqm, an enormously high level in relation to the size of the city. The figure is a third higher than the average of the regional centres covered. Ten years ago, the rent differential was much smaller. Since then, prime rents in Münster have increased by over 40 per cent, whereas the regional centre average has risen by less than 20 per cent. For the moment, however, we do not expect any further increase, bearing in mind the high level already reached and a generally stagnating trend in rents.

Münster is one of the most expensive retail locations after the top 7 in view of outstanding conditions

RETAIL FORECASTS

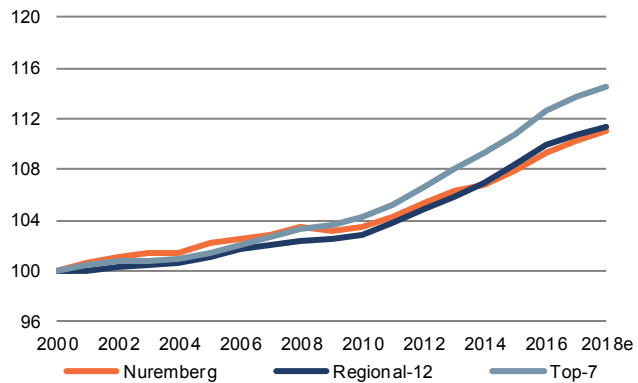
		2015	2016	2017	2018e
Demand					
Per cap. disposable income	EUR/month	1,877	1,901	1,937	1,974
Unemployment rate	%	5.8	5.7	5.4	5.3
Retail sales	EUR m/% yoy	1,805 / 4.3	1,869 / 3.5	1,935 / 3.5	1,999 / 3.3
Retail sales	EUR/sqm retail space	2,893	2,987	3,072	3,160
Supply					
Retail space	in sqm '000	624	626	630	632
Retail space	% yoy	1.8	0.3	0.7	0.4
Retail rent					
Prime/secondary location	EUR/sqm	170 / 10.0	175 / 10.0	180 / 10.5	180 / 10.5
Prime/secondary location	% yoy	0.0 / 0.0	2.9 / 0.0	2.9 / 5.0	0.0 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

NUREMBERG

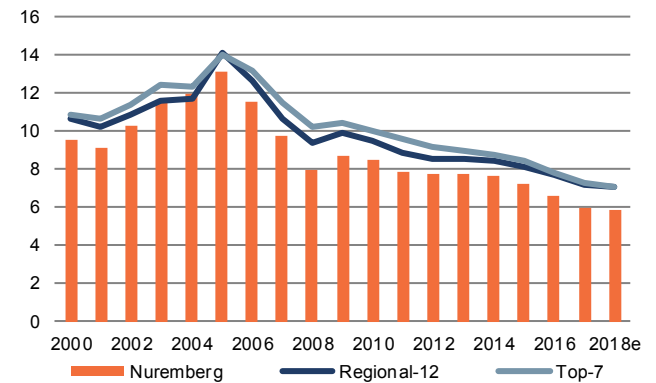
POPULATION GROWTH



Source: Feri

Index 2000 = 100

UNEMPLOYMENT RATE (%)



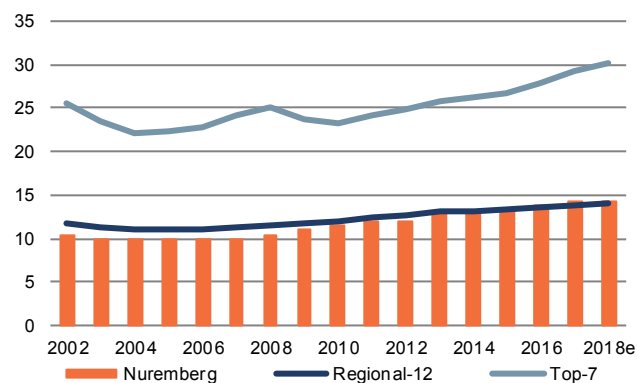
Source: BulwienGesa, DZ BANK AG forecasts

Together with the neighbouring towns of Fürth and Erlangen, Nuremberg forms an important economic region. It is the second largest city in Bavaria with slightly over half a million inhabitants and the economic and cultural centre of Franconia. The city is known around the world for its old imperial palace, Christmas market and toy fair. Its economy was dampened by the structural change in industry which began in the 1970s and was then also followed by major insolvencies and plant closures. However, their impact was strongly mitigated by successes on the road to becoming a service centre and the growing importance of the city as a university town with around 25,000 students: the unemployment rate has more than halved since 2005 – the figure was down to 5.6 per cent in November 2017. There has been a strong performance above all in the field of IT, logistics, high-tech as well as energy and medical technology. Tourism is also very important for the city with over 6,000 overnight stays per 1,000 inhabitants. The city is well served by transport links via the A3, A6 and A9 motorways and a number of high-speed train routes (ICE); it also has an international airport and a port on the Main-Danube Canal along with a major logistics centre. Nuremberg's importance as a seat of learning is set to increase even further: The Bavarian government has decided that Nuremberg is to get its very own university, and EUR 1bn has already been set aside for its construction. Although Nuremberg is already a university town, most of the University of Erlangen-Nuremberg is based in Erlangen.

Bavaria's second largest city is on a successful course after many setbacks

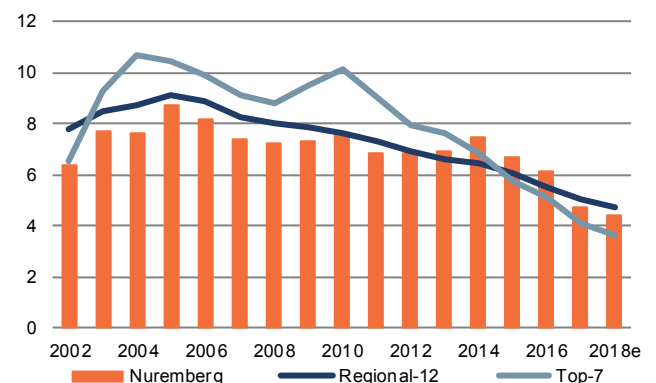
Office space in Nuremberg

PRIME RENTS FOR OFFICE SPACE IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

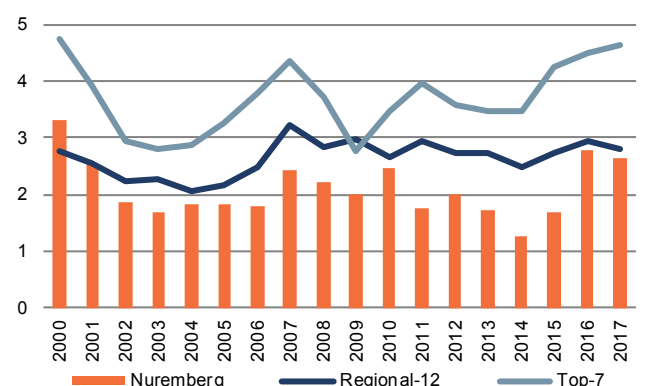
VACANCY RATE (%)



Source: BulwienGesa, DZ BANK AG forecasts

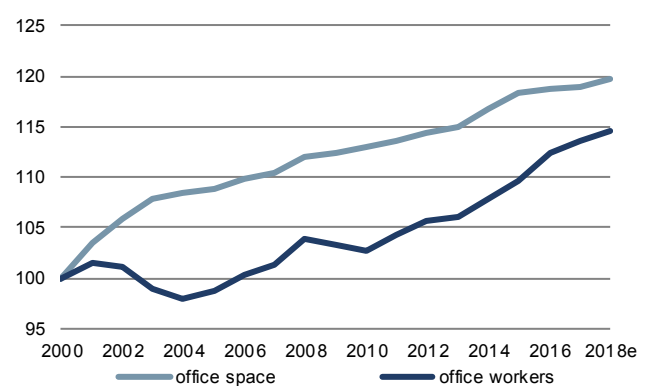
Main regional real estate markets in Germany | 2018

TAKE-UP AS % OF OFFICE SPACE



Source: BulwienGesa

TREND IN OFFICE SPACE AND EMPLOYMENT



Source: Feri, BulwienGesa

Index 2000 = 100

Nuremberg is the second largest office market behind Hannover after the top 7 in Germany. In spite of a sound economic trend, insolvencies and big bankruptcy cases have left their mark on the city: the number of office workers rose by 12 per cent in a ten-year period, i.e. one third slower than the average in the regional centres under consideration in this study. Nevertheless, there has been a marked reduction in the office vacancy rate in Nuremberg to under 5 per cent most recently. Tighter supply has led to a strong, aggregate increase of slightly over 40 per cent in prime rents in the last ten years, almost twice the level seen in the other regional centres. At EUR 14.20 per sqm, prime rents were slightly above average in 2017. Office space take-up in the last two years reached a high level, at 100,000 in 2016 and 95,000 in 2017, which was around one third above the ten-year mean. In 2016, this mostly reflected four major transactions amounting to a total of around 70,000 sqm – of which the new GfK headquarters alone accounted for 38,000 sqm. Last year, in contrast, the strong figure was far less a reflection of big deals; the Federal Ministry of Health accounted for the biggest transaction of 9,000 sqm. The office market has got off to a good start in 2018: the construction of the first of four office projects which will be in-filling near the Marien tunnel can begin after KPMG was signed up as the main tenant for around half of the 9,500 sqm which are to be built. We expect a further reduction in the vacancy rate and a moderate increase in the prime rents on the back of a manageable increase in new office space.

Second largest office market after the top 7

OFFICE FORECASTS

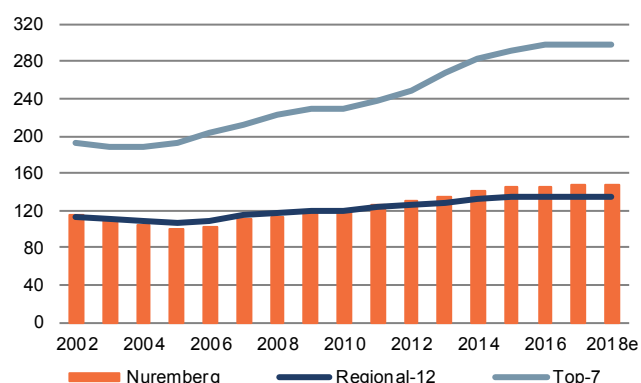
		2015	2016	2017	2018e
Demand					
GDP	% yoy	3.1	3.2	3.4	3.3
Per capita GDP	in EUR	48,586	49,478	50,705	52,034
No. of office workers	in '000	116.0	118.9	120.0	121.2
No. of office workers	% yoy	1.8	2.5	1.0	1.0
Supply					
Total office space	in sqm '000	3,592	3,604	3,610	3,630
Total office space	% yoy	1.5	0.3	0.2	0.6
Vacancy rate	%	6.7	6.1	4.7	4.4
Office rents					
Prime/secondary location	EUR/sqm	13.5 / 7.0	13.8 / 7.2	14.2 / 7.5	14.4 / 7.5
Prime/secondary location	% yoy	2.3 / 1.4	2.2 / 2.9	2.9 / 4.2	1.4 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

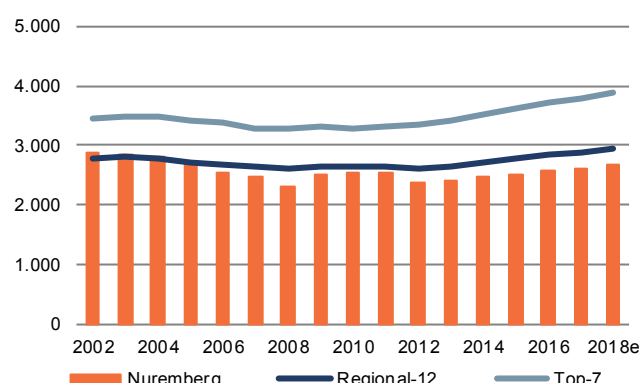
Retail space in Nuremberg

PRIME RETAIL RENTS IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

RETAIL SALES IN EUR PER SQM



Source: Feri

Nuremberg is the leading shopping location 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 135. In addition, at 104, the purchasing power figure is slightly above the German average and, moreover, bolstered by a large number of visitors to the city. Nuremberg makes it into ninth place among Germany's tourist hotspots with over 3 million overnight stays. Its beautiful old town with its attractive shopping promenade makes it an agreeable place in which to spend time. The Karolinenstraße scores highest in terms of footfall, number of chain stores and prime rents. One positive factor is the wide range of shops. Nurembergs only inner-city shopping centre City-Point is planned to be completely refurbished. A hotel is planned as an extension. Outside the city, there are the older Franken Centre and the modernised Mercado. There is a huge question mark hanging over the construction of a centre on the site of the former Quelle store, especially since the Erlangen-based property company Sontowski has now pulled out of the Sonae Sierra project. In the last ten years, high demand from retailers has led to an increase in the prime rents of around one third, i.e. twice as much as the regional centre average. In 2017, prime rents rose by as much as EUR 2 to EUR 147 per sqm. It is therefore just under 10 per cent higher than the reference figure. The situation is likely to remain unchanged this year. Current projects include plans to replace the Wöhrli-Sporthauses on Ludwigsplatz with a new building and an EDEKA convenience store on the site of the former Kaufhof branch on Aufseßplatz.

Top shopping location with large catchment area and large visitor numbers

RETAIL FORECASTS

		2015	2016	2017	2018e
Demand					
Per cap. disposable income	EUR/month	1,845	1,865	1,893	1,919
Unemployment rate	%	7.2	6.6	6.0	5.9
Retail sales	EUR m/% yoy	3,287 / 3.2	3,378 / 2.8	3,470 / 2.7	3,562 / 2.6
Retail sales	EUR/sqm retail space	2,504	2,572	2,619	2,674
Supply					
Retail space	in sqm '000	1,313	1,313	1,325	1,332
Retail space	% yoy	1.8	0.0	0.9	0.5
Retail rent					
Prime/secondary location	EUR/sqm	145 / 15.0	145 / 15.0	147 / 15.0	147 / 15.0
Prime/secondary location	% yoy	3.6 / 0.0	0.0 / 0.0	1.4 / 0.0	0.0 / 0.0

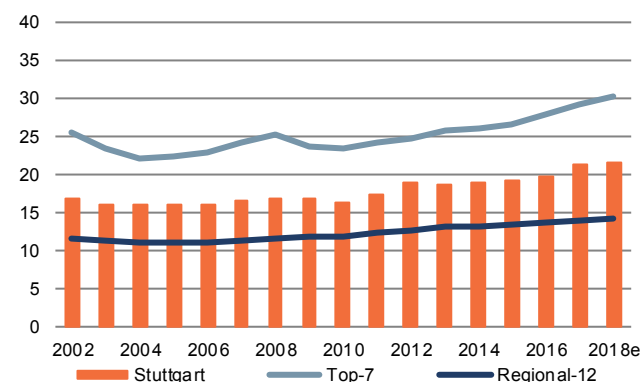
Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

STUTTGART

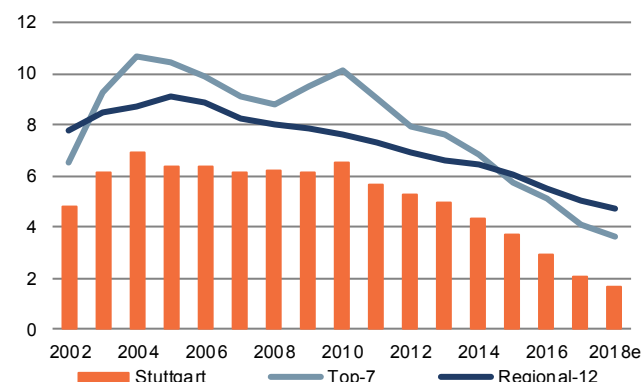
Office space

PRIME RENTS FOR OFFICE SPACE IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

VACANCY RATE (%)



Source: BulwienGesa, DZ BANK AG forecasts

Last year, rents for prime office space in Stuttgart passed the EUR 20 per sqm mark for the first time – indeed by a significant margin – and not before time. At EUR 21.40, prime rents managed a high, one-digit percentage increase, as in Berlin and Frankfurt. Since there is hardly any spare capacity left in the office market, the sharp rise is likely to reflect a greater willingness to pay on the part of tenants. Indeed, given a vacancy rate of only just above 2 per cent or 170,000 sqm of vacant office space, the choice for potential tenants is likely to be very limited. This is especially true if demand is for a large amount of adjoining space. For this reason, it is hardly surprising that the two big transactions of over 10,000 sqm – the tenants are Daimler and CMS Hasche Sigle – involve newly developed offices. However, in spite of the sharp rise in rent, there was no exceptionally high take-up in 2017, even though the figure of 260,000 sqm is not a bad result, just rather average. The fact that it was not more is likely to be a reflection above all of the scarcity of available space. Since there is no prospect of any major completions this year, supply is likely to be even tighter, if anything, rather than increase. Consequently, the gap between prime rents and the figure of EUR 20 is likely to widen even further. After a big jump last year, however, we expect a much smaller rise.

Tight supply limiting take-up and has pushed prime rents above the EUR 20/sqm mark for the first time

OFFICE FORECASTS

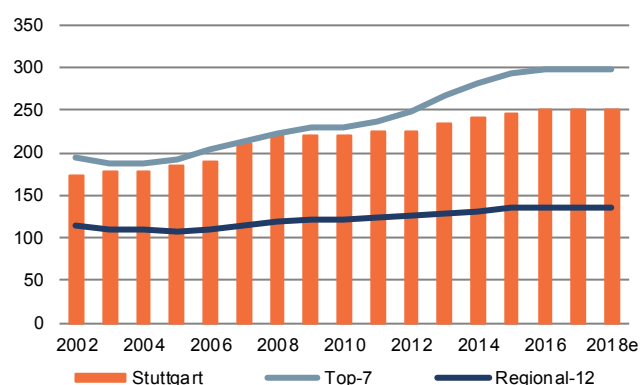
		2015	2016	2017	2018e
Demand					
GDP	% yoy	9.0	3.2	3.4	3.3
Per capita GDP	in EUR	74,892	76,010	77,756	79,718
No. of office workers	in '000	194.0	195.7	199.0	202.0
No. of office workers	% yoy	2.6	0.9	1.7	1.5
Supply					
Total office space	in sqm '000	7,603	7,682	7,785	7,840
Total office space	% yoy	0.8	1.0	1.3	0.7
Vacancy rate	%	3.7	2.9	2.1	1.7
Office rents					
Prime/secondary location	EUR/sqm	19.3 / 8.7	19.7 / 8.8	21.4 / 9.1	21.7 / 9.1
Prime/secondary location	% yoy	1.6 / 0.0	2.1 / 1.1	8.6 / 3.4	1.5 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

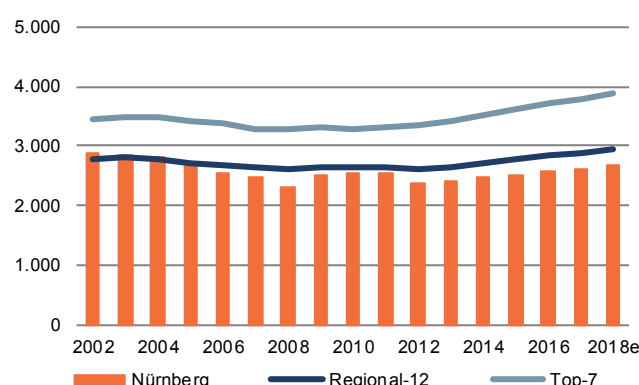
Retail space in Stuttgart

PRIME RETAIL RENTS IN EUR PER SQM



Source: BulwienGesa, DZ BANK AG forecasts

RETAIL SALES IN EUR PER SQM



Source: Feri

The retail sector in Stuttgart benefits from a catchment area of 2.7 million inhabitants with a strong economy, leading to fairly strong scores in terms of purchasing power (113) and centrality (122). Although visitor numbers do not reach top figures, at almost 4 million overnight stays, additional demand from tourism is not insignificant. The city's strength as a location has also been boosted by the development of several large inner-city retail projects, which has led to an increase in retail space in the city of over 20% at a stroke: in the autumn of 2014, the two inner-city shopping centres, MILANEO and Gerber, which have a combined retail space of around 60,000 sqm opened almost simultaneously. In spite of this, prime rents rose slightly to EUR 250 by 2016: after all, the new shopping centres have not only increased retail space but also the city's attraction. Last year, however, prime rents remained stable, as they did in most locations covered in this report. However, this is likely to have been helped by the Dorotheen Quartier which opened in the spring of 2017, adding a further 10,000 sqm of shopping space. Fears that a marked increase in retail space in the city would prove too much have turned out to be unfounded. The Königstraße has remained the dominant shopping street in Stuttgart. The opening of a branch of the fashion chain Saks Off 5th along with a second branch of Primark in the former Karstadt building are also likely to lead to an increase in the number of customers coming to the city. However, we do not expect any further rise in prime rents in 2018.

The city has easily and quickly absorbed the increase in retail space from three new shopping centres

RETAIL FORECASTS

		2015	2016	2017	2018e
Demand					
Per cap. disposable income	EUR/month	2,090	2,112	2,147	2,180
Unemployment rate	%	5.5	5.3	4.7	4.5
Retail sales	EUR m/% yoy	3,531 / 3.5	3,639 / 3.1	3,749 / 3.0	3,857 / 2.9
Retail sales	EUR/sqm retail space	3,330	3,420	3,507	3,585
Supply					
Retail space	in sqm '000	1,060	1,064	1,069	1,076
Retail space	% yoy	6.7	0.4	0.4	0.7
Retail rent					
Prime/secondary location	EUR/sqm	245 / 14.5	250 / 15.0	250 / 16.0	250 / 16.0
Prime/secondary location	% yoy	2.1 / 3.6	2.0 / 3.4	0.0 / 6.7	0.0 / 0.0

Source: Feri, BulwienGesa, DZ BANK AG forecasts

yoy = year-on-year

Main regional real estate markets in Germany | 2018

LOCATIONS AT A GLANCE

OFFICE SPACE

	Total Office Space 2017 Data			Prime rent (EUR/sqm)			Change in prime rent (% yoy)			Vacancy Rate (%)		
	in 1,000 sqm	2007 to 2017 (%)	Per Office Worker in sqm	2016	2017	2018e	2016	2017	2018e	2016	2017	2018e
Augsburg	1,394	6.1	25.3	12.5	12.8	13.0	2.5	2.4	1.6	6.1	5.6	5.4
Bremen	2,636	10.6	25.0	12.5	12.8	13.0	0.0	2.4	1.6	4.5	4.2	4.0
Darmstadt	1,613	12.1	32.1	13.1	13.1	13.5	0.8	0.0	3.1	4.6	2.8	2.5
Dresden	2,635	-0.7	25.0	12.6	12.8	13.0	2.4	1.6	1.6	8.4	7.4	6.7
Essen	3,189	15.0	31.7	14.5	14.5	14.5	3.6	0.0	0.0	5.6	7.0	6.5
Hannover	4,600	7.0	32.7	15.0	15.3	15.6	1.4	2.0	2.0	4.6	3.7	3.5
Karlsruhe	2,395	7.2	27.9	13.3	13.4	13.7	2.3	0.8	2.2	3.6	3.5	3.3
Leipzig	2,723	-0.7	27.7	13.0	13.0	13.2	0.8	0.0	1.5	11.4	10.3	9.6
Mainz	1,603	6.7	30.5	13.0	13.5	13.7	3.2	3.8	1.5	3.5	3.2	3.1
Mannheim	2,070	10.1	28.1	15.2	15.4	15.6	1.3	1.3	1.3	4.4	4.8	4.9
Münster	2,224	10.6	30.3	14.2	14.4	14.7	0.7	1.4	2.1	2.1	1.8	1.7
Nuremberg	3,610	7.7	30.1	13.8	14.2	14.4	2.2	2.9	1.4	6.1	4.7	4.4
Regional centre mean	2,558	7.4	28.9	13.7	13.9	14.1	1.8	1.6	1.6	5.5	5.0	4.7
<i>Total</i>	30,691											
Berlin	19,026	5.0	32.6	28.0	30.0	31.2	16.7	7.1	4.0	3.0	2.4	2.0
Cologne	7,657	7.6	31.1	21.0	21.0	21.4	0.0	0.0	2.0	5.6	4.0	3.5
Düsseldorf	7,597	8.9	36.2	24.5	24.5	25.0	2.1	0.0	2.0	8.3	7.1	6.7
Frankfurt	10,272	4.8	34.9	35.5	38.5	39.5	0.0	8.5	2.6	10.7	9.2	8.4
Hamburg	13,733	8.7	31.7	26.0	26.5	27.3	4.0	1.9	3.0	5.3	4.4	3.9
Munich	13,759	5.6	32.0	34.7	36.0	37.3	1.8	3.7	3.5	2.7	1.9	1.7
Stuttgart	7,785	6.8	39.1	19.7	21.4	21.7	2.1	8.6	1.5	2.9	2.1	1.7
Top location mean	11,404	6.5	33.3	28.0	29.3	30.2	4.9	4.7	3.0	5.1	4.1	3.7
<i>Total</i>	79,830											

Source: BulwienGesa, DZ BANK AG forecasts

Means are space-weighted. **Prime rents** indicated by BulwienGesa represents the mean of the three top 3 to 4 per cent of the rental market, which means that the prime rents given is not the same as the absolute top rent. For this reason, the higher rent figures for individual locations, some of which are quoted in alternative market reports, are fundamentally not contradictory.

Main regional real estate markets in Germany | 2018

RETAIL SPACE

	Total Retail Space 2017 Data			Rent in Prime location (EUR/sqm)			Change in prime rent (% yoy)			Retail Sales (% yoy)		
	in 1,000 sqm	2007 to 2017 (%)	Per capita in sqm	2016	2017	2018e	2016	2017	2018e	2016	2017	2018e
Augsburg	946	12.9	3.3	115	115	115	0.0	0.0	0.0	2.5	2.3	2.0
Bremen	1,568	27.8	2.8	130	130	130	0.0	0.0	0.0	3.5	3.6	3.5
Darmstadt	394	10.0	2.5	98	100	99	-2.0	2.0	-1.0	3.1	2.8	2.4
Dresden	1,068	30.1	1.9	110	110	110	0.0	0.0	0.0	2.9	3.0	2.9
Essen	867	18.3	1.5	108	105	105	-1.8	-2.8	0.0	2.6	2.7	2.6
Hannover	950	13.5	1.8	200	203	203	0.0	1.5	0.0	3.0	3.1	2.7
Karlsruhe	540	10.0	1.8	110	106	107	0.0	-3.6	1.3	3.0	2.8	2.6
Leipzig	710	28.7	1.2	130	127	127	0.0	-2.3	0.0	3.2	3.1	3.3
Mainz	508	20.4	2.4	114	114	114	0.0	0.0	0.0	4.0	3.9	3.6
Mannheim	828	19.0	2.7	153	153	153	2.0	0.0	0.0	3.1	3.2	2.8
Münster	630	25.8	2.0	175	180	180	2.9	2.9	0.0	3.5	3.5	3.3
Nuremberg	1,325	21.4	2.6	145	147	147	0.0	1.4	0.0	2.8	2.7	2.6
Regional centre mean	861	20.6	2.1	134.7	134.9	134.8	0.2	0.1	-0.1	3.0	3.0	2.8
<i>Total</i>	<i>10,335</i>											
Berlin	6,495	19.8	1.8	310	310	310	3.3	0.0	0.0	2.8	2.9	2.8
Cologne	1,409	5.8	1.3	250	255	255	0.0	2.0	0.0	3.4	3.3	3.2
Düsseldorf	1,244	36.7	2.0	275	280	280	1.9	1.8	0.0	3.5	3.3	3.4
Frankfurt	1,556	27.0	2.1	300	300	300	0.0	0.0	0.0	3.3	3.4	3.1
Hamburg	2,998	17.0	1.6	285	285	285	0.0	0.0	0.0	3.9	4.0	3.8
Munich	2,109	24.6	1.4	345	345	345	1.5	0.0	0.0	3.8	3.9	3.6
Stuttgart	1,069	14.7	1.7	250	250	250	2.0	0.0	0.0	3.1	3.0	2.9
Top location mean	2,411	19.9	1.7	297.5	298.4	298.5	1.8	0.3	0.0	3.4	3.4	3.3
<i>Total</i>	<i>16,879</i>											

Source: BulwienGesa, Feri, DZ BANK AG forecasts

Means are space-weighted. **Prime rents** indicated by BulwienGesa represents the mean of the three top 3 to 4 per cent of the rental market, which means that the prime rents given is not the same as the absolute top rent. For this reason, the higher rent figures for individual locations, some of which are quoted in alternative market reports, are fundamentally not contradictory.

Main regional real estate markets in Germany | 2018

STRUCTURAL DATA 2017

	Inhabitants in 1,000	Inhabitants 2007-2017 (%)	GDP (EUR m)	Per Capita GDP (EUR)	Per Capita Dispos- able Income (EUR/Month)	Unemployment Rate (%)
Augsburg	290	9.6	12,792	44,048	1,700	5.4
Bremen	560	3.2	26,040	46,478	1,896	9.7
Darmstadt	158	14.5	9,867	62,268	1,907	5.9
Dresden	548	11.0	19,128	34,900	1,647	6.6
Essen	587	2.1	22,830	38,901	1,734	11.4
Hannover	534	6.9	32,057	60,028	1,986	8.6
Karlsruhe	307	9.2	18,024	58,779	1,973	4.5
Leipzig	573	17.8	18,382	32,084	1,518	7.7
Mainz	215	8.8	10,826	50,418	1,871	6.1
Mannheim	306	7.2	17,947	58,627	1,786	5.4
Münster	314	14.7	15,993	50,990	1,937	5.4
Nuremberg	515	7.2	26,123	50,705	1,893	6.0
Regional centre mean	409	8.6	19,167	46,870	1,802	7.2
<i>Total</i>	<i>4,907</i>		<i>230,009</i>			
Berlin	3,591	11.2	118,313	32,950	1,682	9.0
Cologne	1,085	9.9	59,166	54,538	1,859	8.4
Düsseldorf	614	6.8	46,010	74,904	2,189	7.4
Frankfurt	739	15.4	63,372	85,794	1,898	5.9
Hamburg	1,817	8.1	104,929	57,758	2,083	6.8
Munich	1,465	13.6	101,651	69,374	2,414	4.2
Stuttgart	633	10.4	49,232	77,756	2,147	4.7
Top location mean	1,421	10.8	77,525	54,575	1,959	7.3
<i>Total</i>	<i>9,944</i>		<i>542,673</i>			

Source: Feri, BA, own calculations

Means are inhabitant and space-weighted

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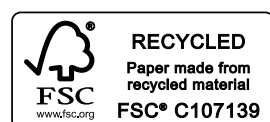
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