

A research publication by DZ HYP | October 2023

REAL ESTATE MARKET GERMANY 2023 | 2024

Retail, office and residential: a changing environment, and the implications across asset classes

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PREFACE

Dear readers,

The real estate market was flourishing until early 2022, but the overall economic weakness in Germany then started to take its toll. Rising interest rates on the one side and structural burdens such as bureaucracy, demographic trends and energy prices on the other added to sector-specific worries. With more people working from home and shopping online, demand for real estate space has shifted. To enhance energy efficiency in existing buildings, enormous investments are required. But the real estate market also holds potential.

This melange of challenges and opportunities is reflected in the retail, office and residential real estate segments, the objects of the present study. Our real estate market reports have been creating transparency for years. This sixteenth edition of our study focuses on the developments in Germany's top locations – Hamburg, Berlin, Dusseldorf, Cologne, Frankfurt, Stuttgart and Munich.

The German real estate market is diverse, a fact that becomes particularly obvious when looking at the road that rents have taken. As a lack of housing options meets high demand, amplified by a strong increase in population growth driven by migration, we expect residential rents to increase significantly between 2023 and 2024, by five to six per cent per year. And with modern office space in continuous demand, the office asset class should also keep growing, albeit at a slower pace than to date considering the economic slowdown. The retail segment again comes in last, but at least rents have stabilised following a year-long decline. Demand for city locations has picked up. Still, there is no point in ignoring the visible vacancies caused by retailers closing their outlets.

This study includes an excursus examining demographics in the real estate markets. An ageing society and high levels of migration have had only moderate implications so far, but this will change in the near future. The effects of an ageing population will be felt not only in the residential real estate market, but also in demand for office and retail space. In this context, migration plays an important role.

The German real estate market report 2023/2024 is of course also available in German. All current reports can be downloaded from our website (on www.dzhyp.de/en/about-us/market-research/); feel free to contact us if you prefer a hard copy.

Yours sincerely,

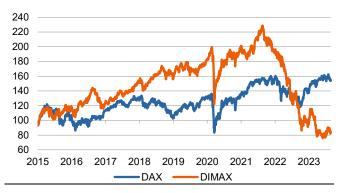
DZ HYP

October 2023

SUMMARY

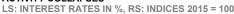
- The situation is serious. Germany is bringing up the rear in the Eurozone in terms of macroeconomic growth. The prospects for the German economy are also gloomy. Other countries are also suffering from the sharp hike in interest rates, but have managed to avoid recession. Structural obstacles such as bureaucracy, demographics, energy prices and infrastructural deficiencies are braking the economy. There is virtually no investment, orders in important sectors such as automobiles, construction and chemicals are conspicuous by their absence, Germany's main trading partner China has its own problems, and new technologies such as Artificial Intelligence are not playing any significant role.
- These factors are applying the brakes to a property market which was still flourishing at the beginning of 2022. Until then the market had been supported by low interest rates. After hikes of more than 4 percentage points in key rates, they have however not only imposed a burden but have also broadened the investment spectrum for investors. E-commerce and work from home are also leading to a shift in real estate needs. As one of the main generators of greenhouse gases, the construction sector is also under pressure to invest heavily in property renovation. Falling valuations and the downward trend in real estate share prices are the consequence. Some large real estate developers have already been obliged to file for bankruptcy, while new build projects have been halted.
- However, as well as the many challenges, the real estate market still offers potential. Properties are in demand for work, product sales and housing purposes. This is highlighted in the 16th edition of our market report on the leading German property locations, the seven largest cities of Berlin, Cologne, Düsseldorf, Frankfurt, Hamburg, Munich and Stuttgart. As in previous issues of our report, we focus on the office, retail and residential market segments.
- Growth in prime rents in the office market almost reached double digits in the first half of 2023, although vacancy rates continue to gradually increase. The reason for this is the high demand for modern office space, which is in very short supply. The downward rent trend in the retail segment which had been under way has come to a halt. Volumes of pedestrians and tourists have also increased again to positive levels. Demand for city centre locations has improved, although vacant properties remain visible as a result of branch closures. Rent growth in the residential market has accelerated significantly. Very few apartments are now available to meet high demand for housing generated by strong, immigration-driven demographic growth.

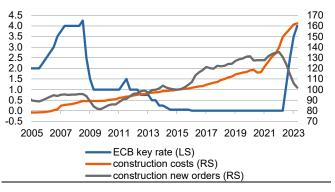
REAL ESTATE STOCKS FALL SHARPLY AFTER A PROLONGED BOOM STOCK INDICES 2015 = 100



Source: Deutsche Börse, Solactive DIMAX: Index of 12 real estate stocks Per 5 September 2023 16th edition of our market report highlights the many challenges for the real estate market, as well as the potential

BUILDING COSTS AND INTEREST RATES UP, CONSTRUCTION ACTIVITY COLLAPSES



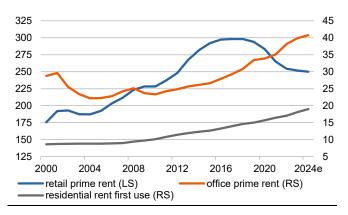


Source: Destatis, EZB

Overview of segment-specific prospects

Rents in the retail, office and residential market segments have shown a heterogeneous trend. Between the new millennium and 2022 prime retail rents increased by around 45 per cent, outperforming office rents which rose by just over 30 per cent. Initial residential rents have even doubled. However, retail rents fell sharply from 2019 to 2022, while office and residential rents maintained their upward trend of previous years. This situation is likely to remain relatively unchanged in the forecasting period up to 2024. In contrast to 2022, we expect residential rents to record the steepest increase, growing annually by 5 to 6 per cent, driven by high demand for housing and a supply shortage. Modern office space is also in demand. Braked by the weak economy, we nevertheless expect slightly slower growth. The retail sector continues to lag behind, but rents here should nevertheless stabilise at current levels.

DIVERGING RENT TRENDS IN THE THREE MARKET SEGMENTS RENTS IN EUR PER M²



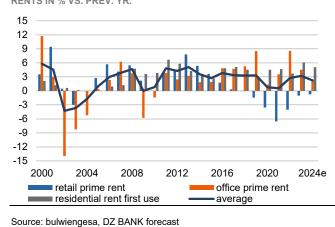


Office and residential rents to

still lags behind, but stabilises

increase further up to 2024, retail





Source: bulwiengesa, DZ BANK forecast

There is no end to the pain in the retail sector. After two years of the pandemic, a recovery is being hampered by high inflation. Even the crisis-resistant local supply sector is suffering from the decline in household purchasing power. After adjusting for inflation, total retail sales in the first half of 2023 were down by 5 per cent yearon-year. Food and mail order contracted even more sharply. Conversely, fashion retail reported strong real growth of more than 7 per cent after a prolonged slack period, albeit starting from a low level. The luxury segment shows a particularly strong performance. Weak sales are being compounded by other negative factors such as higher costs, whether in the form of indexed rents, high energy prices or higher wages. Insolvencies and branch closures in the retail sector are therefore continuing. There is also a growing staff shortage. Funds for future investment - inter alia in digitalisation - are also often in short supply. A return to positive levels of footfall in shopping streets is good news, city tourism has recovered and population growth has resumed. High wage settlements are also having a beneficial impact on purchasing power. Below the line, city centre retail space is in demand, although overall demand is falling.

Average prime rents in the top retail locations reached around EUR 254 per m^2 in mid-2023. This represented a 15 per cent decline on their peak levels of mid-2017. We expect a largely stable trend up to 2024.

Retail:

Positive signs for city centre retail after e-commerce and Covid, but inflation and high costs remain a problem

Retail rents stop falling



Intensified by the mild recession in the German economy, office space rental weakened considerably in the first half of 2023. The difficult economic environment, weak exports and cost pressure as a result of higher energy prices and strong wage growth suggest that companies are fairly reluctant to enter into expensive rental agreements. The office market should pick up again when the economy returns to growth. However, Germany is bringing up the rear among the European economies in terms of growth, hampered by expensive energy and bureaucracy. Infrastructural deficiencies are also obvious. Lower demand for office accommodation as a result of homeworking is also having a negative impact on rental business. Most in demand is centrally located, modern space in sustainable buildings which lend themselves to hybrid working, but which are in very short supply. Unlike the situation in the past, prime rents are therefore increasing – despite growth in vacancy rates.

Growth in prime rents, which came to a halt during Covid, picked up again strongly in 2022. In mid-2023, the average prime rent climbed to EUR 39.20 per m². Annual rental growth should be in the region of 3 to 5 per cent up to 2024. Vacancy rates continue to increase for less popular space.

The residential markets in the top locations are under severe pressure. There is virtually no available supply of residential properties to meet high demand which increased further in 2022 due to high immigration. A large number of new building projects have also been halted by the hike in construction and financing costs. Although a large volume of apartments from projects under construction will still come onto the market this year, the number of completions is likely to fall sharply from 2024. Housing demand triggered by immigration - often concentrated on large cities - is also likely to remain strong. Property management companies are also being obliged to absorb the negative effects of significantly more expensive follow-on financing and high investment in their housing stock, leaving virtually no available funds for new construction. There is no sign as yet of a solution to the new build problem.

As a result of temporarily weaker immigration from 2017, the momentum for rents slowed. However, residential rents have been rising again rapidly since 2022. In mid-2023 average initial rents increased to EUR 18.15 per m², and the growth rate accelerated to 7 per cent. We expect rent growth to be only marginally lower up to 2024, at 5 to 6 per cent annually.

OVERVIEW OF RENT TRENDS IN THE TOP LOCATIONS

	Prime retail rents vs. prev. yr. in %				Prime office rents vs. prev. yr. in %			Residential initial rents vs. prev. yr. in %		
	2022	2023e	2024e	2022	2023e	2024e	2022	2023e	2024e	
Berlin	-5.6	-1	-1	7.4	2-4	2-3	6.2	7-8	5-6	
Cologne	-4.4	-1	-1	10.0	>10	1-2	4.3	6-7	5-6	
Düsseldorf	-1.8	0	0	22.6	6-8	2-3	2.9	6.5-7.5	4-5	
Frankfurt	-1.8	-1	-1	4.7	2-3	2-3	1.2	3.5-4.5	3.5-4.5	
Hamburg	-4.0	-1	-1	5.3	3-4	2-3	3.2	5-6	4.5-5.5	
Munich	-1.6	-1	-1	7.2	3-4	2-3	1.0	4-5	4-5	
Stuttgart	-4.9	0	0	16.7	5-6	2-3	1.8	5.5-6.5	5-6	
Average for top locations	-4.0	-1.0	-0.7	8.6	4.5	2.3	3.7	6.1	5.1	

Source: bulwiengesa, DZ BANK Research forecast

Office:

Despite growth in vacancy rates, prime rents are up sharply, but the recession is slowing the pace

Office rents could increase by 3 to 5 per cent annually up to 2024

Residential: Housing markets in top locations increasingly impacted by housing shortage

Initial rents could increase by 5 to 6 per cent annually up to 2024

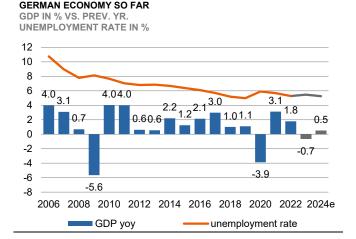
ECONOMIC CONDITIONS IN GERMANY

The recession in the German economy narrowly came to an end with stagnation in the second quarter. Macroeconomic growth remained at the level of the first quarter. Previously it had contracted for two successive quarters. Although, private consumer spending stabilised after declining in previous quarters, the overall prospects for the economy in the second half remain gloomy.

Since May at the latest, the broad-based improvement in sentiment has ground to a halt. Key indicators such as the ifo Business Climate Index for Germany, ZEW economic expectations and the S&P Global survey of purchasing managers are now signalling an economic slowdown again. High interest rates and only a slow decline in inflation are having a braking effect, with no economic impetus from exports. After the end of the strict zero Covid policy in China, the anticipated impetus for the German export sector failed to materialise. The US economy is also heading for a period of weakness. The second half of 2023 will therefore be difficult for the German economy.

We expect GDP to decline by 0.7% this year. An economic recovery is not expected in the coming quarters. In fact, the phase of weakness is likely to persist, with quarterly results expected to decline. In the absence of any momentum for the economy at the beginning of next year, economic growth looks set to be weak at half a per cent.

The heavyweights of the German economy are facing particularly strong headwinds. The electric vehicles produced by the automotive industry are not being well received by customers in the important Chinese market. Similar to other energy-intensive sectors, the chemicals industry is suffering from high energy prices. And higher financing costs are not the only reason for the lack of orders in the construction sector. Construction has become uneconomic due to a maze of regulation, stricter energy efficiency standards and high taxes.



ROBUST LABOUR MARKET VIRTUALLY UNSCATHED BY WEAK

Source: Eurostat, DZ BANK forecast

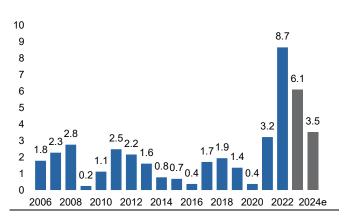
GDP stagnation in Q2 not the end of economic weakness

Deterioration in broad-based key indicators signals recession

No sign of recovery: Contraction in GDP in 2023 will be followed by weak growth in 2024

Key sectors of German economy struggling with negative factors

CONSUMER PRICE HIKE EASING, BUT LIKELY TO REMAIN ABOVE 2% TARGET LEVEL FOR LONGER CONSUMER PRICES (HICP) IN % VS. PREV. YR.



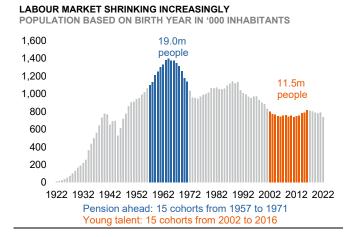
Source: Eurostat, DZ BANK forecast

DEMOGRAPHICS AND REAL ESTATE MARKET

Immigration the greatest element of uncertainty in demographic forecasts

As they embark on their careers, many young Generation Z graduates - who are in demand in the labour market - have preconceptions about wages and working hours which cause raised eyebrows among employers. In contrast, despite achieving good academic grades, baby boomers born in the era of high annual birth rates who are now approaching retirement often had to apply for a large number of jobs to gain a foothold on the career ladder as trainees. The selection criteria previously used by human resources departments, such as a period of study abroad or good academic results, have now been superseded and employers are happy to receive any applications at all. The shortage of skilled workers has broadened into a general labour shortage which affects virtually every sector.

Demographic imbalances pose as great a challenge to our society as climate change. Both trends have been evident for many years, but the necessary adjustments have been addressed at best half-heartedly because of a feared voter backlash. Recent opposition to the German "heating law" shows how difficult it will be to implement the necessary measures. Raising the retirement age, for example to 70 instead of 67, would presumably have little effect. However, action cannot be delayed any longer due to extreme weather conditions, problems in the social security system and the labour shortage. At the same time, the labour market remains fairly buoyant, with most baby boomers born from the mid-1950s still economically active.



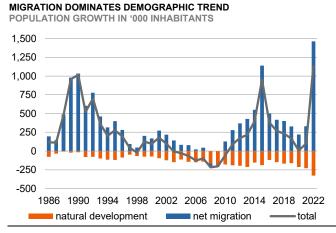
Source: Destatis

For this reason, the consequences for the property market are still moderate. However, this will change in the years ahead when baby boomers born in the 1960s first retire and then some years later become very elderly. However, the ageing population will not only have an impact on housing demand, but also on the need for office accommodation and sales space. While the number of older people and by association, demand for care can be gauged from the current population, immigration will also play a key role in relation to overall housing demand, office employment and retail footfall.

However, future population estimates carry a high degree of uncertainty. In contrast to earlier forecasts, the number of people living in Germany has not fallen overall, but has grown significantly in the last ten years by around 4 million

Demographics has far-reaching consequences – as reflected in current labour market trend

Public opposition hampers early adjustment





Impact of ageing population and immigration on property market still moderate

German demographic trend anything but steady

to recently 84.4 million. The annual rate of fluctuation is thus considerable. In 2008, the population was still contracting by more than 200,000 people while it grew by 1.1 million in 2022.

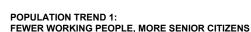
What lies ahead in terms of the future demographic trend in Germany? Given the long forecasting period, varying assumptions can easily produce widely diverging results. To obtain a better overview, the two charts below focus on the moderate variant (G2-L2-W2) of the 15th coordinated population projection produced by the German Federal Statistical Office based on birth rates, life expectancy and migration. They show the population of Germany remaining largely stable up to 2050, while the age-based population structure shows considerable variations.

It is interesting that the three age groups 0 to 20 years, 21 to 34, and 35 to 49 essentially remain stable. Conversely, the 50 to 65 age group of baby boomers is contracting as people move into higher age cohorts. Up to 2035, the number of younger senior citizens (66 to 79 years) will grow particularly; in the next stage from 2040, the number of very elderly people will increase sharply.

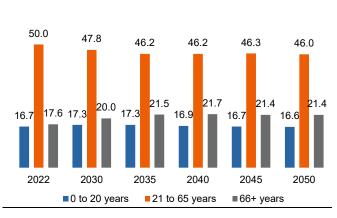
- By 2035, the number of people of working age, defined here as the 21 to 65 age group, will decline by 4 million to 46 million people. Under constant conditions relating to the retirement age and part-time working, the potential labour force would contract sharply. In addition to a growing labour shortage and lower social security contributions, macroeconomic growth could also suffer as a result.
- In parallel, the number of younger, and thus active older people will increase sharply. This could have a positive impact on demand for leisure activities such as travel and culture.
- From 2040, the number of very elderly people will increase visibly. The number of people over 80 will increase by half from currently 6 million to 9 million by 2050. They will account for a larger proportion of the population, up from 7% to 11%. Demand for leisure activities is likely to fall, while care needs will increase significantly.

"Moderate variant" based on population remaining largely stable

Baby boomers will retire up to 2035, number of very elderly people will rise sharply from 2040



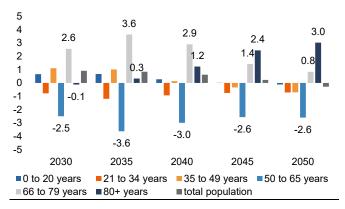
IN MILLION PEOPLE. BASED ON AGE GROUPS



Source: Destatis, DZ BANK

POPULATION TREND 2: UP TO 2035 MORE "YOUNG" SENIOR CITIZENS, THEREAFTER MORE VERY ELDERLY PEOPLE





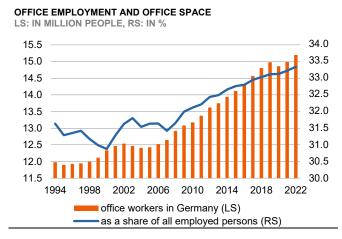
Source: Destatis, DZ BANK

Office market: Labour potential and homeworking

Office employment is a key factor in the demand for office space which increased sharply in previous years. The main contributory factors here have been the growing importance of office work, in conjunction with strong employment growth. However, demand for office space is now likely to fall sharply again. In addition to the currently widespread practice of working from home, an age-related contraction in the potential labour force could also have an impact here. The key word here is "could", since Germany certainly has reserves which may mitigate to a significant degree the unavoidable effects of an ageing population on the labour market.

One possible solution would be to integrate the currently around 2.5 million unemployed people more successfully into the labour market. The option of retiring early at 63 with a full pension could also be removed and pensionable age could be raised. It will be virtually impossible to avoid a higher retirement age if the ratio of pensioners and workers paying contributions is to be stabilised. Another option would be for part-time workers to work longer hours. This would mainly affect women, since few men work part-time. More than two thirds of mothers work parttime, as do around one third of childless women. The fact that women's labour force participation rate (73 per cent in the 15 to 64 age group) is around 8 percentage points lower than men's could also represent a labour reserve. The relatively low participation rate of childless men – at 75 per cent, well below the figure of 91 per cent among fathers – also carries potential.

Future labour force potential will also depend on the extent of immigration into Germany. The important role which migration has played in the labour market is reflected in the strong employment growth of the last 15 years or so, which would not have been possible without strong immigration from eastern Europe, the Balkan countries and south eastern EU countries. However, this labour source is at risk of drying up, because the demographic problems in some of these countries are even more severe than in Germany.

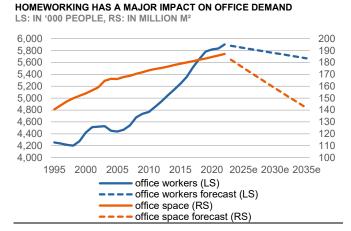


Source: bulwiengesa, DZ BANK

If the potential labour force shrinks as the population ages, demand for offices will also decline

Possible ways to begin to ease the labour shortage

Immigration as a driver for employment growth



Source: Scope, DZ BANK (data for 68 German office locations) Assumptions: Potential labour force will fall by 8 per cent by 2035, office space per office employee will decline from around 32 m² to 25 m², proportion of office jobs will increase from 33.3 to around 34.5 per cent e= estimate In the past, immigration was also insufficiently geared to the specific needs of the labour market. The German government is therefore planning a more active immigration policy with the Skilled Immigration Act passed in summer 2023. However, high taxes and social security contributions, the difficult language, the housing shortage and bureaucracy are making Germany less attractive to skilled workers from abroad. This is unfortunate because Germany is currently losing large numbers of skilled workers, particularly academics, to other countries.

What does this mean for the office market? Since 2005 the number of office workers has increased from 12.5 million to just over 15 million. The proportion of office jobs to total employment has also grown from 31.5 per cent to more than 33.3 per cent. If this ratio increases further to 34.5 per cent by 2035, while labour market potential falls by 8 per cent (based on the above Destatis projection), this would lead to a decline of only 4 per cent in office employment – and thus in office demand. This is fairly small compared to the impact of homeworking. If, for example, office space per office employee which currently averages 32 m^2 falls to 25 m^2 by 2035, demand for office space would contract by nearly 25 per cent as a result of these two factors.

Retail: Population trend and proportion of older people

According to the moderate variant of the population projection, the population of Germany will remain largely unchanged up to 2050. Customer potential will also remain correspondingly stable. The retail sector will nevertheless be forced to adapt to a shift in demand, since older people are becoming a more important customer group. The growing number of "younger old people" up to 2035 could have an initially positive impact, because more people will have time to shop. However, lower incomes in old age and a slowing of macroeconomic growth as the potential labour force contracts may restrict spending capacity.

The proportion of very elderly people with potentially less interest in consumption will increase after 2035. Declining mobility is also likely to be an issue. Consumption could also be hit as spending shifts towards services as people age. For example, older people may consider spending money on support services such as home cleaning, gardening and healthcare.

Housing: Continuing shortage

Times are changing: The 11th coordinated population projection from the German Federal Statistical Office assumed that the population would shrink to less than 75 million people by 2050. This was probably one of the reasons why investment in housing has been so low, with the annual number of completions down to 160,000 units by 2009 – a quarter of the 1995 level. However, housing demand has actually increased, because the current population of Germany is more than 84 million people – and not, as calculated in 2006, around 80 million. Immigration has also been considerably higher than expected as a result of the wars in Syria and Ukraine. In both 2015 and 2022 net migration exceeded 1 million people.

Despite weaker new build activity, from 2012 to 2022 the housing stock grew faster (by more than 6 per cent) than the population (just shy of 5 per cent). Living space even increased by more than 7 per cent. This means that every inhabitant theoretically occupies more than 47 m² of living space. There are two reasons why the housing market is nevertheless coming under increasing pressure. Firstly, housing demand has grown much faster than the population, because the number of private households has increased disproportionately due to smaller households.

Skilled Immigration Act intended to ease the labour market

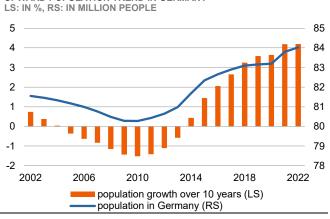
Consequences of declining labour market potential for the office market

Older people increasingly important to retail sector

Less consumption: Services more important to older people

Previous population forecasts underestimated immigration

Housing stock grew faster than population, but new build activity still fell short Source: Feri



UPWARD POPULATION TREND IN GERMANY

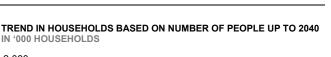


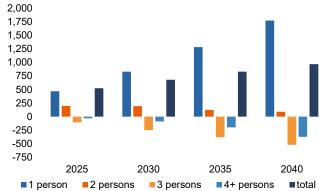
Source: Scope

20 largest German cities based on population

Secondly, housing is not always provided where the need is greatest. The regional imbalance in the demographic trend is having an impact here. Migrants are usually drawn to the larger cities, which is one of the reasons why they often grow much faster than the overall population. The population of Leipzig increased by nearly 20 per cent between 2012 and 2022. Growth rates in Frankfurt, Berlin and Munich were 13 per cent, 11 per cent and 10 per cent. Berlin alone absorbed one tenth of the total ten-year population growth.

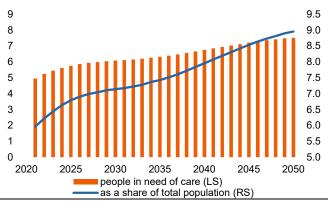
Strong regional growth often contrasts with shrinkage in rural areas far from conurbations. Immigration is too low in these areas to balance out the decline in the population caused by migration and the negative balance of births and deaths in Germany. This not only leads to a wide divergence in rates of population growth, but also to a different age structure. While the old-age dependency ratio - calculated from the proportion of over 65s relative to the 20 to 65 age group - is almost 50 in the east German regions, the city states have a much younger population with a ratio of around 30.





Source: Destatis, DZ BANK

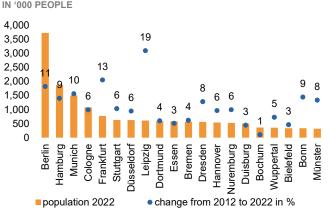
FORECAST FOR NO. OF PEOPLE NEEDING CARE IN GERMANY L: IN MILLION PEOPLE, R: IN %



Source: Destatis, DZ BANK

Regional imbalance in population growth: Cities growing faster and are young, ...

... while the rural population is contracting and ageing rapidly 11



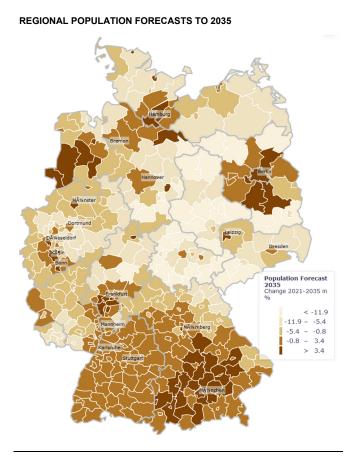
LARGE CITIES HAVE OFTEN SHOWN STRONG GROWTH

The split between growing and shrinking regions will probably persist. Regions with a rapidly ageing population, a low birth rate and net emigration are in contrast with young regions where immigration is high. The maps below illustrate the trend. Even if the population remains largely stable at around 85 million in keeping with current population projections, housing markets in the growth regions would remain under pressure, compounded by the current decline in housebuilding. The outlook is also unfavourable for the shrinking regions which could experience both permanent vacancy rates, and also a housing shortage for the elderly, because low rents make construction uneconomical.

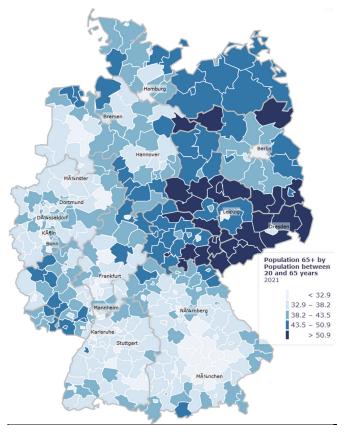
However, due to the ageing society, the number of private households will continue to increase even if the population remains stable. While the number of households of three or more people will decline in the next 20 years, one-person households will become much more numerous. Below the line, the number of households could increase by more than one million, and correspondingly, additional housing could be needed. Demand for housing which is suitable for elderly people is likely to grow as strongly as demand for places in care facilities. Conversely, demand for larger apartments and single-family homes is declining. However, family-friendly housing will also be needed. It is in short supply because very little has been built in recent years and people are staying in their homes when they need less space after children move out or when a partner dies. Immigration to ease the labour shortage will also require a sufficient housing supply.

Regional split likely to persist

No. of one-person households likely to increase sharply



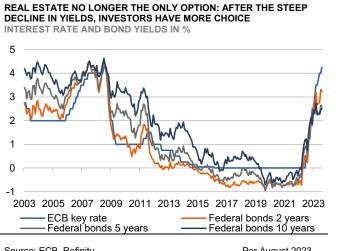


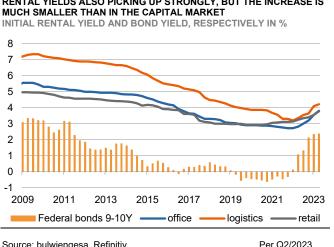


Source: bulwiengesa/Destatis

Source: bulwiengesa/Destatis

INTEREST RATE HIKE BRAKES INVESTMENT MARKET SHARPLY





RENTAL YIELDS ALSO PICKING UP STRONGLY. BUT THE INCREASE IS

Source: FCB Refinity

Per August 2023



Capital market more attractive, while ...

... real estate investment has

become riskier

The climate for real estate investment has altered fundamentally. For many years real estate benefited from a yield advantage compared to the capital market. When bond yields were negative, investors had few options apart from the real estate market. Since the sharp hike in interest rates and bond yields, this is much less the case. Investors can now expect a very positive return of around 2.6 per cent (September 2023) from a 10-year Bund again.

It is possible to achieve a premium of around 150 basis points by investing in firstclass real estate in a prime location. However, this is significantly less than the premium of 300 to 400 basis points available to property investors up to 2021. The risks have also increased. E-commerce, homeworking and weak economic growth are having a negative impact on rental potential, while reducing carbon emissions can require high investment. In addition, the sharp hike in financing costs has more or less eliminated the leverage provided by borrowed capital which is often used in real estate investment.

The various negative factors have led to a slump in commercial real estate investment. For it to become more attractive again, rental yields would have

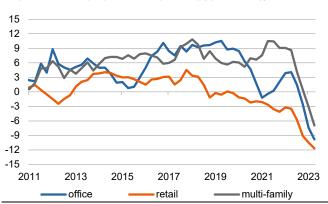
INVESTMENT ACTIVITY DOWN SHARPLY IN 2023



and sellers

There is often a gulf between buyers



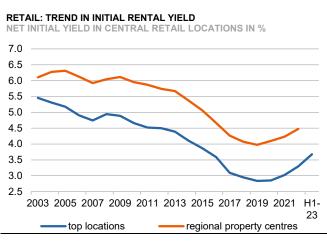


Source: vdp

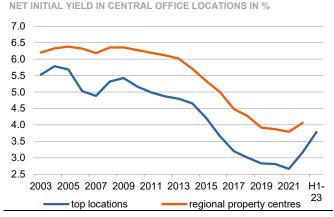
to increase further. However, property owners are still fairly reluctant to accept lower purchase prices, and the price expectations of buyers and sellers often diverge.

However, expensive follow-up financing and sustainable investment are likely to increase the selling pressure, leading to price concessions. Real estate investment could therefore pick up – but probably not before next year. Equity-rich investors have an advantage when it comes to increased financing costs.

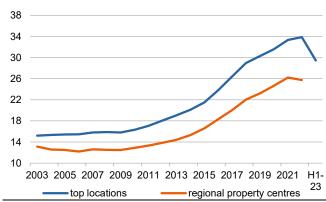
Investment market could recover gradually from 2024



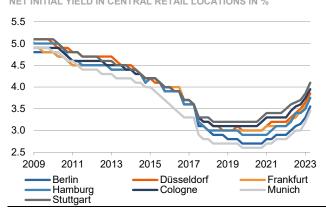
OFFICE: TREND IN INITIAL RENTAL YIELD



RESIDENTIAL: RENT MULTIPLIER FOR MULTI-OCCUPANCY HOMES AVERAGE RENT MULTIPLIER

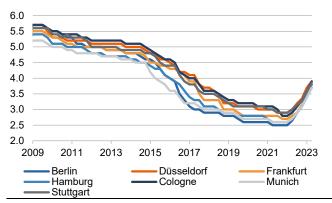


YIELD TREND IN INDIVIDUAL TOP LOCATIONS NET INITIAL YIELD IN CENTRAL RETAIL LOCATIONS IN %

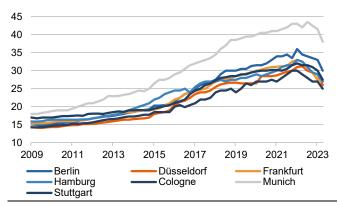


YIELD TREND IN INDIVIDUAL TOP LOCATIONS





RENT MULTIPLIER IN INDIVIDUAL TOP LOCATIONS AVERAGE RENT MULTIPLIER



Source: bulwiengesa

Explanation: the net initial yield for office/retail is calculated from the annual net rent and the total purchase price taking account of additional costs. For the multioccupancy multiplier, the purchase price is divided by the cold rent in the first year and thus corresponds to the reciprocal value of the gross initial yield. Top 7: Index of the top locations Berlin, Cologne, Düsseldorf, Frankfurt, Hamburg, Munich and Stuttgart

Regional 12: Index of the regional centres Augsburg, Bremen, Darmstadt, Dresden, Essen, Hannover, Karlsruhe, Leipzig, Mainz, Mannheim, Münster and Nuremberg

RETAIL

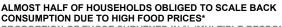
No end to the pain in the retail sector

There is no sign of an end to the pain afflicting the retail sector. After two years of the pandemic, the recovery is being hampered by high inflation. Even crisis-resistant local suppliers are suffering as household purchasing power diminishes. Adjusted for inflation, in the first half of 2023 total retail sales were down by around 5 per cent on the same period last year. Groceries and mail order business showed an even steeper decline. Conversely, after a long slack period, fashion retail achieved strong real growth of more than 7 per cent, albeit from a low level. Only the luxury segment continues to perform well thanks to affluent customers.

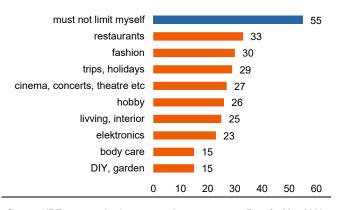
Despite these signs of hope, conditions are tense for city centre retail where sales were decimated during the lockdown. In the fashion segment sales were still down by almost 10 percentage points in real terms on their 2019 level. Other negative factors are also coming into play. At the forefront are significantly higher costs, as a result of indexed rents, high energy prices or wage growth. There is also often a shortage of personnel, leading in some cases to restricted opening hours. One consequence of the negative factors is that budgets for necessary investment have been trimmed or completely cancelled. There is particular demand for digitalisation, shop fittings and inventory control systems.

Glimmer of hope despite many negative factors: fashion retail grew strongly in first-half 2023

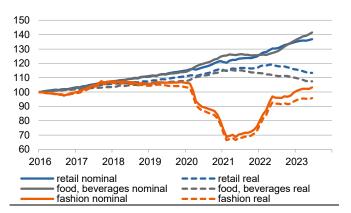
Conditions for city centre retail remain strained due to lower sales and high costs



PROPORTION OF THOSE SURVEYED IN % (MULTIPLE RESPONSES ARE POSSIBLE)



Source: HDE consumption barometer prices Data for May 2023 * "Are higher food prices forcing you to restrict spending in other areas?" FASHION RETAIL SHOWS POSITIVE GROWTH IN 2023, BUT SALES REMAIN WELL BELOW PRE-COVID LEVEL RETAIL SALES DECEMBER 2015 = 100



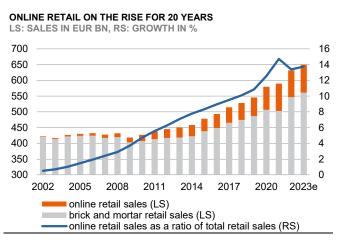
Source: Destatis

However, the structural shift in city centre retail poses a particularly significant challenge. Online retail has grown strongly since the new millennium and now accounts for a proportion of around 14% of sales. In the core range of city centre retail the proportion is in some cases three times as high. However, instead of focusing on less sales space, the retail sector has long been geared to expansion. Demand for sales space has led to the construction of numerous city centre shopping centres. Although the ongoing retail crisis created obstacles for many projects, it did not bring construction to a complete halt. In 2022 alone, another four centres opened in Germany. The "XXL-Mall" in the Hamburg HafenCity is still set to open in 2024.

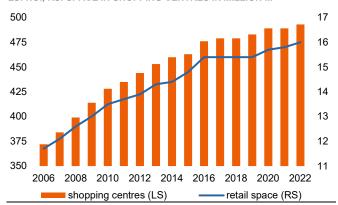
Despite successful e-commerce, retail sector was geared to expansion

The optimistic expectations fuelled by growth in sales space can also be attributed to the former favourable conditions for the retail sector. These included falling unemployment, real wage growth thanks to low inflation, population growth, and not least, flourishing city tourism. The upward trend in prime retail rents which continued until 2016 despite growth in sales space and booming e-commerce reflects the prosperous environment at that time. After the high costs associated with the expensive parallel operation of online shops prompted the retail sector to scale back dense branch networks, rents stagnated briefly at a high level, before starting to fall in 2019. Shortly thereafter the downward trend accelerated, driven by the pandemic and inflation.

Rents already falling before Covid: Expensive, dense branch networks need to be scaled back



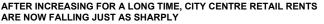
NO. OF SHOPPING CENTRES STILL INCREASING UNTIL RECENTLY LS: NO., RS: SPACE IN SHOPPING CENTRES IN MILLION M²



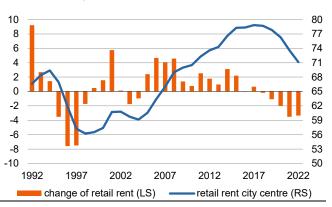
Branch networks were already being scaled back before Covid. However, the steep decline in city centre sales as a result of Covid lockdowns forced chain stores to accelerate the withdrawal process. According to HDE figures, at the end of 2022 the number of shops had declined by more than 40,000 compared to pre-pandemic levels. Many chain stores closed 30% of their outlets. After this radical course of action there are still around 300,000 shops with a continuing downward trend. In addition to branch closures, a large number of insolvencies – even of established retailers such as Galeria, Görtz, Hallhuber, Peek & Cloppenburg and Salamander – have also contributed to this trend. In summer, the beauty chain Yves Rocher announced the forthcoming closure of its 140 German branches.

Source: EHI Retail Institute

City centre retail continues to contract, partly due to insolvencies and branch closures



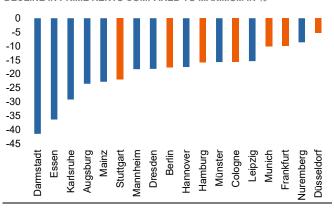
LS: CHANGE IN %, RS: RENTS IN EUR PER M²





data for whole of Germany





Source: bulwiengesa

Source: HDE

However, vacant properties are visible, not only in city centres with a low quality of stay, but in virtually all city centres. In addition to vacancies, landlord insolvencies are also having a negative impact. If shops remain open, landlords face demands for rent concessions. In contrast to office properties, landlords derive only limited benefit from indexed rents, because many retailers cannot afford steep rent increases. Contract periods for new rental agreements are also shorter. Instead of the ten-year term which was previously the norm, fashion retailers are now signing rental agreements for three, to at most five years. They are also generally renting only two, or at maximum three floors.

Sales space no longer required by retailers can be repurposed for other retail formats or for alternative usage. For example, vacant department stores are being repurposed as mixed use properties. In addition to scaled down sales space, the main uses envisaged are offices, apartments, hotels, fitness and leisure activities and medical facilities. However, demand for retail space has also stabilised again. As well as classic city centre retail, suppliers who previously had no city centre presence - such as car producers - are now showcasing their products there. Product diversity is thus improving and is providing positive impetus for city centres.

However, not every tenant makes a city centre more attractive; for example, food discounters which are following drugstore chains into city centres. The growth in discount stores, nail bars, mobile phone and barber shops has already been obvious for some time. Landlords face a dilemma: city centres benefit from a broad-based supply mix of commerce and culture, but property owners are reliant on generating sufficient rental income and cannot always be too choosy when selecting tenants. However, if the appeal of a city centre diminishes as a result of vacancy rates or an insufficiently attractive retail offer there is a risk of a downward spiral as city centre footfall gradually decreases.

Market conditions in retail sector

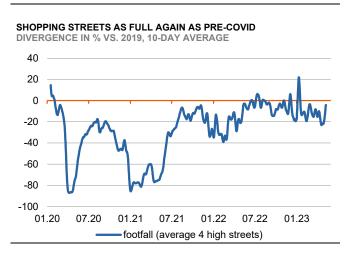
There are several positive developments. City centre footfall has now virtually returned to pre-Covid levels. Even if sales have not recovered to the same extent, positive city centre footfall is still better than empty streets. The population is also growing, boosting customer potential. The war in Ukraine is a tragedy for many people, but the retail sector has benefited from population growth of 1.1 million

Landlords not only suffering from vacancy rates

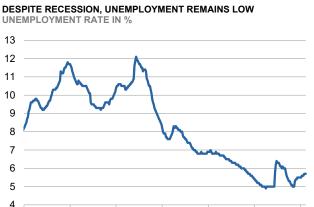
City centre trend supported by space repurposing and supply diversity

Property owners reliant on rental income cannot afford to be overly selective when choosing tenants

Good for retail: Low unemployment, growing population, tourism recovering



Per May 2023 Source: hystreet.com / Destatis Berlin (Kurfürstendamm North side), Hamburg (Spitalerstr.), Cologne (Schildergasse), Munich (Neuhauser Str.)



2008

2013

UNEMPLOYMENT RATE IN %

Source: Bundesbank

1993

1998

2003

Per August 2023

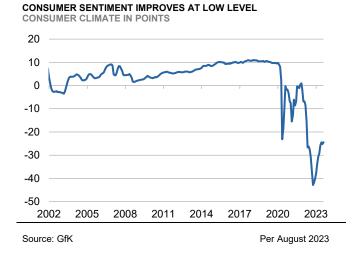
2023

2018

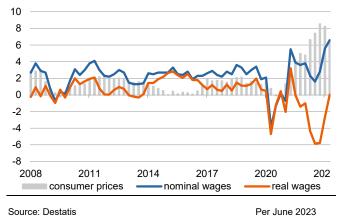
people in 2022 alone. Previously the number of inhabitants had been stagnating for several years. Tourism business has also recovered rapidly after the pandemic. The number of overnight stays has almost returned to its high level of 2019. Another positive aspect is that unemployment in Germany has remained low respite recession.

Gloomy consumer sentiment is bad news for the retail sector. Although the GfK consumer climate survey has improved from previous lows, it remains at a very low level. The situation is being compounded by continuing hikes in consumer prices. The upward trend has slowed visibly, but remains at a high level. Real wages are still therefore very negative, but the shortfall is gradually diminishing. This trend is likely to continue when nominal wages increase visibly as a result of high wage agreements.

Consumer sentiment and real wage growth still weak, but improving gradually



INFLATION EASING, BUT REAL WAGES REMAIN NEGATIVE IN % VS. PREVIOUS YEAR



The German Retail Federation (HDE) expects nominal sales growth of 3 per cent this year. Price-adjusted sales are nevertheless likely to decline as in 2022. The decrease in 2023 could be even larger (4 per cent) than in 2022 (1 per cent). As in previous years, online sales are set to increase by an above-average nominal rate of nearly 5 per cent to around EUR 90bn, which could lead to real growth of 2 per cent. Forecast growth for in-store retail is significantly weaker at less than 3 per cent to EUR 561bn. This would result in a real decline of 5 per cent.

It is therefore unsurprising that 60 per cent of retailers surveyed by HDE in summer 2023 cite consumer restraint as the key issue, closely followed by the price trend, energy costs, the bureaucratic burden affecting the Mittelstand, and the skilled labour shortage. At some distance behind in sixth place is the fact that city centres have become less attractive.

Retail: Comparison of top locations

Sales space rental has picked up again in 2023. In the first half of 2023 around 90,000 m² of sales space was let, a level last achieved in 2016. In the intervening six years, the average annual figure has only been around 65,000 m². The top locations have benefited particularly from intensified rental activity. In the period 2015/2016 the seven cities still accounted for a proportion of just over 20 per cent. Conversely, in the first half of 2023 a good third of rented space was taken up by the top 7. Some of the newly let space was previously used by Galeria department stores or clothing chains such as Appelrath Cüpper, H&M and Zara. In some cases, retailers used the

In-store retail likely to contract sharply in real terms in 2023

Consumer restraint the main issue for retailers

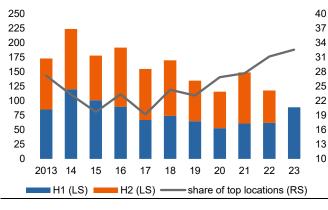
Rental business picking up, particularly in top locations

improved offer as an opportunity to switch locations. The positive result is therefore partly attributable to a large number of relocations. The Aachener fashion chain has also contributed to the growth in rental figures, with plans to expand up to 2024 by renting some former Galeria stores. In future, Aachener will have a presence in the top locations in the former Karstadt store in Frankfurt's Zeil shopping street.

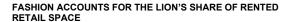
Some sales attributable to relocations

SHOP SPACE RENTALS PICKING UP IN 2023, TOP LOCATIONS ACCOUNT FOR A GROWING PROPORTION

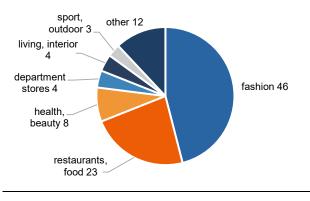
L: RENTAL INCOME TOP 7 IN TSD. M², PROPORTION IN %



Source: BNP Paribas RE







Source: JLL

Data relates to city centre locations in Germany

Before the retail crisis, the fashion segment regularly occupied the top ranking for space take-up, before being overtaken by restaurants and food shops. Supported by the relocation of clothing chains, fashion was again in top position in the first half of 2023, accounting for nearly 50% of rented space. Restaurants and food stores occupied around a quarter of space. Next in line, at some distance were health and beauty premises, ahead of department stores, household goods and sport/outdoor shops.

The relocation of chain store branches within a location has a positive impact on rental business, but does not reduce the vacancy rate. Space availability in city centre locations has in fact increased slightly due to the closure of shops and branches. This is particularly true of Frankfurt where the volume of available shop space has increased to a high level within a short period.

The renewed interest in city centre locations has obviously halted the downward trend in prime retail rents. Rents in the seven locations reviewed have remained stable in 2023. Prime rents range from just shy of EUR 200 per m² in Stuttgart to slightly more than EUR 300 per m² in Munich. The average rent for first-class retail space is EUR 250 per m². This is around 15 per cent lower than the previous maximum. However, there are regional differences. The range extends from a decline of more than 20 per cent in Stuttgart to only a moderate reduction of 5 per cent in Düsseldorf. Munich, the most expensive German retail location, also shows a relatively low rent decline of 10 per cent. However, the top locations have remained unscathed by the steep declines in rent - in some cases of more than 30 per cent - in many cities.

Fashion regains leading position in rental statistics

Space availability picks up slightly in 2023

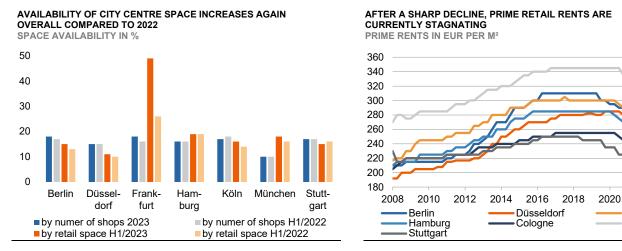
Prime rents down by a good 15 per cent from maximum levels to EUR 250 per m²

H = half year

2022

Frankfurt

Munich



Source: JLL

H = half year

Source: bulwiengesa

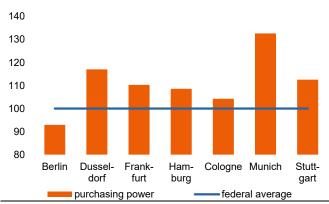
Top locations absorb negative factors for retail comparatively well

The Top 7 are feeling the negative impact of e-commerce, inflation and high costs on in-store retail just as much as any other German retail locations. However, they are better placed because of their large catchment areas of several million people and above-average purchasing power. Another plus point is continuing population growth, which averaged nearly 1 per cent each year in the seven cities from 2012 to 2022. Customer potential is expanding accordingly. Another important demand factor is the large number of visitors from within Germany and abroad, who are major contributors to city centre retail sales. Tourism business in the top locations has returned to its 2019 level again after the pandemic.

From the retailer's perspective, there are other reasons to opt for the top locations. Because of their size and internationality, they are well placed to test new concepts and to act as a "gateway" for new suppliers. Most foreign chains open their first German branch in one of these seven cities. Nor do these cities face the same risks of either depopulation or downward spirals which are an issue for many other city centres. With a broad offer of retail, restaurants and culture, there are always good reasons to visit the city centre. Branches in the Top 7 locations also therefore have a good chance of avoiding closure when networks are being thinned out.

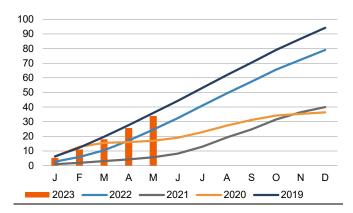
Top 7 are comparatively low-risk locations for retailers





Source: bulwiengesa

TOURISM IN TOP 7 BACK AT 2019 LEVEL OVERNIGHT STAYS IN TOP LOCATIONS IN MILLION, CUMULATIVE



Source: Municipal tourism statistics

Summary retail market

City centre retail faces competition from other urban districts which have prospered partly as a result of homeworking, peripheral shopping malls and outlet centres, and of course e-commerce. However, the level of interest in city centre sales space shows that online product presentation is not sufficient to motivate potential buyers. This is particularly true of the top locations where, thanks to high footfall and tourist volumes, a particularly large potential customer base can be reached. In-store retail thus has future prospects here, even though demand for sales space will be lower in the long term.

Reduced rents and the currently good availability of sales space facilitate the conclusion of new rent agreements for terms which have more than halved and which mitigate the risk for tenants. Prime rents seem to have completely bottomed out, although further downward movement cannot be ruled out. However, a stabilisation of demand for sales space suggests that rents will not fall further, although with positive space availability, they are also unlikely to pick up again quickly. The structural shift in the retail sector and in city centres is also continuing. The era of large-scale rentals in particular is likely to be more or less at an end.

For city centre retail to remain lively it is important for city centres to remain attractive. High vacancy rates, branch closures and e-commerce have made citizens, politicians and property owners aware of this. The activities initiated range from redesigned concepts and investment plans for city centres to the development of quarters where sales space is repurposed for other uses. Implementation of these measures is supported by demand for new offices and apartments and the associated sharp rent increases. Conversely, increased construction and financing costs may jeopardize new city centre projects.

Good prospects for retail in top locations

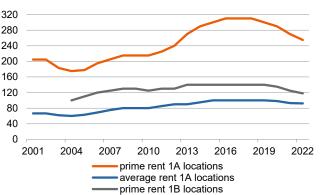
Prime rents should stabilise

High construction and financing costs could hamper city centre developments

Berlin: Retail space



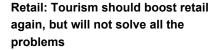
BERLIN: PRIME RETAIL RENTS BASED ON LOCATION IN EUR PER $\ensuremath{\mathbb{M}}^2$

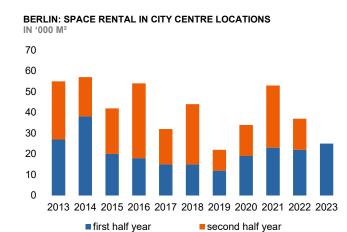


Source: bulwiengesa

Source: bulwiengesa

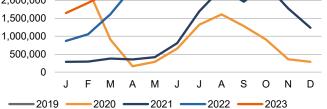
The retail sector has benefited significantly from the upturn in Berlin. On the one hand, unemployment fell sharply, and on the other hand customer potential grew strongly. Since 2011 the population has grown by a good 350,000. Combined with an equally expanding hinterland, the retail sector has the largest catchment area in Germany of around 5.4 million people. Tourism – which is important for Berlin – is also flourishing, and has returned to its 2019 level again this year. Visitors play a more important role in Berlin than in other top locations because spending power in the capital city is fairly low. Apart from its size, the Berlin retail sector is characterised by several geographically distinct prime locations. These include Tauentzienstraße which has the highest prime rents, Ku'damm, Alexanderplatz with its high footfall, Friedrichstraße, and the on-trend Hackescher Markt. There are also around 70 shopping centres, the most prominent of which is the large Mall of Berlin. Prime rents stagnated at EUR 310 per m² from 2016 to 2019, before falling by 18 per cent to EUR 255 per m² by the end of 2022. Rents have since remained stable. Although the retail outlook for the attractive German capital is generally positive, the negative effects - for example of vacant properties and business closures - are clearly visible. The large volume of sales space on offer and Berlin's numerous shopping centres pose a challenge. Some shopping centres are likely to be repurposed in future.





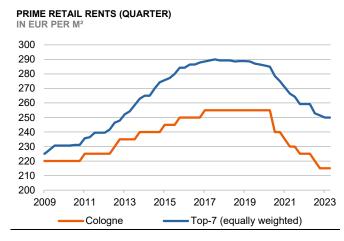
Source: BNP Paribas Real Estate

BERLIN: MONTHLY TOURISM STATISTICS NO. OF OVERNIGHT STAYS 4,000,000 3,500,000 2,500,000 2,500,000 1,500,000



Source: City of Berlin

Cologne: Retail space



COLOGNE: PRIME RETAIL RENTS BASED ON LOCATION IN EUR PER M 280 240 200 160 120 80 40 2004 2007 2010 2001 2013 2016 2019 2022 prime rent 1A locations average rent 1A locations

prime rent 1B locations

Retail: Decline in prime rents

remains within limits despite

generous supply of space

Source: bulwiengesa

centre.

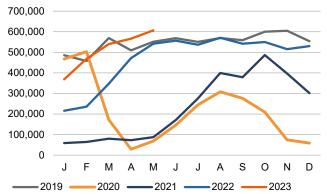
Source: bulwiengesa

The city of Cologne, with its population of one million people, is the second top location in western Germany after Düsseldorf which gives rise to a certain amount of competition. A catchment area of 2.4 million potential customers and a large volume of day-trippers from the Benelux countries are an attractive prospect for retailers. However, tourism is not quite as important as in other top locations. Spending power is also fairly moderate for a top location at 104 points. The Düsseldorf figure is 117 points. In contrast to the state capital with its clearly defined luxury segment, Cologne city centre is more strongly focused on mainstream retail. Its three kilometre shopping route encourages a stroll through prime locations and boosts footfall. One particular beneficiary is Schildergasse where many chain store branches are located. Footfall is also high in Hohe Straße, but still falls short of the high levels in Schildergasse. Ehrenstraße is more of a trendy location. A smaller luxury segment has become established in the Domkloster/Wallrafplatz area. Prime rents have fallen by 16 per cent from their peak levels to EUR 215 per m², but remain stable this year. Vacant properties are particularly evident in Hohe Straße, but mainly due to renovation. The conversion of Ehrenstraße into a pedestrian zone in April 2022 had a positive impact and significantly boosted footfall. The construction of the Laurenz Carré near the cathedral should lead to an upgrading of the city

COLOGNE: SPACE RENTAL IN CITY CENTRE LOCATIONS 30 25 20 15 10 5 0 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 birst half year • second half year

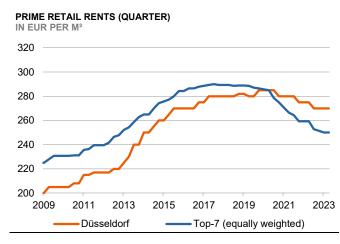
Source: BNP Paribas Real Estate

COLOGNE: MONTHLY TOURISM STATISTICS NO. OF OVERNIGHT STAYS

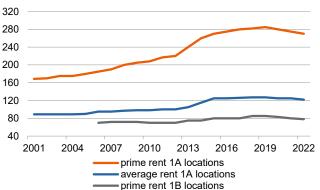


Source: City of Cologne

Düsseldorf: Retail space



DÜSSELDORF: PRIME RETAIL RENTS BASED ON LOCATION IN EUR PER M²

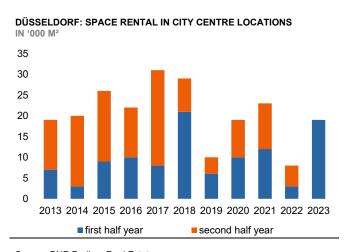


Source: bulwiengesa

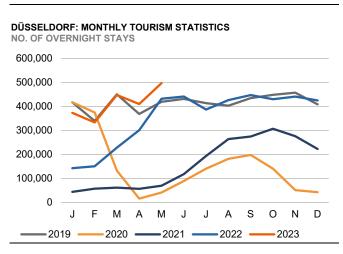
Source: bulwiengesa

Retail: Düsseldorf city centre withstands negative effects on retail better than other locations

Düsseldorf has clearly developed successfully as a shopping location. Various urban planning measures, large infrastructure projects and major investment in new and existing retail properties have significantly enhanced the attractions of the city centre. Although the Düsseldorf retail sector suffered as much as anywhere else from Covid restrictions, the negative impact on rental business was less severe than in other top locations. Prime rents declined by only 5 per cent from their maximum to recently EUR 270 per m². Plus points are a catchment area of 2 million people and high purchasing power, which is 20 per cent higher than the German average. The city also benefits from its focus on the stable luxury segment, epitomised by the famous "Kö" shopping boulevard. Apart from the Königsallee, other prime city centre locations are Flingerstraße and the reconfigured Schadowstraße shopping street. Other additions in recent years have been iconic retail developments such as the Kö-Bogen, the KII and the renovated Kö-Galerie shopping mall. Other construction projects are the renovation of the Sevens shopping centre, whose upper floors will be converted into offices, and a branch of the Berlin-based KaDeWe in the Carsch-Haus. However, the realisation of the spectacular Calatrava Boulevard remains in doubt, after the Centrum Group was forced to file for insolvency in July. One positive development is the decision to reprieve the Galeria branch in Schadowstraße which the department store group had initially planned to close. However, it will be reduced in size.

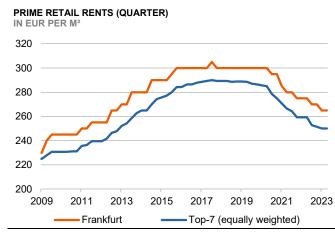


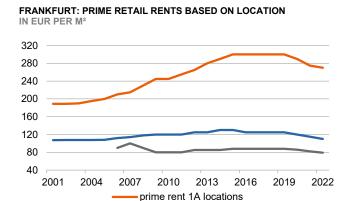
Source: BNP Paribas Real Estate



Source: City of Düsseldorf

Frankfurt: Retail space





average rent 1A locations

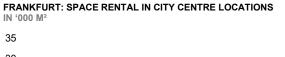
prime rent 1B locations

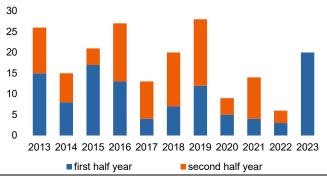
Source: bulwiengesa

Source: bulwiengesa

The Frankfurt conurbation has grown dynamically in recent years. It now has a catchment area of around 2.5 million people with high purchasing power. Rising guest numbers are also good for the retail location. With 14,000 overnight stays per 1,000 inhabitants, a high level is reached among the top locations. The previous maximum level could almost be regained in 2023. One positive factor is that visitors from Asia, who represent an important demand group for the retail sector in Frankfurt, are now returning to the city centre in large numbers. Frankfurt has a broad retail offer with its two prime locations of Zeil and Goethestraße as well as several large shopping centres. Goethestraße, with its focus on the luxury segment, has clearly developed more successfully than the Zeil shopping street which has considerably more vacant properties. A new tenant - Aachener - has at least been found for the former Karstadt store. The sneaker chain Snipes is moving into the Eckerle menswear store. However, the future of the P&C branch of almost 17,000 m² remains uncertain. Various building works for renovations and new builds are likely to have a negative impact for some time. The fact that it has generally been possible to find new tenants or alternative uses for many vacant properties shows the level of interest in the Zeil shopping street. This is probably also the reason why prime rents have only fallen by 10 per cent from their maximum to recently EUR 270 per m².

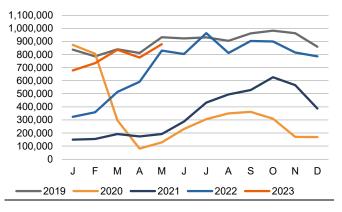
Retail: Tourism in Frankfurt has clearly gained momentum – Zeil shopping street becomes a building site





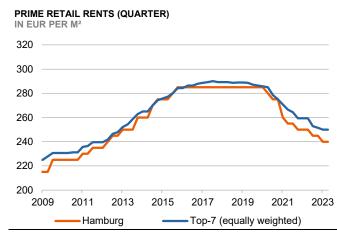
Source: BNP Paribas Real Estate

FRANKFURT: MONTHLY TOURISM STATISTICS NO. OF OVERNIGHT STAYS

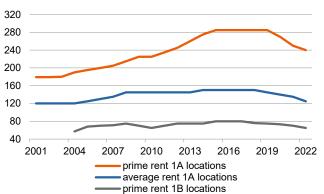


Source: City of Frankfurt

Hamburg: Retail space



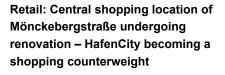
HAMBURG: PRIME RETAIL RENTS BASED ON LOCATION IN EUR PER $\ensuremath{\mathsf{M}}^2$

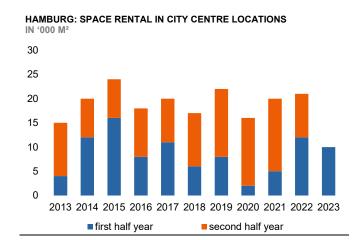


Source: bulwiengesa

Source: bulwiengesa

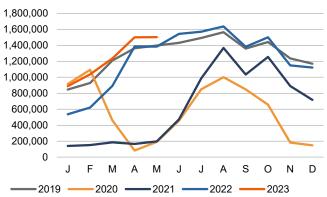
As the leading shopping location in northern Germany, Hamburg benefits from a catchment area of 3.5 million people and high purchasing power. Tourists and cruise passengers are an important customer group. In the first half of 2023 visitor numbers had returned to their high level of 2019. The broad retail offer - ranging from the classic consumer stores of Spitalerstraße and Mönckebergstraße to luxury locations such as the Neuer Wall shopping street - is attractive to customers. These are supplemented by the large Europa Passage mall. The pandemic clearly depressed retail activity in Hamburg city centre, resulting in conspicuous vacant properties. To reduce these, the Hamburg Senate established the "Frei Fläche" funding programme for temporary creative and cultural purposes which was extended to 2023. The Jupiter programme also includes space in the former Kaufhof Sport building. Conversely, the future of the former Kaufhof store has been settled, with 8 floors set to be converted into housing, offices and retail space from 2025. The former C&A store in Mönckebergstraße is to be replaced by a new building – also for mixed-use. Karstadt will be reduced in size following partial demolition and will be the only remaining department store in Hamburg City. Prime rents fell by 16 per cent compared to 2019 to EUR 240 per m², a level mainly achieved on Neuer Wall. The opening in 2024 of a 80,000 m² shopping centre in the HafenCity is likely to increase the pressure on the city centre.





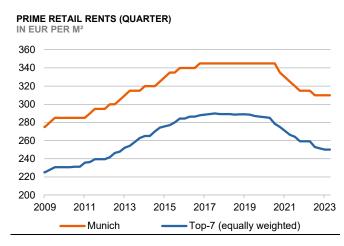


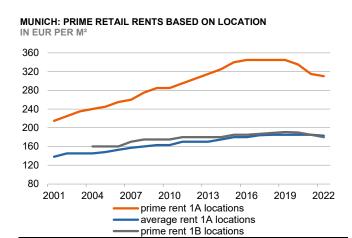




Source: City of Hamburg

Munich: Retail space



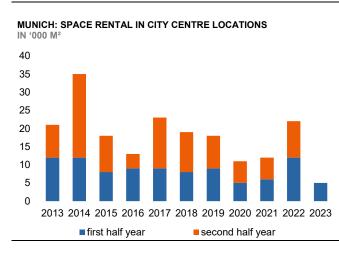


Source: bulwiengesa

Source: bulwiengesa

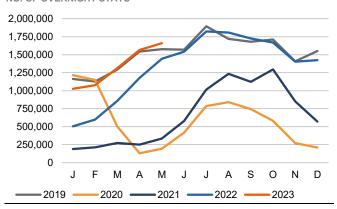
In terms of prime rents, purchasing power and sales floor productivity, Munich tops the retail league in Germany. Contributory factors are the economically strong catchment area which has grown significantly to around 3.2 million people. Another plus point is the high quality of stay in the attractive city centre with a Bavarian flavour and an extensive shopping offer with mid-range retail concepts, traditional specialist shops and luxury locations. Munich also benefits from flourishing tourism thanks to its world-renowned Oktoberfest. Prime rents have risen to the highest level in Germany, although the volume of city centre sales space is relatively high at half a million m². The highest rents are in Kaufingerstraße, Neuhauser Straße and Maximilianstraße. Despite their high level, prime rents have fallen by only 10 per cent from their peak to EUR 310 per m² and have remained stable this year. Munich is thus the only German shopping location with prime rents of more than EUR 300 per m². However, signs of the retail crisis are also evident in the form of vacant properties, offset to some extent by temporary usage. The number of traditional shops has also fallen. The planned extension in 2023 of the pedestrian zone by 350 metres into Tal Straße is being delayed. One larger project is the mixed-use conversion of the Karstadt building at the main railway station, which will in future be known as "Corbinian". There are no plans for a branch of Galeria.

Retail: Only Munich achieves a prime rent of more than EUR 300 per m²



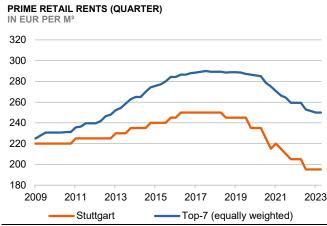
Source: BNP Paribas Real Estate

MUNICH: MONTHLY TOURISM STATISTICS NO. OF OVERNIGHT STAYS



Source: City of Munich

Stuttgart: Retail space



STUTTGART: PRIME RETAIL RENTS BASED ON LOCATION IN EUR PER M² 280 240 200

2010

Source: bulwiengesa

Source: bulwiengesa

2001

2004

2007

160

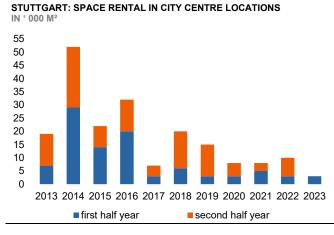
120

80

40

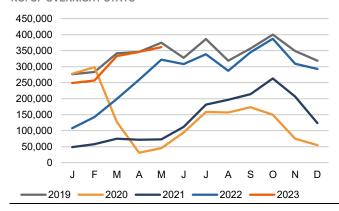
Stuttgart benefits from a catchment area of 2.6 million people with strong purchasing power. However, tourism is clearly less important than in other top locations. But this is not the reason why prime rents in the prime location of Königstraße have declined comparatively steeply - by 22 per cent to recently EUR 195 m². This is the sharpest fall in the top locations segment. The fact that prime rents have remained stable since autumn 2022 is positive. Several negative factors are responsible for the previously marked decline in rents. These include large building sites such as the urban renewal project of the century - Stuttgart 21 - and the now completed renovation of the Market Square. Added to these were the major expansion in 2014 of sales space on offer following the development of large city centre retail projects such as the MILANEO and Gerber shopping centres. City centre sales space has grown by a good 20 per cent. In response to the now lower demand for sales space, Gerber is being converted for mixed-use. Other construction projects in the city centre involve the construction of new office and retail space in place of the former sports arena (Königstrasse/Schulstrasse). This Galeria branch in Eberhardstraße is scheduled to close in January 2024, while the branch on Königstraße will remain. The "Schlossgartenquartier" group of buildings at the entrance to Königstraße will

also be revitalised by 2025.



Source: BNP Paribas Real Estate

STUTTGART: MONTHLY TOURISM STATISTICS NO. OF OVERNIGHT STAYS



Source: City of Cologne

Retail: Prime rents stabilise after

2013

prime rent 1A locations

prime rent 1B locations

average rent 1A locations

2016

2019

2022

steep decline

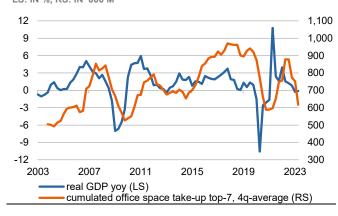
OFFICE

Weak economy slows pace in office market

Office market activity largely follows the economic trend. Given the mild recession in the German economy in the first half of 2023, it is not surprising that take-up has weakened noticeably. In view of the generally difficult economic climate, weak export business and pronounced cost pressure – for example as a result of high wage agreements – companies are obviously reluctant to commit to expensive rental agreements. This restraint is reflected in office rentals. Virtually no large office space in the five-digit square metre range has been let.

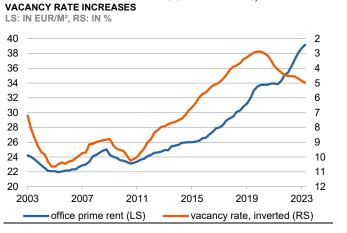
The office market is likely to pick up again once the economy returns to growth. However, instead of the "green economic miracle", Germany is bringing up the rear among the European economies in terms of growth. Companies and economists are therefore becoming increasingly critical of the government. The key factors braking the economy are high energy prices and bureaucracy. Infrastructural deficiencies are also impossible to ignore. Weaknesses are the expansion of renewable energy, digitalisation, the transport network and the education system. It is therefore unsurprising that Germany is losing ground in terms of its international competitiveness and that companies are reluctant to invest there. Planned semiconductor plants in Dresden and Magdeburg are good news, but have been bought at the cost of subsidies running into billions.

RECESSION IN FIRST HALF OF 2023 HAD CLEAR IMPACT ON OFFICE RENTALS LS: IN %, RS: IN '000 M²



Source: bulwiengesa, Feri

Top locations only



ALTERED DEMAND PROFILE DRIVES UP PRIME RENTS, WHILE

Source: bulwiengesa, DZ BANK

Top locations only

The rental business is also being adversely affected by lower demand for office space as a result of homeworking. Many companies are also allowing remote working abroad, in order to facilitate a "workation" for their employees – i.e. temporary working while on holiday. The impact on demand for office space is reflected in examples such as the Bundesbank, which was still planning several high-rise office buildings for its Frankfurt headquarters on the assumption that employees would be coming into the office to work. However, the office space which was to have been built has now been scaled down considerably from 100,000 to 5,000 m². Under the Bundesbank's new office concept, up to 60 per cent of work c an be carried out at home, resulting in a contraction of 40 per cent in the estimated office space required. Although no conclusions should be drawn from one individual case, Bundesbank employees are unlikely to be working very differently to employees in many other companies.

Homeworking causes general decline in demand for office space

Germany's economic weakness hampers office market

Structural obstacles a barrier to economic recovery

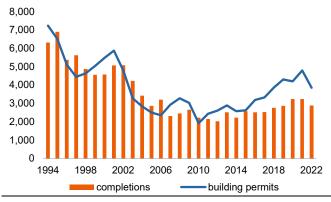
Many office floors were often already under-utilised before Covid with staff absent on business trips, working part-time, on holiday, or on sick leave. This factor will also be taken into account when scaling down space for new office concepts which involve flexible "hot desking". Demand for less space will also change the specification profile for new offices. Centrally located, modern space in sustainable buildings which lend themselves to hybrid working will be in demand. Companies want to offer something extra when competing to hire staff by providing an attractive working environment. Climate-friendly properties also underpin a company's sustainability credentials.

Companies can therefore be said to be seeking "quality not quantity" in terms of their space requirements. However, only a limited amount of this type of space is available. Around 60% of the current office stock dates back to before 1990. Conversely, almost no offices have been built in the recent past. The space available in the market, whether after rental contracts have expired or as a result of sub-letting, do not therefore tend to meet the necessary criteria. While vacancy rates are gradually accumulating for older properties, very little space is available in new office premises. As a result of the shortage of office space in recent years, rental contracts have often already been concluded at the project development stage, and have already been largely let by the time of completion.

Rental agreements may also therefore fail to materialise because no suitable space is available. This gap between supply and demand for modern office space is also reflected in market data. In terms of prime rents, the "market rule" no longer applies, i.e. that growing vacancy rates are accompanied by falling rents. In fact, the opposite is true. While average vacancy rates in the seven top locations have grown from 3 to 5 per cent since 2020, prime rents have increased on average by more than 15 per cent to around EUR 39 per m².

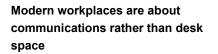
RECOVERY IN OFFICE BUILDING HALTED BY HIGHER CONSTRUCTION AND FINANCING COSTS





Source: Destatis

To a lesser extent, the slight acceleration in office building has also contributed to the growth in vacancy rates, although – as reflected in the rapid rent growth – this is insufficient to meet demand for modern office space. Compared to the low point for office building, when only 2 million m^2 of space was completed throughout Germany in 2012, by 2020 the figure had picked up by 60% to reach 3.2 million m^2 . In fact, the volume of approved space more than doubled in the same period. However, given the deterioration in conditions for new build activity, the volume of both completed and approved space declined again in 2022. As a result of the massive hike in



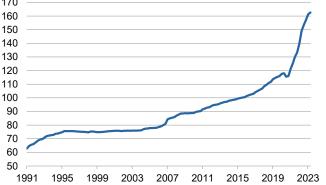
Market supply consists mainly of older buildings with a conventional layout

Despite growing vacancy rates, prime rents for modern offices are rising sharply

AFTER A STEEP RISE, COST TREND FOR OFFICE BUILDING SLOWED AGAIN AT BEGINNING OF 2023 CONSTRUCTION COSTS FOR OFFICE BUILDING 2015 = 100



Source: Destatis



Accelerated office building slowed by deterioration in building conditions building and financing costs, office construction is also likely to weaken further. Customers seeking new premises will therefore have to take into account that the volume of new build space will not be sufficient to meet demand for modern space in the coming years.

Market conditions for office market

After the feared "gas shortage" failed to materialise last winter, sentiment at companies and among economic experts initially improved again. However, the gloomy economic climate in Germany, with a recession in the first half, and the weakness of its important trading partner China, is weighing heavily on expectations and assessments of the current situation. This is reflected in the results of the ZEW Financial Market Survey and the ifo business climate index.

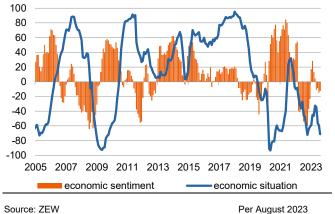
Business climate and economic expectations are both gloomy



Source: ifo Institute

Per August 2023

ECONOMIC EXPERTS STILL SEE NO SIGN OF UPTURN ZEW FINANCIAL MARKET SURVEY INDICES IN POINTS



The weak economy is also having an impact on the hitherto robust labour market. Because of the poor growth outlook companies are now more reluctant to hire staff. This is reflected in faltering employment growth. Unemployment has also increased slightly, while the number of job vacancies has fallen marginally. However, there are no signs of a crisis in the labour market based on the record number of people in work (45.8 million in July 2023). Although the number of job vacancies is clearly below previous peak levels, it is still high with 750,000 jobs on offer (August 2023). In parallel, the skilled labour shortage is persisting.

The gradual decline in inflation is good news. Interest rate hikes of more than 400 basis points within a year by the ECB are having the desired effect. However, this applies first and foremost to the overall inflation rate, which has fallen visibly from a peak of nearly 9 per cent in autumn 2022 to around 6 per cent (August 2023). Core inflation adjusted for volatile fuel and food prices is nevertheless the more crucial variable, and has so far fallen only marginally from its peak. A restrictive monetary policy is still therefore advisable. There is no sign of any relief in the form of a visible reduction in financing costs.

Labour market robust, but economic weakness clearly visible here too

High inflation means continuing restrictive monetary policy and thus high financing costs

31

Per August 2023

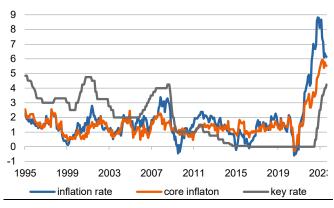
LS: IN MILLION PEOPLE, RS: IN '000 JOB VACANCIES 46 1,000 900 45 800 44 43 700 42 600 41 500 40 400 39 300 38 200 37 100 1992 2007 1997 2002 2012 2017 2022 labour force (LS) iob vacancies (RS)

LABOUR MARKET VIRTUALLY UNSCATHED SO FAR BY WEAK

UNLIKE THE OVERALL INFLATION RATE, THE CORE RATE IS NOT YET FALLING

INFLATION RATE AND KEY INTEREST RATE IN %

Source: Feri, German Federal Statistical Office



Source: Bundesbank, German Federal Employment Agency Per Aug 2023

In the years ahead, the ageing society is likely to have an increasing impact on the labour market, depressing employment levels. As a consequence, office employment and demand for office jobs could also fall. However, an above-average positive trend is expected in the seven largest cities reviewed here. In their function as important economic centres, combined with an attractive housing environment, they are drawing in immigration from within Germany and abroad. This is creating a "win-win situation". The easier availability of young skilled workers is advantageous for companies in an environment characterised by a skills shortage. This is leading to the creation of attractive jobs, which may in turn lead to an influx of people. Conversely, the ongoing tensions in the housing markets of the major cities is a disadvantage.

As a result of remote working, demand for space should nevertheless generally decline, as evidenced by the example of the Bundesbank we referred to earlier. However, it is difficult to predict to what extent demand for office space will actually change. It will take time for space usage to level out based on tenants' space needs, available office space and rents. Companies will avoid under-utilised office floors just as much as premises with an insufficient supply of workstations. The motivation to come into the office will ultimately decline if the number of desks provided is inadequate. A high attendance rate is desirable to foster good communication.

However, the impact of remote working on the office market will only become evident after a delay, partly because rental agreements have generally been concluded for longer periods, often of more than ten years. "Old" office space also has to be used until new space becomes available. The same applies if locations are merged. Top locations can benefit due to the large number of corporate headquarters based there. Office space which is surplus to requirements in the long term will only therefore be freed up gradually. However, only some of this space is likely to increase vacancy rates. The chances of older buildings being relet are poor, primarily for structural, rather than economic reasons. If the prospects of a long-term let are low, owners might opt to repurpose, or even demolish a building.

Negative impact of ageing society presumably less marked in top locations

"New Work" effect: Steady decline in demand for office space

Persistently unrentable space will be withdrawn from the market, increasing the vacancy rate

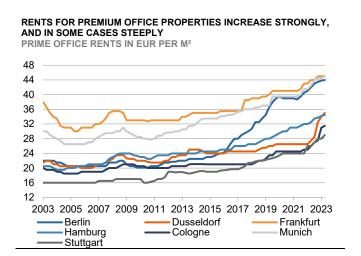


ECONOMIC CONDITIONS

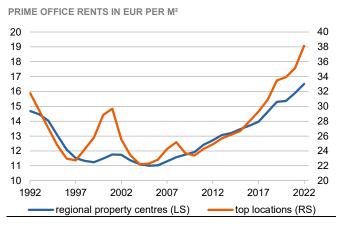
Office: Comparison of top locations

The influence of the "New Work" concept on office rental cannot be ignored in the top locations. Despite the weaker rental business as a result of the sluggish economy and increasing vacancy rates, prime rents are rising fast. The average annual rate of change has accelerated to around 10 per cent in 2023. The last time rents increased at a similar pace was in the dot-com era more than 20 years ago. While at that time it was assumed that a golden era had dawned for internet business models, today rents are being driven up by a shift in demand for office space. In Frankfurt and Munich, rents for premium office space are around EUR 45 per m². Rents in previously cheaper locations have also risen sharply. Prime rents in Stuttgart have for example increased from EUR 24 to a good EUR 30 per m².

Office rents rising almost as fast as in the dot-com era



TOP LOCATIONS OUTPACE REGIONAL CENTRES FOR RENT GROWTH



Source: bulwiengesa

Office space should be attractive, suitable for new office work concepts and demonstrate a positive sustainability rating. However, this combination of attributes is virtually impossible to find, leading to a divergence between supply and demand. Current conditions are also contributing to rapid rent growth. The much faster increase in prime rents here compared to the regional centres reflects high demand for the top locations. There is unlikely to be any difference in the type of office space required in the various locations. Available modern space is in even shorter supply in the regional centres because new office projects in these cities are generally geared to owner-occupation, and are not generally of a speculative nature.

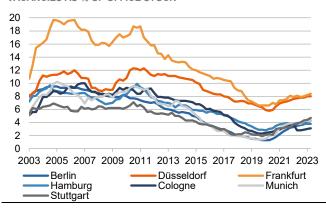
In 2005, and for a brief period in 2010, the average vacancy rate in the top locations reached just over 10 per cent. By 2019 the figure had fallen to around 3 per cent. While office employment grew strongly, the office stock in the top locations increased only slightly in this period. However vacancy rates increased again gradually with the onset of the pandemic. The vacancy rate is currently around 5 per cent. The further increase in the number of vacant properties since 2020 is attributable to homeworking, but also to growth in the volume of new office space. The office stock in the top locations grew on average by 0.4 per cent between 2012 and 2018. Since 2018, annual growth in available space has increased to around 1 per cent.

Source: bulwiengesa

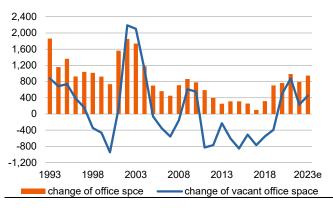
Rapid rent growth mainly impacts top locations

Homeworking and accelerated office building both contribute to growing vacancy rates

HOMEWORKING, THEN A SLUGGISH ECONOMY: VACANCY RATES RISING STEADILY VACANCIES AS % OF OFFICE STOCK



HOMEWORKING, LARGER VOLUME OF NEW SPACE AND WEAK ECONOMY LEAD TO HIGHER VACANCY RATES IN '000 M². CUMULATIVE OVER TOP LOCATIONS



Source: bulwiengesa

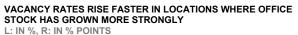
Source: bulwiengesa

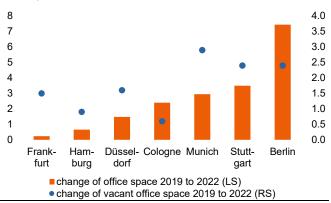
However, because levels of new build activity have varied in the top locations, the supply of office space has increased heterogeneously. There has been virtually no growth in office space in Frankfurt, Hamburg and Düsseldorf and vacancy rates have therefore increased less. Considerably more offices have been built in Munich, Stuttgart, and particularly Berlin, and vacancy rates have consequently grown faster. Strikingly, vacancy rates in Cologne and Berlin have grown moderately based on the growth in the office stock. The project pipeline shows the supply of new space focused on Berlin continuing to grow up to 2024. This is likely to raise the vacancy rate further but, most importantly, will improve the supply of modern office space.

As we described at the beginning, the shift in office demand and the recession have dampened rental activity. The first half of 2023 was one of the weakest so far with take-up of 1.05 million m². Even during the Lehman crisis, more space was let. 2023 was 27 per cent weaker than the first-half average from 2013 to 2022. Düsseldorf, Cologne and Stuttgart even showed a decline of more than 40 per cent. Conversely, levels in Berlin and Munich were close to average. In Frankfurt and Hamburg the single-digit decline compared to the ten-year average was fairly small.

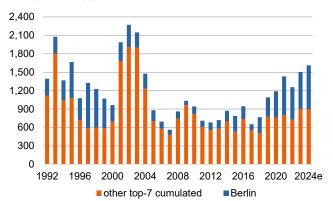
Locations with more new builds have slightly more vacant properties, but benefit from better supply of modern office space

Rental activity weak in 2023, but with major location-related differences





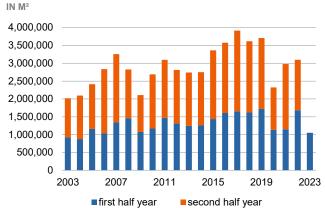
NEW SPACE HAS GENERALLY ACCELERATED, BUT MAINLY FOCUSED ON BERLIN NEW SPACE IN '000 M²



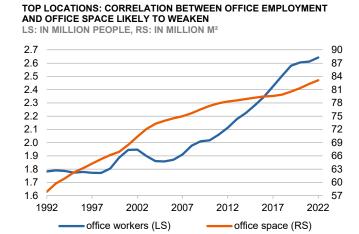
Source: bulwiengesa

Source: bulwiengesa

34



FIRST HALF 2023 ONE OF THE WEAKEST SO FAR IN TERMS OF RENTAL PERFORMANCE



Source: bulwiengesa

Source: bulwiengesa, Scope

Summary office market: Demand for climate-friendly communications centres

In the first half of 2023 office market activity was driven by the small and mediumsized market segment. The second half could be better due to individual large contracts, but given the gloomy sentiment at companies, 2023 is unlikely to be a good year below the line. With no wide-ranging economic recovery expected in 2024, the office market is likely to remain weak. Most companies are also managing well with the available space supply and remote working.

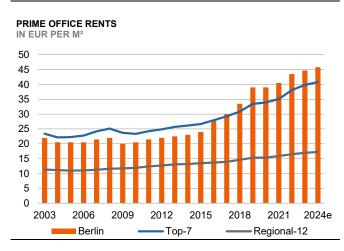
Rentals will go ahead if they meet the required specifications in terms of location, facilities, layout and size as well as sustainability. However, modern office space remains in short supply. New office projects are often put on ice and most space under construction has already been pre-let. Prime rents will therefore continue to increase despite growing vacancy rates and a sluggish economy, but at a slower pace than before. We regard annual growth of 3 to 5 per cent as realistic by 2024.

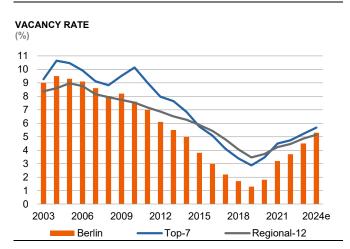
The actual demand for office space for the "New Work" concept will only emerge over time. Given a shortage of skilled local workers and housing, it may only be possible to hire new employees if they are permitted to work remotely full-time. The number of employees will then increase, but office demand will not. For various reasons, companies are therefore likely to place value on the ability to adapt space usage in line with their individual needs. To this end, space available in the short term could also increasingly be used as "flexible workspace". Impetus for office market revival difficult to find

High rents accepted if space is an exact fit for concept

Office usage must first become established, and flexibility is therefore key

Berlin: Office space

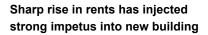




Source: bulwiengesa, DZ BANK forecast

Source: bulwiengesa, DZ BANK forecast

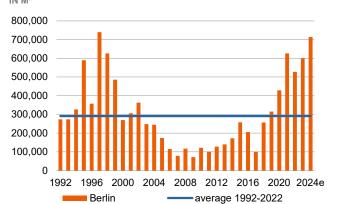
The economic upturn in Berlin has given a strong impetus to Germany's largest office market (21 million m²). Within the space of just a few years, growing demand for office space led to a doubling in the annual take-up to over 1 million m² (2017 and 2019). Weak office construction over a long period of time meant that the vacancy rate had fallen to just over 1 per cent by 2019, while prime rents rose steeply. The pandemic in turn led to a fall in take-up of office space to around 800,000 m² p.a. There was a marked upturn in office construction activity in response to high demand for space and higher rents; the annual rate of completions rose to over 500,000 m² from 2021 onwards. Together with a reduction in demand for space triggered by the WFH trend, the vacancy rate rose to 4.3 per by the middle of 2023. Even so, high demand for modern office space has driven prime rents to EUR 44 per m² – double what they were in 2013. A weak economy slowed the rental rise in H1 2023 and take-up fell to its lowest level in ten years at 270,000 m². This only includes two major transactions - BCG and the Jobcenter. There were still as many as four in the first half of 2022. Although building activity is slowing down, projects currently underway mean that a substantial amount of new space can be expected to come onto the market up until 2024. This is likely to limit rental increases further, while vacancies could continue to rise.



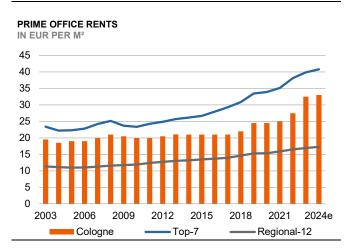
TAKE-UP IN BERLIN IN M² 1,100,000 1.000.000 900,000 800 000 700,000 600,000 500,000 400,000 300,000 200,000 100,000 0 2003 2007 2011 2015 2019 2023 ■ first half year ■ second half year

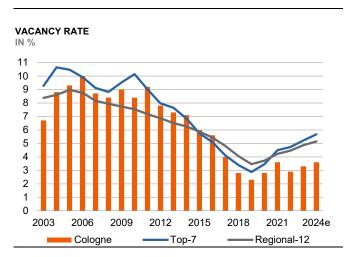
Source: bulwiengesa

NEW OFFICE SPACE IN BERLIN IN M²



Cologne: Office space



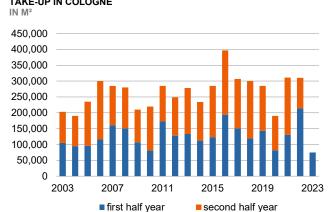


Source: bulwiengesa, DZ BANK forecast

Source: bulwiengesa, DZ BANK forecast

Although Cologne is the fourth largest of the big German cities in terms of population, its office market only ranks in sixth place with just over 8 million m² of space. Nonetheless, the office market has demonstrated solid results in the last few years. Whereas take-up in the big office markets in 2021 and 2022 was mostly well below the peaks achieved prior to the pandemic, Cologne posted stronger results at 310,000 m². Another gratifying factor is a low vacancy rate and its slow rise. The figure lately stood at 3.1 per cent, which is hardly any higher than it was prior to the pandemic. Prime rents have risen by over 20 per cent to EUR 31.50 per m² since mid-2022. However, measured in relation to a sound market performance, transaction statistics in the first half of 2023 were weak at just 75,000 m². This reflects the absence of any large leasing transactions. The biggest deal this year, involving the Kirchliche Zusatzversorgungskasse (Church Benevolent Fund), was just 8,000 m², followed close behind by a transaction with BCG. Bearing in mind signs that new office construction is already tailing off and a high proportion of space under development which is already leased, the supply of available modern office space remains tight. A low vacancy rate is also limiting supply. Rents are therefore likely to continue to rise in the next few guarters, albeit at a slower pace, accompanied by a moderate rise in the vacancy rate.

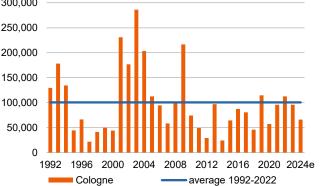
Virtually no vacancies while prime rents have been rising sharply since 2022



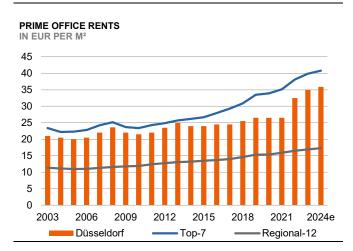
TAKE-UP IN COLOGNE

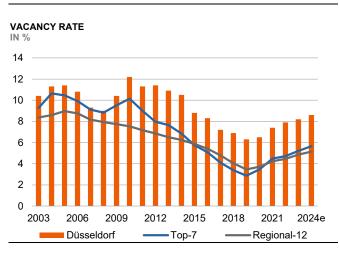
Source: bulwiengesa





Düsseldorf: Office space



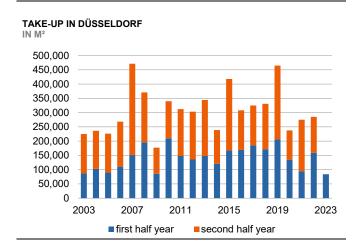


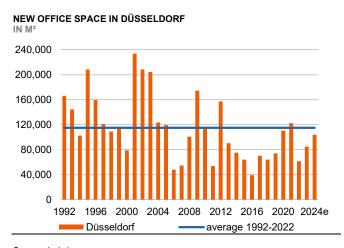
Source: bulwiengesa, DZ BANK forecast

Source: bulwiengesa, DZ BANK forecast

Sharp rise in prime rents since 2022

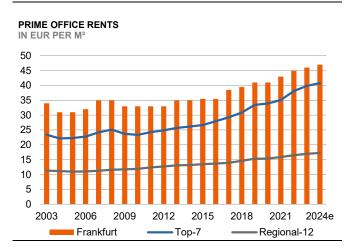
Although Düsseldorf has the smallest office market among the top locations at just under 7.8 million m², it only lags marginally behind Cologne and Stuttgart. Whereas prime rents have risen steadily in the other top locations in the last few years, the rate of increase in Düsseldorf has been slow. However, huge interest in modern office space has meant that, even in Düsseldorf, prime rents surged by over 20 per cent in 2022, and, in spite of weak letting activity, they had risen to EUR 35 per m² by mid-2023 – noticeably reducing the gap in the relation to the average prime rent for top locations. Take-up fell to its lowest level of the last 20 years in the first half of 2023 at 84,000 m². Unlike in 2022, there were no major transactions of over 10,000 m². Only one lease agreement – involving Hengeler Müller – came close to that order of magnitude. By 2023, new construction, vacated offices and a low level of letting activity had led to an increase in the vacancy rate to 8 per cent. Only Frankfurt has a slightly higher rate, although a further rise is on the cards. After a sharp rise in rents in 2022, another marked increase in prime rents is unlikely this year although a lack of contemporary space could still drive them upwards.

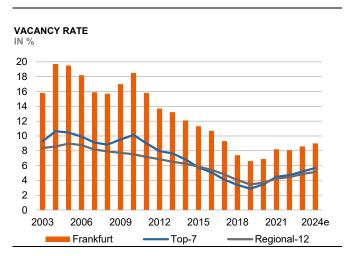




Source: bulwiengesa

Frankfurt: Office space



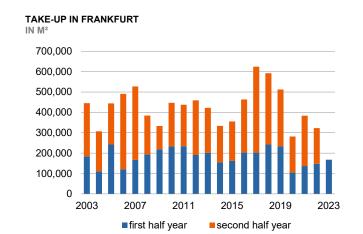


Source: bulwiengesa, DZ BANK forecast

Source: bulwiengesa, DZ BANK forecast

Frankfurt's office market has excelled over many years with the highest prime rents in Germany. Since 2019, however, Berlin and Munich have almost been neck-andneck, and indeed Munich had caught up with Frankfurt by mid-2023 with prime rents of rising to EUR 45 m²; Berlin only lags marginally behind. Whereas letting activity in the top locations was weaker in the first half of 2023 than in the same previous-year period, Frankfurt in fact achieved a slightly higher take-up at almost 170,000 m² although this did not include a single transaction of over 10,000 m². However, each of the three deals - involving Universal Investment, Eintracht Frankfurt and the Local Education Authority - came up to just below that mark. In addition, there are signs of further larger transactions over the rest of the year. Even the ECB is active: The European Banking Authority, which currently uses the ageing Eurotower as its base, could move to the Gallileo Tower. Completions this year and next year are likely to be only moderate in spite of a few larger project developments. The current restraint surrounding new projects could therefore lead to a further weakening in construction activity. The vacancy rate could increase to 9 per cent in 2024 as a result of vacated space. Even so, prime rents could rise slightly further on the back of high demand for modern office space at a time when this type of space is in short supply.

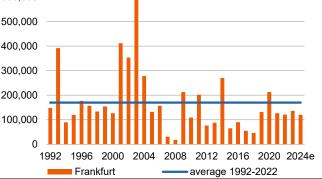
Quite respectable lettings figures for the Frankfurt office market in the first half of 2023



Source: bulwiengesa

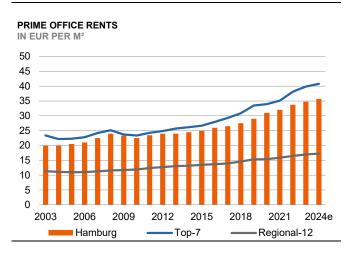


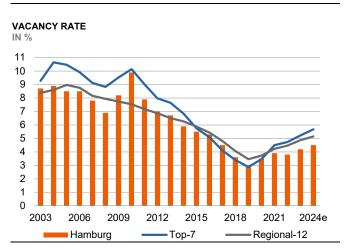
NEW OFFICE SPACE IN FRANKFURT



Source: bulwiengesa

Hamburg: Office space

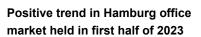




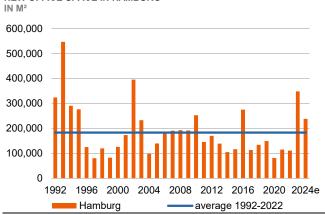
Source: bulwiengesa, DZ BANK forecast

Source: bulwiengesa, DZ BANK forecast

Hamburg is the third largest office market in Germany behind Berlin with a stock of 14 million m² and almost on a level with Munich. However, prime rents for office space in Hamburg are around EUR 10 per m² lower. Even so, the Hamburg office market has done well, supported by a broadly-based local economy. Prime rents have risen by around 40 per cent in the space of ten years to EUR 34.50 per m² most recently. Take-up was a fairly solid 225,000 m² in the first half of 2023, which is only around 10 per cent below the ten-year average. The transaction involving Hamburg's parliament was just below the 10,000 m² mark. The biggest transaction (15,000 m²) arose through RTL's takeover of Gruner+Jahr. The vacancy rate has remained at just under 4 per cent, owing to only a moderate completion volume in the last few years. The vacancy rate is low, above all in the HafenCity. Supply in this area is improving again through new projects. Overall, new space coming onto the market in 2023 and 2024 is likely to be well above the level in previous years, first and foremost among which will be the 64-floor Elbtower, although its completion is not scheduled until 2025. Further office space is expected to go up in the new Grasbrook quarter opposite the HafenCity. The vacancy rate is likely to lift to just over 4 per cent this year and an increase in prime rents is also on the cards.



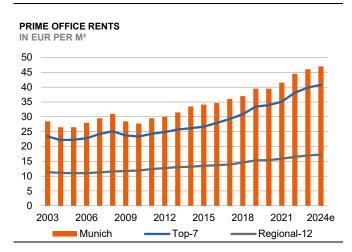
TAKE-UP IN HAMBURG IN M² 700,000 600,000 500,000 400,000 300,000 200,000 100,000 0 2023 2003 2007 2011 2015 2019 first half year second half year

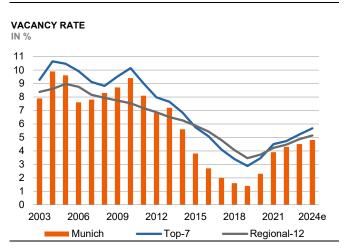




Source: bulwiengesa

Munich: Office space

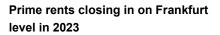


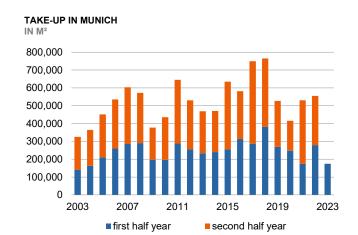


Source: bulwiengesa, DZ BANK forecast

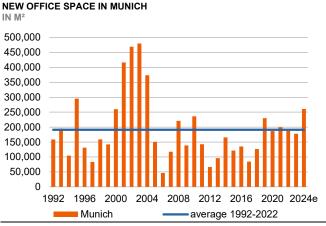
Source: bulwiengesa, DZ BANK forecast

The Munich metropolitan region has one of the strongest economies of all the German states. The location's potential is supported by the fact that Munich is home to leading US IT giants such as Amazon, Apple, Google and Microsoft. Strong growth in white-collar work has meant that any earlier vacancies in the office market were largely whittled down. By 2019, the vacancy rate had fallen to just over 1 per cent, while prime rents had risen sharply. In spite of tight supply, annual office take-up rose to a high of around 750,000 m². In the wake of the pandemic, however, take-up fell sharply, accompanied by a marked increase in the vacancy rate to 4.3 per cent most recently. Prime rents nevertheless continued to climb and recently caught up with Frankfurt at EUR 45 per m². However, in the first half of 2023, an economically-led weakening in leasing activity and gradual improvement in the supply of modern office space have slowed down the rise in rents. At 175,000 m², take-up was down by almost 100,000 m² on the normal figure for the first half. Although two deals – involving Cariad and DGB – just exceeded the 10,000 m² mark, as in other locations, the absence of major transactions has been the main reason behind weak results. We expect a moderate increase in both the vacancy rate and prime rents in the second half.

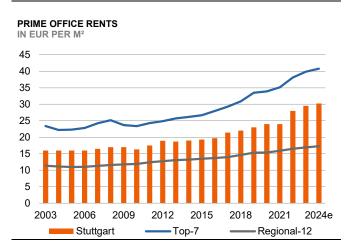


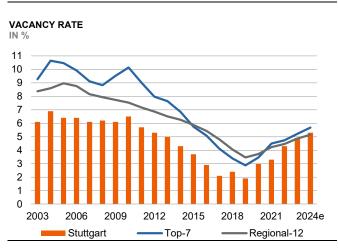


Source: bulwiengesa



Stuttgart: Office space

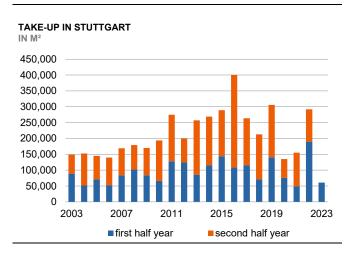




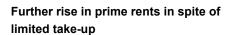
Source: bulwiengesa, DZ BANK forecast

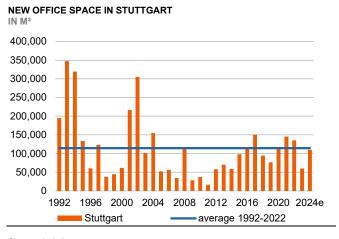
Source: bulwiengesa, DZ BANK forecast

Stuttgart differs from the other top locations in so far as industry is of greater importance in the city. In an office market of 8.2 million m², a weaker services sector is reflected in a more moderate take-up. Nevertheless, there was a marked upturn in activity in the office market from 2010 onwards. With the exception of 2016, there was also a high take-up of around 300,000 m² in Stuttgart in 2015, 2019 and 2022. The upturn in demand for office space also led to a fall in the vacancy rate to under 2 per cent in 2019, while previously low prime rents rose sharply. However, much weaker leasing activity in 2020 and 2021 led to a sharp rise in the vacancy rate. The figure is now almost 5 per cent, which is back close to what it was prior to 2010. In spite of weak leasing activity in the first half of 2023 at around 60,000 m² and a marked rise in vacancies, prime rents continued to rise to EUR 29 per m² most recently. The biggest deal in the Frankfurt office market was for 7,000 m². Assuming market conditions remain weak, we expect a moderate increase in prime rents in the next few quarters which will be driven by demand for modern office space. The vacancy rate is likely to rise to just over 5 per cent.



Source: bulwiengesa

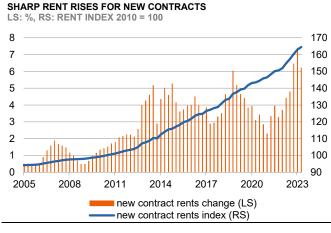




RESIDENTIAL

Housing market stressed by construction crisis, immigration and climate investment

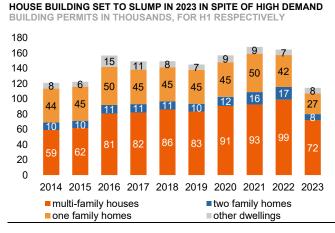
Cranes could become a more unusual sight in city skylines in the next few years. Although work is continuing on projects that are already underway, there are now hardly any new projects in the pipeline. A sharp rise in construction and financing costs is forcing project developers and property companies to call a halt to many construction plans, as illustrated by a sharp fall in the number of building permits awarded in the first half of 2023. This is all happening at a time when high immigration is generating an urgent need for flats. There should be more residential construction, not less, since there are hardly any vacant properties left in spite of huge efforts to build new housing. However, it would require increases of at least 50 per cent in already expensive rents for house-building projects to become economically viable once again.



Source: vdp

rent rises across Germany

Situation in housing markets in top locations becoming even tighter



Building permits for Germany

and expensive

Source: Destatis

A sharp rise in interest rates and construction costs in 2022 has undoubtedly contributed to the slump in housing construction, but there are other reasons which go further back. These include complicated building regulations which are not uniform throughout Germany; rising costs through higher building and energy efficiency standards, along with a tough planning-permission process. On top of that, there is a land tax which can be up to 6.5 per cent (it varies from one German state to another), along with social housing quotas of 30 or more, making unsubsidised housing even more expensive. According to the German Property Federation (ZIA), residential property is hit by taxes of 37 per cent.

The economic viability of investing in housing construction has been suffering for a long time from a number of cost drivers. In addition, more widespread rent regulation is dampening income. The fact that housing was still being built in spite of this reflected an expansionary monetary policy and resulting negative bond yields. A lack of investment alternatives meant that investors accepted low rental yields which could be improved over time by rising rents. However, housing construction is no longer an attractive option in view of much healthier bond yields at present, much higher financing costs and an increase of 35% per cent in construction costs within the space of three years. With the increased energy efficiency of new buildings

Bureaucracy and taxes make

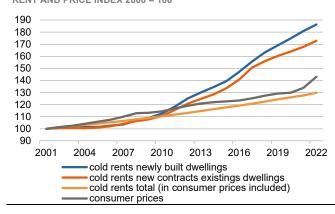
building in Germany complicated

Residential construction is expensive and no longer works in view of normalised interest rates envisaged from 2025 – EH-40 standard instead of the EH-55 standard in force since 2023 – housing construction would become even more expensive.

Another problem is that property companies face a veritable tidal wave of costs. Firstly, bearing in mind an increase of over 400 basis points in key interest rates, any follow-up financing could become much more expensive. Secondly, property companies face substantial investments in energy efficiency measures and new heating technology. Consequently, even if the economic viability of new housing construction were to improve, the necessary financing would still be lacking. In addition, the valuation of property portfolios which often include older and less energy-efficient homes is declining.

Falling interest rates, more moderate building costs and simplified building regulations could rekindle new building, but this is unlikely to happen: Inflation is not yet under control; labour is in short supply and the cost of energy for the production of energy-intensive building materials is set to remain high. In any case, housing problems in cities cannot be solved with new building alone. Building plots are virtually impossible to find and there are environmental and climate restrictions. For this reason, any available reserves in property portfolios are becoming increasingly important with the possible repurposing of redundant office and retail space and a more efficient use of the existing housing stock. Apart from a natural desire on the part of tenants to remain in the familiar home, rental rights encourage the "hoarding" of living space (under-occupation).

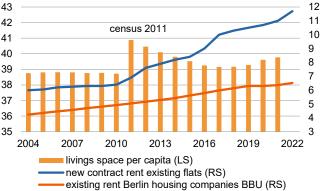
GAP BETWEEN EXISTING RENTS AND MARKET RENTS GROWING INEXORABLY WIDER RENT AND PRICE INDEX 2000 = 100



Source: bulwiengesa, Destatis

UNDER-OCCUPATION OF SPACE PER INHABITANT L: M², R: EUR PER M²

LOW EXISTING RENTS, E.G. IN BERLIN, ENCOURAGE CONSISTENT



Source: bulwiengesa, BBU Market Monitor 2022

High demand for housing at a time of persistent shortages has led to a sharp rise in rents for new contracts, leading to an ever growing gap in relation to existing rents. In addition, many landlords forego rent increases. As a result, even consumer prices have risen faster than existing rents. For tenants who have been living in the same accommodation for a long time, moving can often be financially unattractive since a move would mean a huge rise in the cold rent (without utilities) per m². This is illustrated by the example of Berlin. Anybody moving home (from existing stock) currently faces an increase in rent to an average of EUR 12.50 per m²; existing rents are only roughly half that amount. The problems in the housing market are therefore not encouraging an economical use of living space. On average, Berlin inhabitants still have around 40 square meters of living space per capita and virtually nobody moves any longer. The annual fluctuation in the housing market fell from 8 to 5 per cent between 2010 and 2021.

Growing gap between existing rents and rents for new contract

Cheap housing stock in Berlin for example means that even large flats are affordable

Property companies hit by high interest costs and a decline in property values

Building new housing alone not enough; existing housing also has to become part of the solution The market situation is becoming increasingly difficult for those looking for a home. New completions are increasingly rare while existing stock hardly becomes free any longer. Rapidly rising rents are likely to widen the gap between existing rents and new contract rents even further, making moving home even more unattractive. Assuming the supply of new builds remains limited, there should be a better use of existing stock, e.g. through a more rapid rise in existing rents. In this respect, indexed rents could help with steady adjustments.

In any case, sharp rent rises for existing housing stock are now more likely. Reducing the high greenhouse emissions from buildings will call for substantial investments and a modernisation allocation will allow at least some of this to be passed on to tenants. Based on the current legislation, up to 8 per cent of modernisation costs can be permanently transferred to rents. A maximum increase of EUR 3 per m² within the space of six years (EUR 2 in the case of cold rents of up to EUR 7 per m²) is permissible. The energy-efficient refurbishment of buildings and the renewal of heating technology cause high costs, which can lead to noticeable rent increases.

The switch from fossil fuels to renewable energy for heating is regulated in the socalled "Heating Act" (GEG). The subsidies for the installation of new heating systems as well as the allocation of the costs to the rent are not yet regulated (as of the beginning of September 2023). The EU directive sets out further legal requirements regarding the overall efficiency of buildings, according to which existing buildings will have to achieve an EPC rating of E by 2030 and a rating of D by 2033. The Federal Association of German Housing and Real Estate Companies (GdW) estimates that 45 per cent of housing in Germany will therefore have to undergo an energy-efficiency upgrade in the next nine years. Oil and gas heating systems are becoming increasingly uneconomical on the back of rising energy and CO₂ costs – up to 95 per cent of which are borne by the landlord, depending on the level of energy efficiency. However, decisions about heating systems are difficult to make in view of a lack of information about incentives or options to link up to district heating.

The ratio of rent to upgrade costs passed on to tenants could prove detrimental, especially in the case of low cold rents excluding utilities, since old buildings with low rents will require the biggest investment. The burden could be too much for low-income tenants in affordable flats. In 2022, around 12 per cent of households spent over 40 per cent of their income on housing costs. Even if any upgrade-related increase in rent is partly offset by falling heating costs, climate change mitigation costs are a political "hot potato". Contrary to promises, tight housing markets means that rents will not become more affordable; instead they will continue to rise.

What has become of the plan to nationalise large property companies? In September 2021, the referendum on this subject conducted in Berlin attracted a lot of attention, not least because a majority of the electorate voted in favour. The Commission charged with looking at the legal framework presented its conclusions in June 2023. On this basis, expropriation is possible in principle, but it is doubtful whether it can ever be implemented. Indeed, apart from doubts about the usefulness of such a move and the huge costs it would involve, there are fundamental legal hurdles in relation to proportionality, equal treatment and compensation. Should the plan actually be carried out, then it would probably require a decision by the Federal Constitutional Court. However, the issue of nationalisation under Art. 15 of the German Constitution (GG) has never been looked at in depth.

Existing rents would have to rise faster to close the rent gap

Investment in energy-efficiency likely to lead to sharp rise in rents

Germany's "Heating bill" and the EU's Energy Performance of Buildings Directive set out plans for a green overhaul of buildings

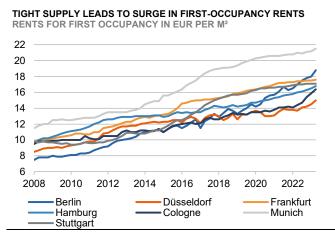
Oil and gas heating systems could become economically unviable through rising energy costs or the price of CO₂

Anger is inevitable: climate change mitigation will drive the cost of living even higher

Berlin's Commission on the nationalisation of large property management companies has given the green light, but doubts persist

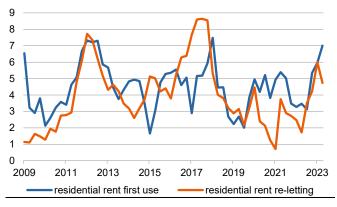
Trend in the housing market in top locations

Conditions for housing are especially challenging in Germany's seven biggest cities. This is driven above all by strong migration from at home and abroad, reflecting attractive job markets in economic centres with good income prospects. Another problem is immigration. Immigrants are mostly drawn to cities because they offer better conditions for starting a new life. The figures speak for themselves: Since the turn of the millennium, the population in the seven biggest cities has grown by around 1.5 million inhabitants to 10.2 million – an increase of around 17 per cent. One third of the population growth took place during the first half of this period up to 2011; two thirds of the increase has taken place in the second half.



Housing markets in the seven biggest cities especially tight





Source: bulwiengesa

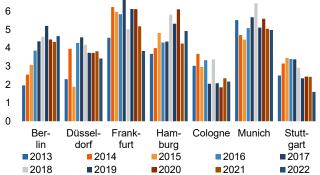
Up to around 2010, however, supply was still fairly reasonable because of a high level of new building in the 1990s. This is reflected in a largely stable rental trend up until that point. Thereafter, supply became tighter while demand for housing surged on the back faster population growth, compounded by the slump in housing construction which followed the property crisis in the 1990s. This laid the foundation for the rise in rents which continues to this day. At present, first-occupancy rents range from EUR 15 in Düsseldorf to EUR 21.5 per m² in Munich. Once such properties are rented on to a new tenant, rents range from EUR 12.50 per m² in Berlin up to EUR 18.50 per m² in Munich. Cologne has seen the slowest rise in r ents since 2010 at around 50 per cent. Munich stands out in this respect: rents there have risen by a further 75 per cent on top of an already high level.

New residential construction started to pick up again from 2010 onwards, but failed to meet the growing demand for housing. In spite of a rising number of new housing units, vacancy rates remained at a very low level. There are striking differences in completions figures: Whereas, for a time, more than six new homes per 1,000 inhabitants were being built in Frankfurt, Hamburg and Munich, Cologne and Stuttgart only managed three units per annum at best. The figure for Berlin was around 4.5, although this nevertheless trebled the rate of new building within the space of just a few years. These high completion figures are impressive, bearing in mind a mostly tight supply and the high cost of building plots. This is especially true of Munich, the most densely populated of Germany's big cities.

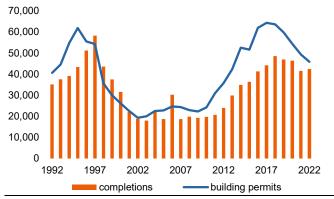
Source: bulwiengesa

Rents have been rising noticeably across the board since 2010

Housing construction started to pick up in 2010 albeit with big regional differences MOST SUCCESSFUL CITIES FOR NEW HOUSING: FRANKFURT, HAMBURG AND MUNICH NO. OF HOUSING COMPLETIONS PER '000 INHABITANTS 7



MOMENTUM IN HOUSE BUILDING HAD LET UP NOTICEABLY EVEN BEFORE THE RISE IN INTEREST RATES AND CONSTRUCTION COSTS AGGREGATE NO. OF HOUSING UNITS ACROSS TOP 7



Source: Scope, Municipal statistical offices

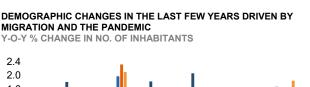
Source: Scope, Municipal statistical offices

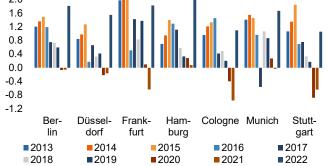
In 2018, both building permits and completions reached a high level, almost in line with the level last seen in the 1990s. Since then, though, completions and building permits have been falling again. In other words, the decline set in even before the rise in interest rates and construction costs. Apart from increasing restrictions, e.g. through a lack of building plots, resistance from civic society, or environmental concerns, this is also likely to reflect a temporary let-up in immigration from 2017 onwards. The number of inhabitants even declined slightly during the pandemic years of 2020 and 2021. However, population growth surged again in 2022 with the end of the pandemic and above all because of the war in Ukraine.

The sharp rise in demand for housing in 2022 is not the only reason for the accelerated rise in residential rents though. Rising interest rates have meant that many potential buyers can no longer muster the finances required for home ownership, pushing up demand for rental property even further, as illustrated by the right-hand side graph below on the cost of buying. In spite of the assumption of a 9 per cent fall in purchase prices and of a 6 per cent rise in rents in annual rents in 2023, the annual rent for 2023 is much lower than the cost of borrowing which has almost doubled against 2021.

Population growth in top locations has now slowed down substantially

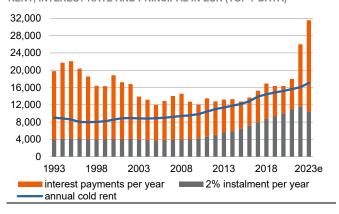
Renting more attractive now that mortgage rates have exploded





Source: Destatis

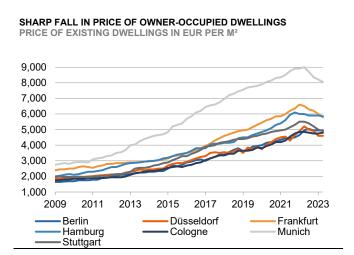
PURCHASE AND RENTAL PRICES FOR 100 M² EXISTING FLAT: SHARP RISE IN BORROWING COSTS TOO MUCH FOR MANY BUYERS RENT, INTEREST RATE AND PRINCIPAL IN EUR (TOP 7 DATA)



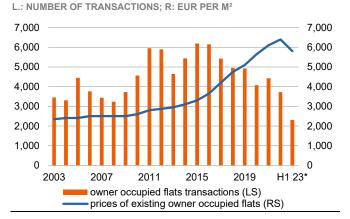
Source: bulwiengesa, Bundesbank, DZ BANK

With property prices in top locations at such a high level, the increase from 1 to 4 per cent in mortgage interest rates is having a major impact. After prices had peaked in 2022, they immediately began to let up again because financing is now so much more expensive. Measured against this, though, the fall in prices is still moderate. However, the number of transactions has fallen sharply since there are fewer potential buyers and also because seller are often unwilling to make substantial price concessions. One argument against big price discounts is that the rental market is buoyant in view of the short supply of available properties.

Marked fall in sales figures of own housing



FRANKFURT AS ILLUSTRATION OF WEAK MARKET: FIGURES SHOW MARKED FALL IN SALE OF DWELLINGS TO PRIVATE HOMEBUYERS



Source: bulwiengesa

Summary and outlook for the residential market

The housing market in top locations is especially under pressure. The market is likely to get even tighter in view of an almost total lack of vacant properties, ongoing migration to cities and, at the same time, little housing construction. Rents in the seven biggest cities can therefore be expected to continue to rise rapidly. The ever widening gap between market and existing rents could also be a contributory factor since tenants are being discouraged from moving – a trend which is dampening the supply of available housing. However, even existing rents are set to rise sharply, driven by forthcoming measures towards cleaner energy and their cost impact on rents.

In addition, greater regulation of the rental market is prompting some landlords to remove properties from the regulated market and to opt instead for less regulated and/or less transparent forms of rental such as holiday lets or furnished flats. On balance, we can expect to see growing frustration among prospective renters. The kind of affordable housing promised by politicians is practically non-existent.

Residential rents in the top locations are likely to increase by around 6 per cent this year and we expect a similar increase next year. Rent regulation, especially through the rent "brake", could lead to a split in the rental trend between the various market segments. In the case of less regulated housing – completed from 2014 onwards or comprehensively modernised – rents could rise faster than in older, regulated flats. Pressure on politicians to act is also set to grow as rents continue to rise. Forthcoming Landtag elections as well as the next Bundestag election in the autumn of 2025 are likely to push the shortage of housing to the top of the agenda with calls for stricter rent regulation following close behind. Supply is therefore set to remain unnecessarily tight, since we can then expect housing construction to be dampened not only by high interest rates and construction costs, but also by dwindling investor interest.

Source: bulwiengesa, City of Frankfurt

Residential rents in top locations likely to continue to rise sharply

Properties being withdrawn from the regulated market as a result of regulations

Gap in rents could widen between strongly and less strongly regulated sub-markets

TOP SEVEN LOCATIONS - DATA AND RENTS

LOCATION DATA

		Berlin	Cologne	Düsseldorf	Frankfurt	Hamburg	Munich	Stuttgart	Top Locations
No. of inhabitants and % cl	hange								
2022		3,764,000	1,088,000	631,000	773,000	1,892,000	1,525,000	637,000	10,300,000
2012 to 2022 (10 years)	%	11.4	6.2	5.9	12.8	8.7	9.7	6.4	9.5
2017 to 2022 (5 years)	%	3.7	0.3	1.7	3.8	3.0	2.6	0.3	2.7
Households									
Absolute change 2012 - 2022 (10 years) 22			45,500	19,700	52,600	109,300	104,500	25,100	579,000
Completed housing units									
2013 to 2022 (10 years)		141,700	28,600	22,000	41,200	86,400	76,700	17,200	413,000
2018 to 2022 (5 years)	per '000 inhabitants p.a.	4.6	2.4	3.8	5.3	5.3	5.4	2.3	4.5
Unemployment									
July 2023	%	9.1	8.8	7.1	5.8	7.5	4.4	5.1	7.5
GDP									
Per capita 2022	EUR	47,000	68,000	95,000	107,000	72,000	89,000	102,000	71,000
Disposable income									
Per capita 2022	EUR	24,505	27,069	30,062	27,440	28,124	35,993	29,914	28,033

Source: Scope, Federal Labour Agency

RENTS

	Retail % change in prime rent in %					Office % change in prime rent in %					Residential % change in average first occupancy rent in %				
	10 years 2012- 2022	5 years 2017- 2022	2022 у-о-у	2023е у-о-у	2024e y-o-y	10 years 2012- 2022	5 years 2017- 2022	2022 у-о-у	2023е у-о-у	2024e y-o-y	10 years 2012- 2022	5 years 2017- 2022	2022 у-о-у	2023е у-о-у	2024е у-о-у
Berlin	6	-18	-5.6	-1	-1	98	45	7.4	2-4	2-3	72	38	6.2	7-8	5-6
Cologne	-9	-16	-4.4	-1	-1	34	31	10.0	>10	1-2	33	17	4.3	6-7	5-6
Düsseldorf	23	-4	-1.8	0	0	38	33	22.6	6-8	2-3	20	9	2.9	6.5-7.5	4-5
Frankfurt	2	-10	-1.8	-1	-1	36	17	4.7	2-3	2-3	44	15	1.2	3.5-4.5	3.5-4.5
Hamburg	-2	-16	-4.0	-1	-1	40	27	5.3	3-4	2-3	24	15	3.2	5-6	4.5-5.5
Munich	2	-10	-1.6	-1	-1	48	24	7.2	3-	2-3	55	13	1.0	4-5	4-5
Stuttgart	-13	-22	-4.9	0	0	48	31	16.7	5-6	2-3	62	17	1.8	5.5-6.5	5-6
Top locations	2	-15	-4.0	-1.0	-0.7	53	30	8.6	4.5	2.3	49	22	3.7	6.1	5.1

Source: bulwiengesa, DZ BANK forecast

GLOSSARY

Apartment blocks	The purchase price is divided by the basic rent (excl. bills) in the first year and therefore equates to the reciprocal value of the gross initial rent. Bills are not factored in.
Centrality score	Retail centrality is calculated by dividing retail sales in a specific location by retail spending and then multiplying the result by 100. The figure will be above 100 points if retail sales are higher than retail spending and consequently that location in question has additional purchasing power.
Multi-occupancy multiplier	The purchase price is divided by the cold rent in the first year and thus corresponds to the reciprocal value of the gross initial yield. Additional costs such as utilities and management costs are not taken into account.
Net initial yield	The initial rental yield for office and retail space is calculated dividing the annual net rent by the overall purchase price, taking into account additional charges.
New space	Office space completed in a particular year from new building.
Office space take-up	Office space newly occupied during a one-year period in a location either through letting or owner occupation. The figure does not include contract extensions. The timing factored in is not the beginning of the actual use of the space, but when the contract was signed.
Prime rent	The prime rent represents a mean of the top 3 to 5 per cent of lettings in the market and therefore the figure given does not correspond to the absolute top rent.
Purchasing power score	Purchasing power relevant to the retail sector defines that part of the income of households in a region which is available for purchasing goods and services. The purchasing power figure describes a location's ability to purchase goods and services in relation to the German average which is set at 100 points.
Reg-12/Regional-12	Space and inhabitant-weighted index consisting of 12 regional centres, namely Augsburg, Bremen, Darmstadt, Dresden, Essen, Hanover, Karlsruhe, Leipzig, Mainz, Mannheim, Münster and Nuremberg.
Тор-7	Space and inhabitant-weighted index of the seven top locations under consideration in this report, namely Berlin, Cologne, Düsseldorf, Frankfurt, Hamburg, Munich and Stuttgart.
Vacancy rate	Proportion of vacant space in a location in relation to existing space.

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