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REAL ESTATE MARKET UNDER "CORONA SCRUTINY"

Most asset classes show solid development

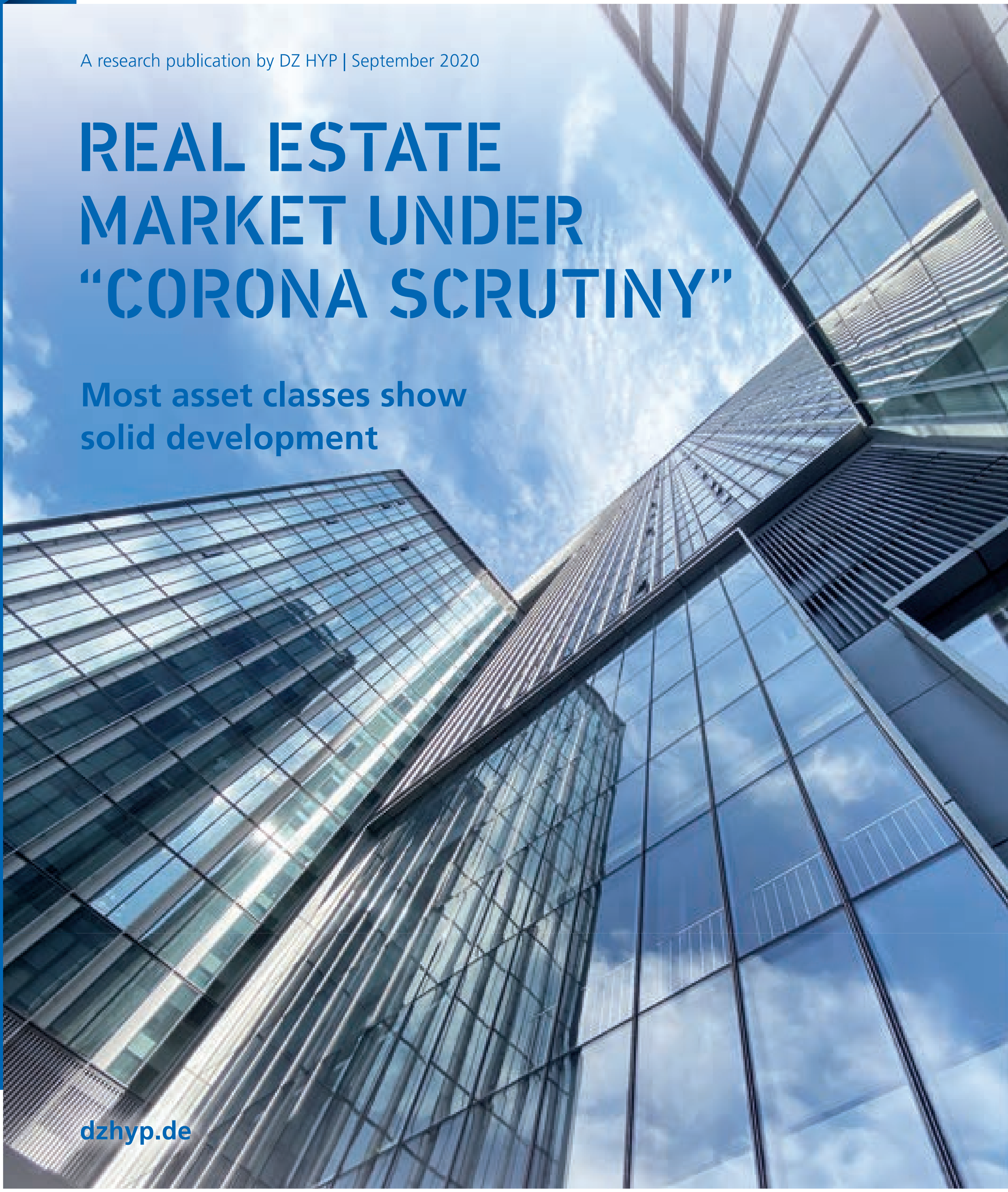

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TABLE OF CONTENTS

PREFACE

Dear Sir/Madam,

As a leading commercial real estate bank in Germany, DZ HYP regularly analyses the markets in which it is active. Our market report covering developments on the residential, office and retail asset classes in Germany’s seven largest cities by population is usually published every autumn. In 2020, however, the outbreak of the COVID-19 pandemic has presented the world with hitherto unknown challenges, leading to a recession in Germany – a development which also impacts the real estate market. In light of this special situation, this year we will analyse the effects of the pandemic on different asset classes, forecasting further developments. We will not only take a closer look at the residential, office and retail segments, but also at the hotel and logistics markets.

All in all, the real estate market is proving to be solid and crisis-resistant, particularly in the residential segment. The lending business for owner-occupied homes remained on a solid level during the lockdown months of April and May. Purchase prices also maintained their high level, even increasing substantially in some cases. The same applies to the residential rental business. Fears of payments arrears have proved to be largely unfounded, and average first-occupancy rent levels rose in the first half-year. Commercial real estate shows a differentiated picture: logistics real estate should be the chief beneficiary from the crisis, as a result of increased e-commerce activity. However, the logistics sector still has ties to the industrial sector, too. Since traditional manufacturing companies are demanding less properties due to the recessionary environment, the take-up of space has slowed year-to-date. This also applies to the office property market. Nevertheless, top rents and vacancy rates have shown barely any reaction so far. In the medium term, the recession is expected to slow the demand for space. The hotel and retail sector asset classes are facing challenges. Whilst the former should show an improvement in the medium term – following the lockdown-induced collapse of business – the latter’s already challenging pre-corona situation has worsened due to the pandemic.

One thing most asset classes have in common is that, after around eleven years of upturn, the times of dynamically rising rents and purchase prices have come to an end. As a rule, however, real estate continues to retain its status as an attractive investment thanks to favourable financing conditions and a yield pick-up over investment alternatives.

2021 will see our regular market reports “Regional Real Estate Markets” and “German Real Estate Market” published again. In addition, we analyse the commercial real estate markets in individual German federal states: an overview of DZ HYP’s real estate market reports to date is available on our website https://www.dzhyp.de/en/about-us/market-research/

Yours sincerely,

DZ HYP

September 2020

SUMMARY

» The coronavirus has triggered one of the deepest recessions experienced in Germany. However, the property market has withstood fairly well the major challenges of the pandemic which has now been rampant for about six months; the retail sector and hotels have nevertheless been hit hard by the lockdown. This is not self-evident since prices and rents have reached high levels after ten years of upturn and low interest rates. However, the property market has been supported during the crisis by several factors. A combination of a strong economy, an efficient medical system, and largely well-judged measures from politicians have helped. The pandemic has been rapidly curbed and the negative impact on the economy and the labour market has been minimised. The confidence of citizens and investors has been maintained. However, since the summer, the number of infections has been rising again, which may again lead to restrictions.

» The housing market has shown the greatest resilience during the pandemic. Buyer demand has proved robust. Stable mortgage lending in the second quarter reflects continuing interest in buying a home. Purchase prices have remained high despite rising unemployment and job losses at many companies. Low interest rates are helping, since they often make it cheaper to buy rather than rent a property. Residential rents have also proved crisis-resistant. Fears about rent arrears after the outbreak of the pandemic have proved to be largely unfounded. Residential rents even increased slightly in the first half.

» Although investment in commercial real estate fell in the second quarter, the rate of decline remained limited. Despite the well-established decline in initial rental yields, the yield advantage compared to bonds is still so large that investors cannot afford to ignore the property market.

» At the same time, the prospects for commercial real estate have deteriorated, with the retail sector feeling the main impact. Although footfall did recover after the lockdown, the decline of up to EUR 40bn in city-centre retail sales cannot be recovered. Conversely, online shopping has gained ground. The situation in the hotel sector is also difficult, even if people have not lost the joy of travel. Demand in the office market is slowing as a result of the recession and this is likely to continue in future as more people work from home (WFH). Many companies plan to permanently extend the range of flexible working options. The commercial real estate segment which shows the best prospects at the moment is logistics properties, which are benefiting from the e-commerce boom.

» However, the era of steady growth in rents and purchase prices is already over. Instead, the property market faces a number of challenges. Digitalisation has gained pace and could lead to a shift in property demand. Alternative uses must be found for obsolete retail space, although this should be possible in city centre locations. Future demand for office space will have to be gauged. And hotels could be hit by a permanent decline in business travel. Working from home and an ageing population could alter the demand pattern in the housing market.

» Thanks to favourable financing terms and the yield advantage, property remains attractive – provided the long-term outlook is right. The German property market is also benefiting from its reputation as a safe haven. The prospects are particularly favourable for contemporary properties in good locations which will still be sought-after when less space is required. However, there is less potential if the asset class, location or quality are not right. In a prosperous environment, it was still usually possible to find buyers and tenants. This is now likely to become more difficult.

THE POST-COVID PROPERTY MARKET

Coronavirus stress test passed, but many challenges ahead

Two years ago there was still talk in the property market about rising interest rates. This did not happen because the economy lost momentum. The market returned to “business as usual” as interest rates fell again. Rents and prices continued to increase. The focus was on issues such as the housing shortage, the risks of a bubble forming, the shortage of office space, and the potential for high street retail. However, the arrival of the “black swan” in the form of the coronavirus has been a game changer. Weeks of lockdown, a deep recession and rising unemployment are leading to a visible deterioration in the economic environment which benefited the property market. Revenues in the retail sector and hotels are slumping. The aftermath of the pandemic is likely to be more prolonged than in earlier crises. The rapid advance of digitalisation could have a sustained impact on work, consumer behaviour and housing.

Just over ten years after the financial crisis, the “black swan” has returned

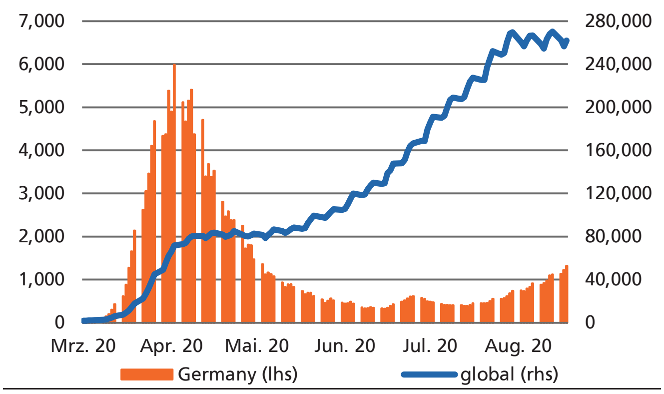
The negative impact of the pandemic on macroeconomic performance is almost unprecedented. German economic output is likely to fall sharply by around 6 per cent this year. However, the lowest point has been passed and the economy has already started to recover. Germany has also successfully coped with the challenges posed by the pandemic. However, the rising number of infections since the summer, which could lead to renewed restrictions in public life, is a cause for concern. The confidence of citizens is also being shored by an economic package worth billions intended to prevent company insolvencies and curb the rise in unemployment.

Germany has coped with the challenges of the pandemic successfully so far…

The beneficial effects on the property market are clearly visible. The first stress test has been largely successfully passed, particularly for residential properties. Renting residential property has proved to be a solid business. And demand from buyers for houses and apartments has remained generally robust, despite all the restrictions, partly due to low interest rates. Positive trends are also evident for commercial properties which have suffered more, with buyers of both housing portfolios and commercial properties undeterred. The German property market has lived up to its reputation as a safe haven. But what lies ahead? The coronavirus crisis is not over yet.

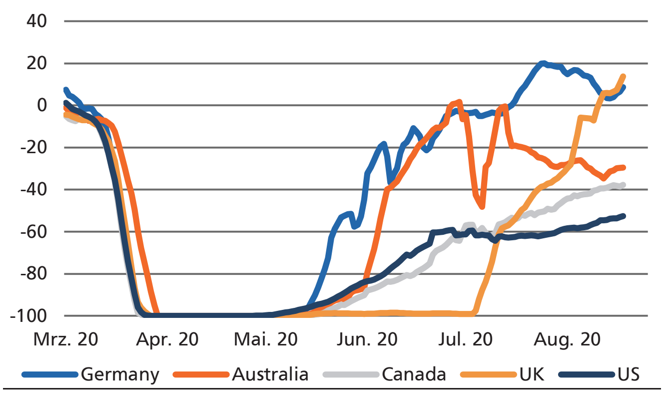
… mitigating the negative impact on the property market

PANDEMIC SPREADS RAPIDLY WORLDWIDE, BUT NUMBER OF INFECTIONS IN GERMANY REMAINS UNDER CONTROL
COVID-19 NEW INFECTIONS PER DAY (7-DAY AVERAGE)



Source: Reuters — data up to 19 August 2020

PUBLIC LIFE RECOVERS COMPARATIVELY QUICKLY IN GERMANY
RESTAURANT BOOKINGS COMPARED TO PREVIOUS YEAR IN %



Source: Open Table — data up to 18 August 2020

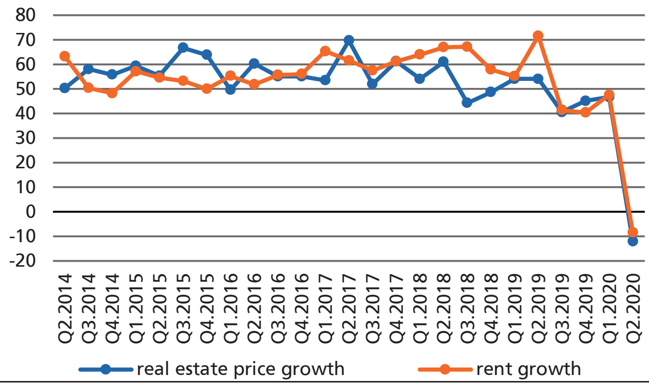
Instead of steady growth in rents and purchase prices, the property market faces many challenges. Right at the top of the list are the negative consequences of the recession which are curbing demand for commercial space. The pandemic has also reinforced already long visible trends such as weakness in the retail sector. Some sales space has undoubtedly become permanently obsolete, although it should be possible to find potential alternative uses for city centre locations. The pandemic has also triggered a large-scale experiment in home working, which companies and their employees have judged to be a success. Has this put paid to the shortage of office space, and will there soon be a surplus again?

Many challenges ahead for the property market

Considerable momentum has in any case been created for digitalisation. This could have an impact on the trend towards city living. Anyone who works from home on a regular basis might prefer to live in a rural setting with more space. Hotels may have to adjust to fewer business guests as physical appointments with customers are more often replaced by virtual meetings. Other factors will be demographic challenges such as an ageing society and the baby boomer generation reaching retirement age. On the one hand, this will reduce labour market potential in the coming years, and on the other hand the housing needs of older people could lead to a shift in the demand pattern in the housing market.

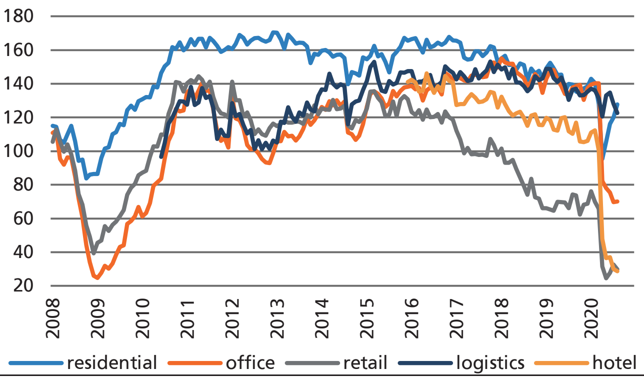
Digitalisation and demographics will impact the property market

PROPERTY MARKET EXPECTATIONS DID FALL VERY SHARPLY OVERALL IN Q2, …
BALANCE OF POSITIVE AND NEGATIVE RESPONSES



Source: IW, ZIA (property sentiment index, ISI) as of Q2/2020

… BUT TO A WIDELY DIVERGING EXTENT DEPENDING ON MARKET SEGMENT
SURVEY RESULTS FROM AROUND 1,200 PARTICIPANTS



Source: bulwiengesa, Deutsche Hypo (property climate) as of August 2020

Although current market surveys take a fairly gloomy view of the outlook for the property market, multi-family homes and commercial real estate remain attractive to investors thanks to their yield advantage – provided the property in question has the right long-term prospects. The outlook is particularly favourable for contemporary properties in good locations which will remain in demand even if less space is required. However, if the asset class, location or quality are not appropriate, there is correspondingly less potential. In times of prosperity it was usually still possible to find buyers and tenants, but this is now likely to become more difficult.

Properties with long-term potential are attractive

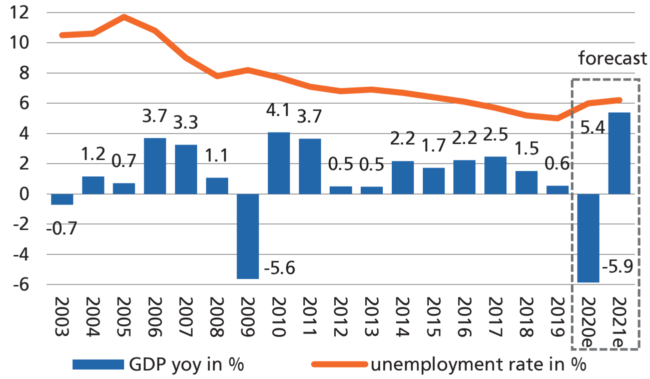
In the following pages we firstly review the economic climate and demographic trend. We then discuss property market trends in terms of prices and rents, investment activity, yields and new construction. The main focus of our report is an evaluation of the residential, office, retail, logistics and hotels asset classes.

Economic environment – recovery already under way

The infection prevention measures imposed in Germany were eased fairly quickly. Production resumed again after a relatively brief interruption. Businesses, restaurants and hotels were also able to reopen early. The German economy has nevertheless suffered massive damage. Despite extensive support measures including the topping up of short-time working allowances and an economic package of EUR 130bn, economic output is likely to contract by around 6 per cent this year. Exports – which are important to Germany – are particularly weak.

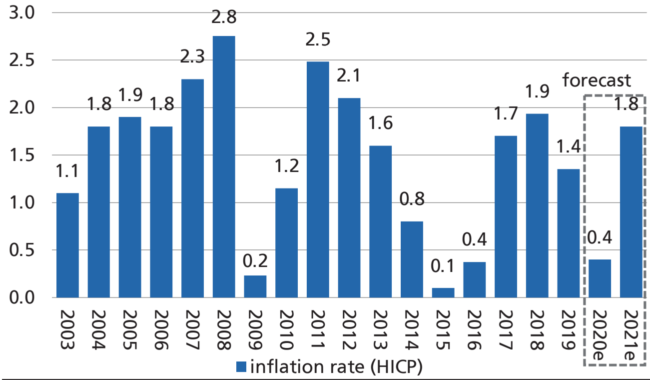
Despite the relatively brief lockdown, massive damage to the economy

ECONOMY: OUTPUT WILL NOT RETURN TO 2019 LEVELS BY 2021 EVEN WITH A STRONG RECOVERY



Source: DZ BANK as of August 2020

LOWER OIL PRICE HAMPERS CONSUMER PRICE RISES IN 2020

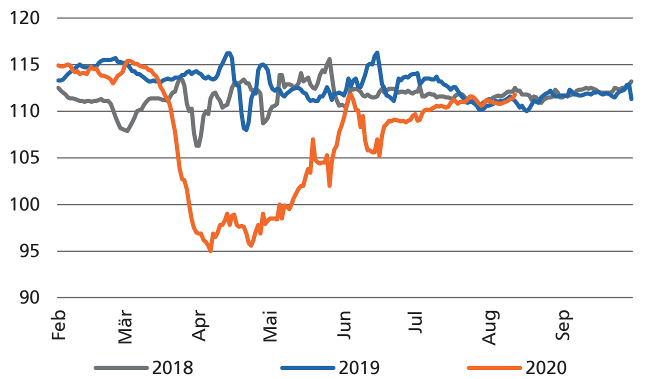


Source: DZ BANK as of August 2020

Despite falling sharply, growth in unemployment could be moderate at an average annual rate of only about 1 percentage point. Millions of applications for short-time working have been a mitigating factor here. However, the labour market will remain weak for the time being. Many companies have announced extensive job shedding. However, the outlook for the labour market should improve since the economic recovery is already under way. In an ideal scenario, it will be possible to keep the number of infections low in the autumn and winter. If there are no major setbacks, we would expect macroeconomic growth of just over 5 per cent next year.

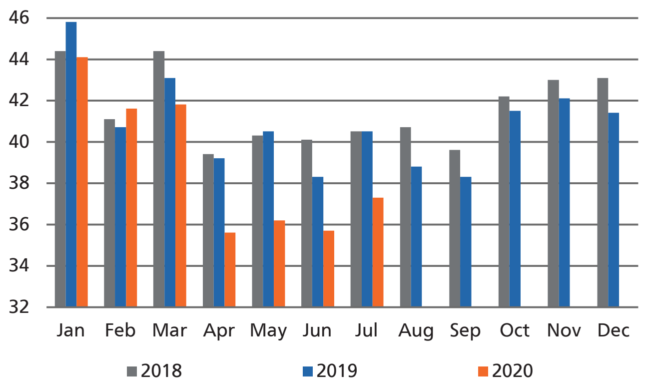
Unemployment growth likely to be generally moderate

ECONOMIC ACTIVITY HAS PICKED UP AGAIN NOTICEABLY
TRUCK TOLL MILAGE INDEX, MOVING 7-DAY AVERAGE, 2015 = 100



Source: Federal Statistical Office data up to 14 August 2020

THE LOWER ENERGY CONSUMPTION SHOWS THAT THE INDUSTRY HAS NOT YET REACHED "BUSINESS AS USUAL"
MONTHLY POWER CONSUMPTION IN TERAWATT HOURS



Source: Federal Network Agency

Demographic challenge: German population is ageing

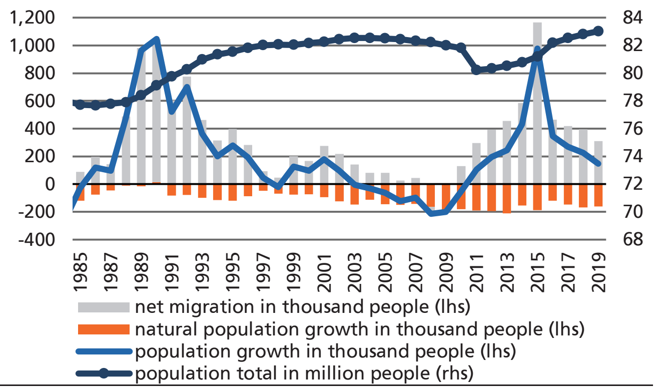
Population forecast assumes only moderate decline in population

The demographic trend poses major challenges for society, the economy and the property market, although population forecasts are much less gloomy today than ten years ago. In 2009 the Federal Statistical Office predicted that the population would shrink from 82 million at that time to 65-70 million by 2060. A low birth rate was one contributory factor. Conversely, the latest population forecast (in 2019) shows a much larger population of 75-83 million in 2060. The reasons for this are a rising birth rate, and first and foremost higher immigration.

Positive trends in birth rate and net migration

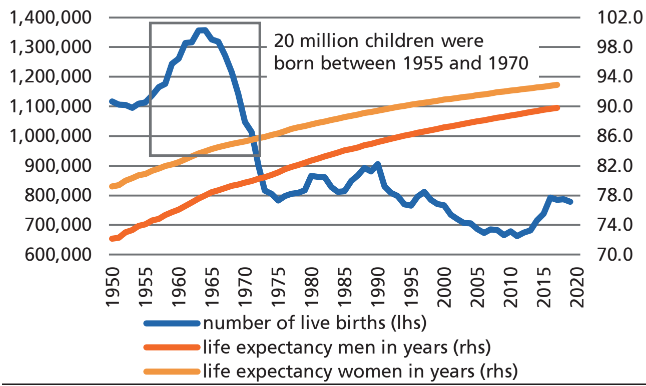
In fact, there were positive trends in the birth rate and migration between 2009 and 2019. The birth rate has increased from less than 700,000 to around 800,000 children. Migration has had a greater impact. In contrast to a previously fairly low level of net migration, the migration balance since 2011 shows an increase of at least 300,000 people per year, taking the population to its highest level so far of around 83 million people. The wide fluctuation in net migration will also determine the future demographic trend. Conversely, the net population balance has been consistently negative for decades.

MIGRATION INCREASES POPULATION OF GERMANY TO 83 MILLION



Source: Eurostat
2011 Correction of the number of inhabitants by census data

SMALLER WORKING POPULATION, MORE PENSIONERS: BABY BOOMERS ARE AGEING



Source: Federal Statistical Office Trend in life expectancy since 1971

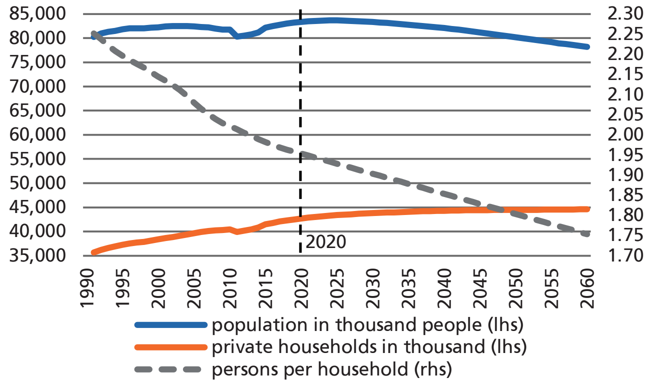
Population largely stable, but clearly ageing

However, although the demographic trend rarely makes the headlines these days - which was not the case about ten years ago – it remains a controversial topic. While numbers are likely to remain more or less stable for the time being, the population is ageing rapidly. One reason for this is the steady increase in life expectancy. Another factor is the ageing of the baby boomer generation with its high birth rates. More than 20 million children were born between 1955 and 1970 and are now gradually approaching retirement. The ageing population has already had a major impact. Since the 1980s the average age has increased by nearly 10 years – from 37 to 46.

Proportion of older people will increase sharply within 20 years

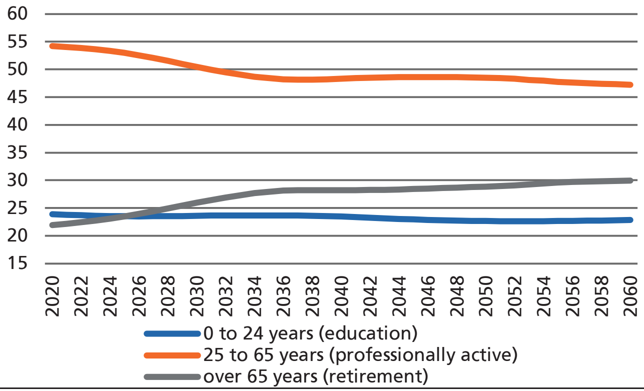
This means that the potential labour pool is contracting visibly, while the number of people drawing pensions is growing. The proportion of the population aged 25 to 65 will decline from around 56 per cent to 48 per cent within less than 20 years. Conversely, the proportion of the population over the age of 65 will increase from just over 20 per cent to 28 per cent. As well as imposing a heavy burden on social security systems, this population shift will significantly intensify the shortage of skilled workers, and will lead to changes in housing demand.

DESPITE A GRADUALLY SHRINKING POPULATION, NUMBER OF PRIVATE HOUSEHOLDS CONTINUES TO RISE



PROPORTION OF OLDER PEOPLE IN POPULATION GROWING S IGNIFICANTLY

PROPORTION IN PER CENT



Source: Federal Statistical Office

Data basis: 14th coordinated population projection up to 2060, "moderate" scenario

Residential property: ageing population leads to shift in housing demand

The number of people over the age of 65 will increase by 18 million to 23 million by 2040. This is likely to lead to a steep increase in demand for apartments suitable for older people. However, building new apartments of this type could be difficult, not only due to a shortage of space or a lack of capacity in the construction sector. Given that pensions will probably be smaller, many older people will be unable to afford high rents. Conversely, large apartments and single-family homes could become less important.

Commercial property: growing number of older people could reduce office demand and hamper consumption

The growing number of older people will be accompanied by a marked contraction of 5 million in the 25-65 age group, to less than 40 million people by 2040. The previously large labour pool is likely to shrink, leading to lower demand for office space. The shift in age structure could also lead to altered shopping patterns, causing demand for retail property to decline further. Possible reasons for this are decreasing mobility and lower incomes in retirement, which will curb consumption. This will be particularly true if housing costs increase at the same time. Older people will also be more familiar with online shopping in future than currently.

OVERVIEW OF MARKET TREND

Purchase prices and rents

Property market characterised by rising prices and rents for ten years

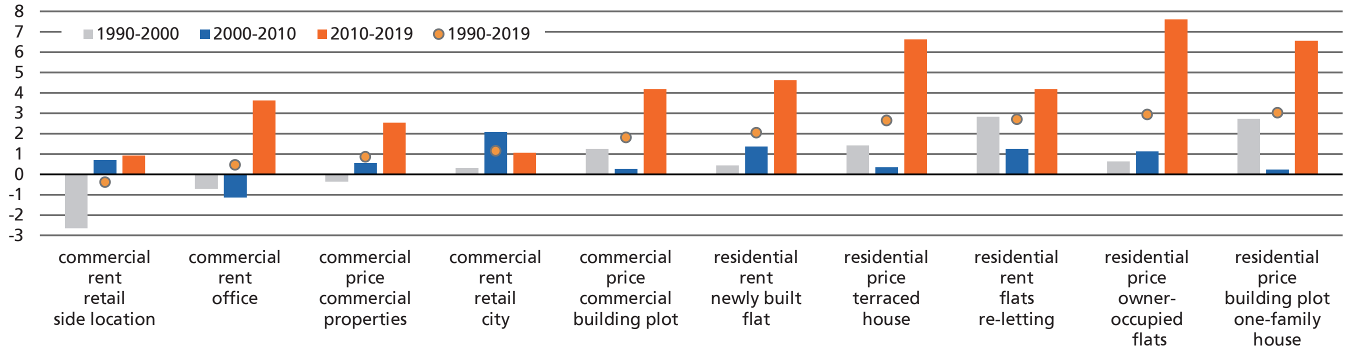
For some time, the German property market has been characterised by rapid growth in prices and rents. In recent years, attractive commercial properties, multi-family properties and owner-occupied homes have become considerably more expensive. Not even the pandemic has halted the robust uptrend in the housing market. Even in the second quarter, rents and purchase prices continued to rise. Although the pace has now slowed somewhat, there were already signs of this happening before the coronavirus outbreak.

However, prices and rents grew slowly from 1990 to 2010

However, this has not always been the case. The highest rates of price and rent growth have been focused on the last ten years. Previously the pace of growth was fairly weak for a long time. In the 1990s commercial rents even fell. Taking the market as a whole, there is also a clear divergence between residential and commercial properties. Despite the prolonged upturn, and strong employment growth, residential properties have generally performed much better. Demand for commercial properties has been mainly focused on good sites and a small number of locations. The lion's

FREQUENT STAGNATION – LONG-TERM PRICE AND RENT TRENDS IN THE GERMAN PROPERTY MARKET

AVERAGE PRICE AND RENT TRENDS COMPARED TO PREVIOUS YEAR IN PER CENT FOR THE STATED TIME PERIODS



Source: bulwiengesa, DZ BANK

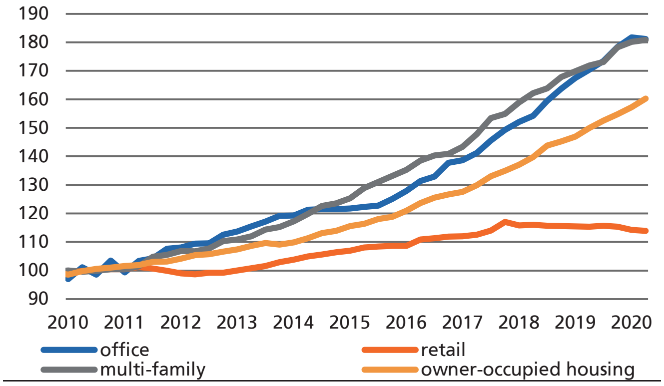
share of commercial real estate investment has also frequently been in the seven largest cities, although they account for only about an eighth of the population.

Steepest price rises for multi-family homes and office properties

The strong price momentum which set in about ten years ago in the property market has continued for owner-occupied homes even after the outbreak of the pandemic. However, there are major differences in the rate of price rises depending on the type of property. Price growth has also slowed somewhat in the last two years or so. Strong price growth has been mainly evident for multi-family homes and office buildings. The trend for owner-occupied properties has also been strong, but not quite so rapid. Conversely, the already slightly weaker price growth for retail properties has weakened further since 2017. Prices here are now falling slightly.

RESIDENTIAL AND COMMERCIAL PRICE TRENDS IN GERMANY

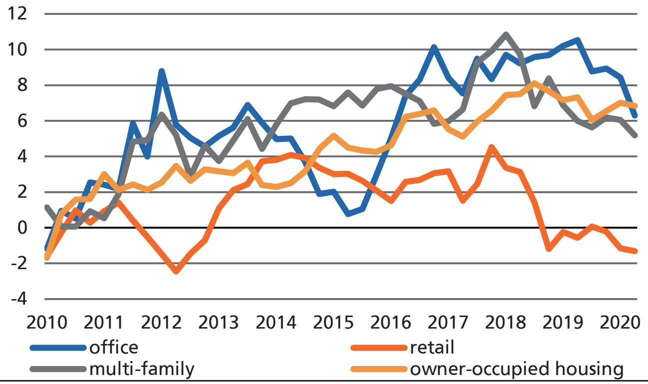
PRICE INDICES 2010 = 100



Source: vdp as of Q2/2020

RESIDENTIAL AND COMMERCIAL PRICE TRENDS IN GERMANY

PRICES COMPARED TO PREVIOUS YEAR IN PER CENT

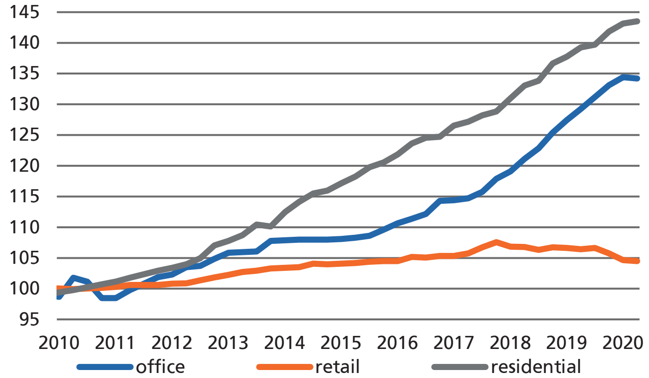


Source: vdp as of Q2/2020

Rent growth momentum slows since 2019 – retail rents already falling

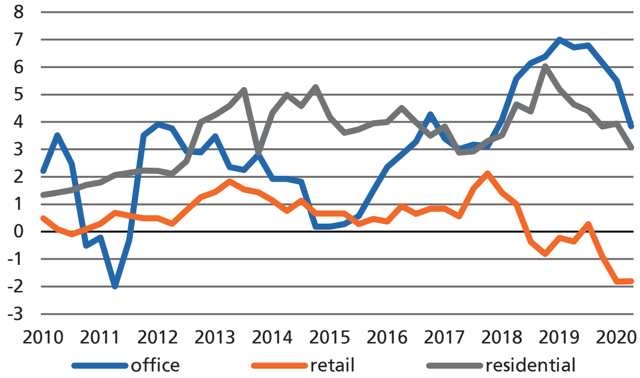
Prices have been driven by high demand for properties due to falling interest rates and significant rent growth. While the index of residential rents shows an almost linear increase, office rent growth has only accelerated since 2016. The pace of rent growth has slowed since 2019. Retail rents, which have essentially stagnated for some time, are already falling. However, office rents also fell somewhat in the second quarter.

TREND IN RESIDENTIAL AND COMMERCIAL RENTS IN GERMANY
RENTAL INDICES 2010 = 100



Source: vdp as of Q2/2020

TREND IN RESIDENTIAL AND COMMERCIAL RENTS IN GERMANY
RENTS VS. PREVIOUS YEAR IN PER CENT

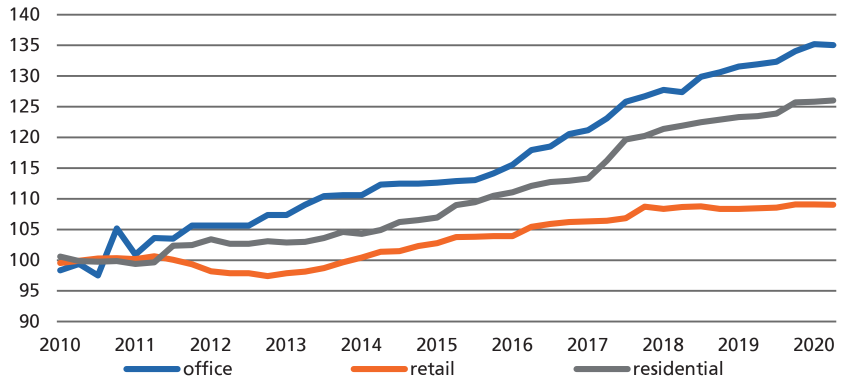


Source: vdp as of Q2/2020

The relationship between property prices and rents illustrates the price-driving influence of falling interest rates, but also the expected positive trend in rents. Valuations have climbed particularly high for office properties. Based on the vdp data we have used, there is a gap of about 35 per cent (base year 2010) between prices and rents. The trend is not quite as marked for multi-family homes where prices exceed rents by 25 per cent. Prices and rents for retail properties have largely moved in parallel.

Prices of office properties and multi-family homes clearly outpace rents

POTENTIAL OVERVALUATION: PRICES RISING FASTER THAN RENTS
PRICE/RENT RATIOS 2010 = 100



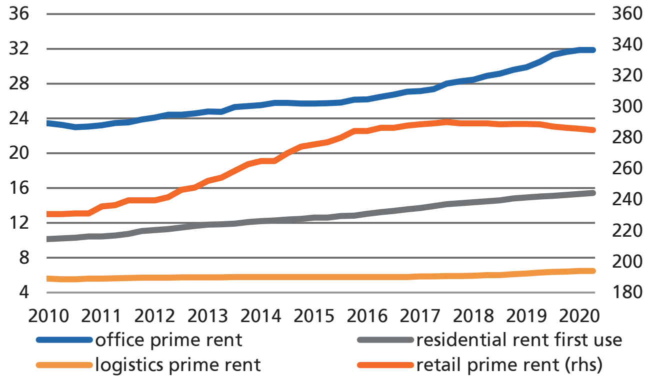
Source: vdp, DZ BANK as of Q2/2020

Market trend in the seven largest cities

The seven most densely populated German cities (top locations) play a particularly important role in the property market by virtue of their market size and liquidity. The major cities are characterised by high economic output – with the exception of Berlin -, strong growth in the workforce, inhabitants and visitors, and by their internationality. This is frequently where the highest valuations and rents in the German property market are reported, but the lowest rental yields. This justifies a separate description of prices and rents, which follows in the later sections of the report on the individual asset classes.

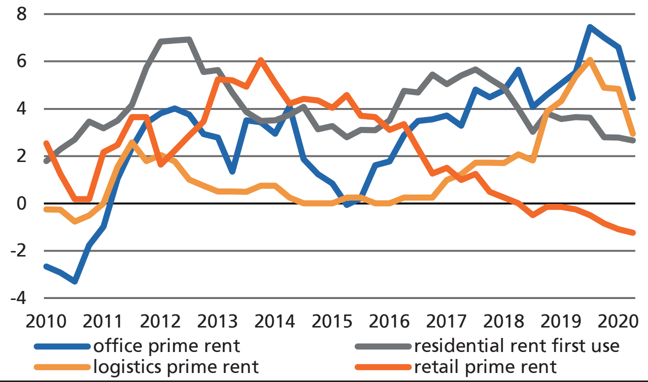
Top locations play a particular role in the property market

RENT TREND TOP 7: IN THE SECOND QUARTER OF 2020 ONLY RESIDENTIAL RENTS CONTINUED TO RISE
RENTS IN EURO PER SQM



Source: bulwiengesa as of Q2/2020
Figures for Berlin, Düsseldorf, Frankfurt, Hamburg, Cologne, Munich, Stuttgart, shown as unweighted averages

DOWNWARD PACE OF RETAIL RENTS ACCELERATES IN SECOND QUARTER OF 2020
RENTS COMPARED TO PREVIOUS YEAR IN PER CENT



Source: bulwiengesa as of Q2/2020
Figures for Berlin, Düsseldorf, Frankfurt, Hamburg, Cologne, Munich, Stuttgart, shown as unweighted averages

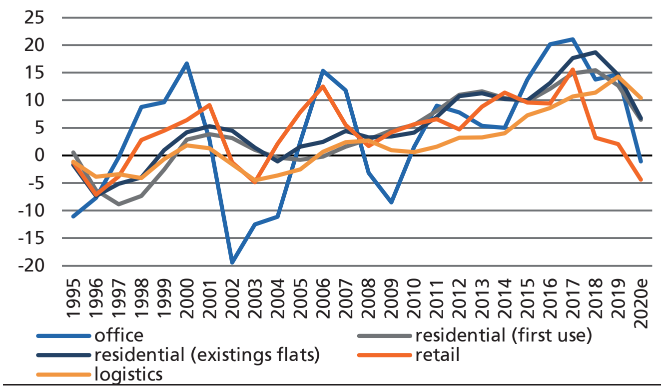
In recent years, rents in top locations have continued to rise rapidly despite their already high levels. However, the upward momentum was already faltering here too before the pandemic. Retail rents have been falling since 2019. This trend continued in the second quarter, which was particularly affected by the lockdown. Apart from the retail sector, rents have not however fallen. Residential rents have even continued to increase slightly.

Rents have not fallen sharply so far in the coronavirus crisis

Property valuations in top locations have risen rapidly in recent years. However, this trend is unlikely to continue in 2020. Given the high levels reached, valuations could fall for the first time in many years. Neither the pandemic nor regulation of the rental market have been able to halt the upward trend in relative valuations of multi-family homes, although ratios of purchase prices to rents have already more than doubled within ten years. At mid-year 2020, average levels paid in Düsseldorf and Cologne were the equivalent of 26.5 years of rent. In Munich the figure was close to 40.

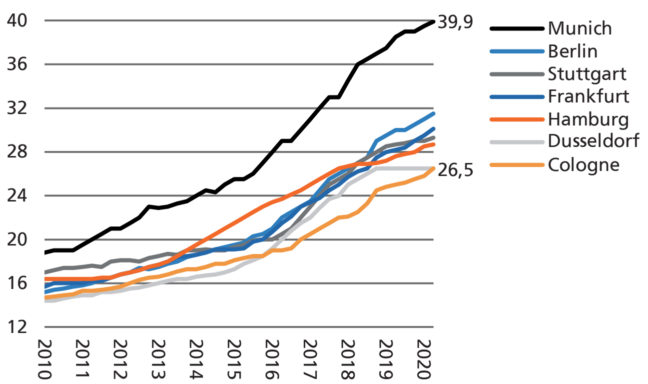
Investment pressure drives prices of multi-family homes up further despite coronavirus crisis

PROPERTY VALUATIONS TOP LOCATIONS: VALUES COULD ALSO FALL AGAIN FOR THE FIRST TIME IN MANY YEARS IN 2020
CAPITAL GROWTH COMPARED TO THE PREVIOUS YEAR IN PER CENT



Source: bulwiengesa, DZ BANK
GPI figures (German Property Index) for individual property types have been calculated as unweighted averages for the seven top locations.

STILL SOUGHT-AFTER – RELATIVE VALUATIONS OF MULTI-FAMILY HOMES INCREASED AGAIN IN SECOND QUARTER OF 2020
MULTI-FAMILY HOME MULTIPLE (PRICE/RENT RATIO)



Source: bulwiengesa

Investment market: Investors still banking on property

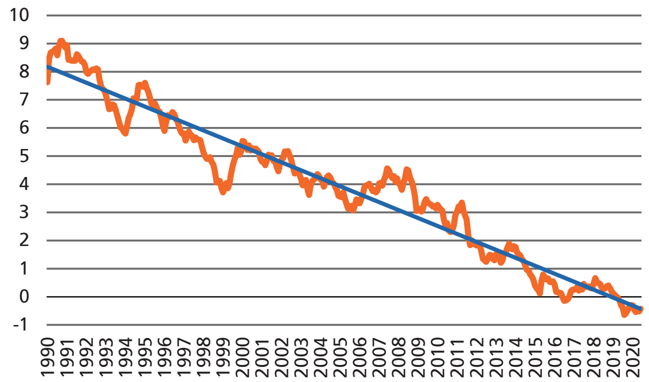
Falling capital market yields fuel interest in property market

Commercial properties and housing portfolios are in demand for investment purposes. Given that bond yields have been in decline for decades, many conservative investors such as pension funds, life insurance companies and foundations have little choice but to invest in property. Unlike low bond coupons, rental income from residential and commercial properties can be used to finance regular payments to pensioners for example. Property has also been regarded as a solid investment in what has been a stable economic environment so far.

Investment volume restricted by property shortage

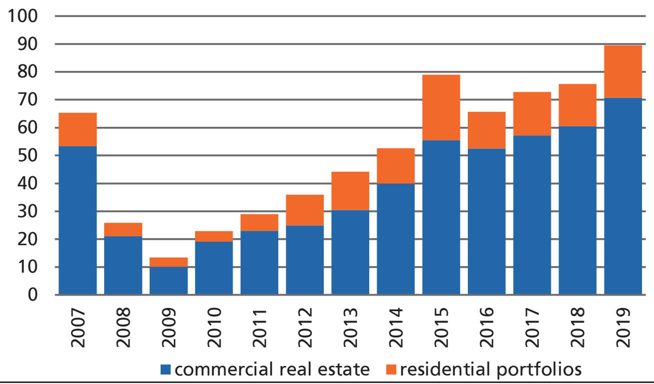
As a consequence of the ECB's expansionary monetary policy, ten-year Bund yields have continued to fall, reaching zero in 2015. They have been consistently negative since last year. Investment volume - which started to grow in 2010 - has nevertheless slowed since 2016. One of the main reasons for this was the shortage of available properties. Demand has been mainly focused on core properties in the seven top locations, although only a limited number of these are available. Although owners have obtained high selling prices, they have then inherited the investment problem from buyers. Despite this caveat, investment volume in the German property market reached a historical peak of around EUR 90bn in 2019. Nearly EUR 20bn was invested in housing portfolios.

ECB NOT SOLELY RESPONSIBLE: CAPITAL MARKET YIELDS SHOW AN ALMOST LINEAR DECLINE FOR 30 YEARS
10-YEAR BUND YIELDS IN PER CENT



Source: Refinitiv data as of August 2020

INVESTMENT GROWTH IN COMMERCIAL AND RESIDENTIAL PORTFOLIOS SLOWS VISIBLY
INVESTMENT IN EUR BN



Source: EY

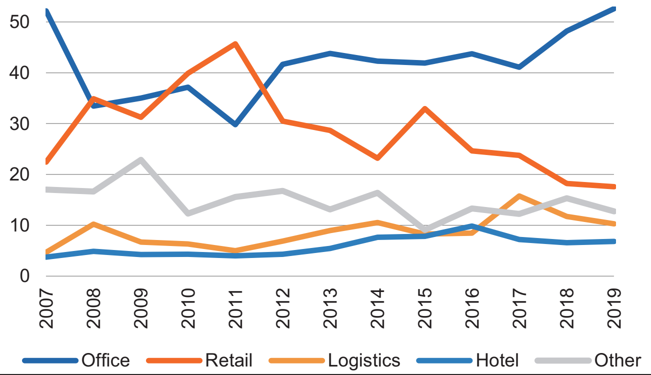
As well as housing, main focus of demand is offices, logistics and hotels

Only a few years ago, investment volume was largely dominated by office and retail properties. However, recent years have seen a major shift between asset classes. As a result of the e-commerce boom, investors have steered clear of retail properties, apart from local shops. The proportion of retail properties has fallen to below 20 per cent. Conversely, office properties have benefited from a growing shortage of space and increasing rents, and now account for a proportion of more than 50 per cent. Demand for logistics properties and hotels has also been high, boosted by flourishing e-commerce, growth in tourism and comparatively high yields.

Coronavirus pandemic dampens property market prospects

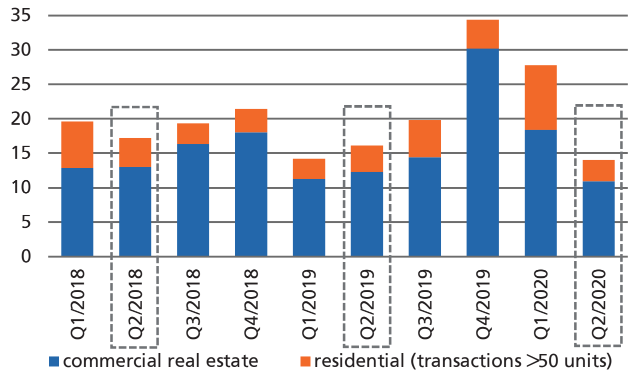
The coronavirus pandemic is impacting on property investment from two angles. On the one hand, there are many question marks over the outlook for commercial real estate. Online shopping, working from home and the absence of tourists could lead to an increase in the previously small number of vacant properties and exert downward pressure on rental income. This is a disincentive to buying commercial real estate. Residential property has remained virtually unscathed by the pandemic, but is also suffering from growing market regulation. On the other hand, there are no alternative forms of investment when interest rates are low. To overcome the economic crisis, the ECB will continue to focus on an expansionary monetary policy by purchasing large volumes of bonds. Capital market returns are therefore likely to remain low despite a massive increase in public debt.

OFFICE PROPERTIES HAVE DOMINATED THE INVESTMENT SPECTRUM RECENTLY
SHARE OF INVESTMENT IN COMMERCIAL REAL ESTATE IN PER CENT



Source: BNP Paribas Real Estate, CBRE

BRAKING EFFECT OF PANDEMIC ON INVESTMENT LESS SEVERE THAN EXPECTED
INVESTMENT IN EUR BN

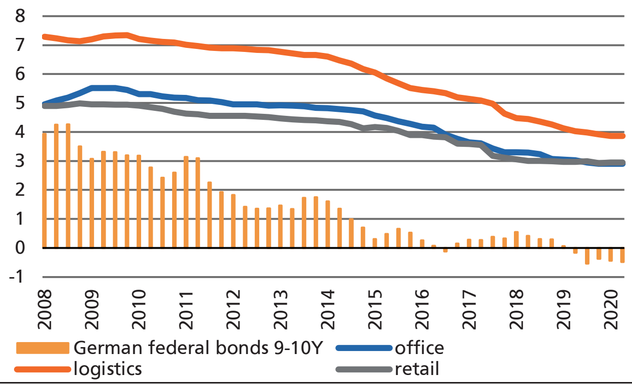


Source: CBRE

Property market surprisingly robust in second quarter

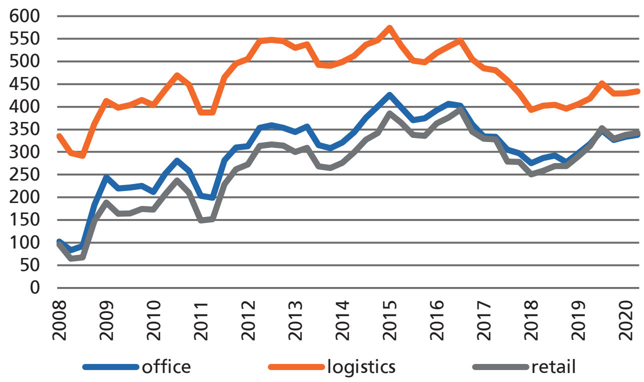
The yield dilemma is likely to have driven the respectable investment volume in commercial real estate in the second quarter of 2020. As expected, investment activity has slowed visibly. The volume of residential and commercial properties purchased halved compared to the first quarter. However, very high levels were reported in both the final quarter of 2019 and the first quarter of 2020, thus overstating the decline. Compared to the second quarters of 2018 (EUR 17bn) and 2019 (EUR 16bn), the decline to EUR 14bn in the second quarter of 2020 was much more moderate. This is particularly true given the many negative factors such as the lockdown, restrictions on contact and travel, the deterioration in the outlook for the property market, and uncertainty surrounding the course of the pandemic.

DECLINE IN INITIAL RENTAL YIELDS STABILISES AT JUST BELOW 3 PER CENT
BOND YIELDS AND INITIAL RENTAL YIELDS IN PER CENT
DATA FOR SEVEN TOP LOCATIONS



Source: bulwiengesa, Refinitv as of Q2/2020

CONTINUING WIDE YIELD DIVERGENCE BETWEEN PROPERTY AND BONDS
DIVERGENCE IN RENTAL YIELDS VS. BUNDS IN BASIS POINTS
DATA FOR SEVEN TOP LOCATIONS



Source: bulwiengesa, Refinitv, DZ BANK as of Q2/2020

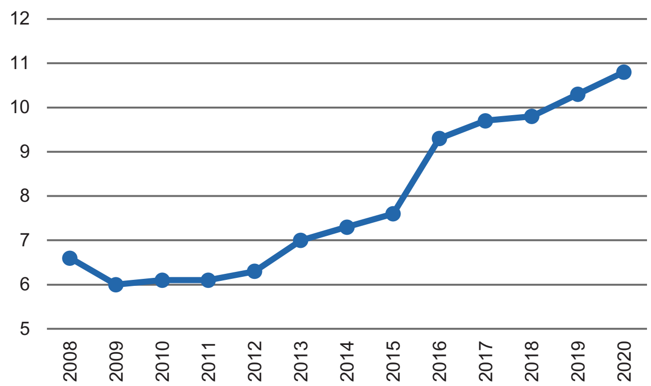
Office properties had the lowest yields for commercial real estate before pandemic outbreak

The downward trend in initial rental yields has slowed visibly. Before the outbreak of the pandemic, the lowest yields were 2.6 to 2.7 per cent, and were generated from premium office properties in Berlin and Munich. Overall, peak office yields in the seven largest cities, which represent the leading German office markets, were just below 3 per cent. Yields of around 4 per cent were obtained from second-tier office markets. Retail properties have lost their earlier yield advantage compared to offices. Much higher yields are still being generated from logistics properties and hotels. However, the downward yield trend has been more pronounced here until recently, and the divergence from office properties has therefore narrowed.

Despite a sharp fall in rental yields, property still shows a substantial yield advantage

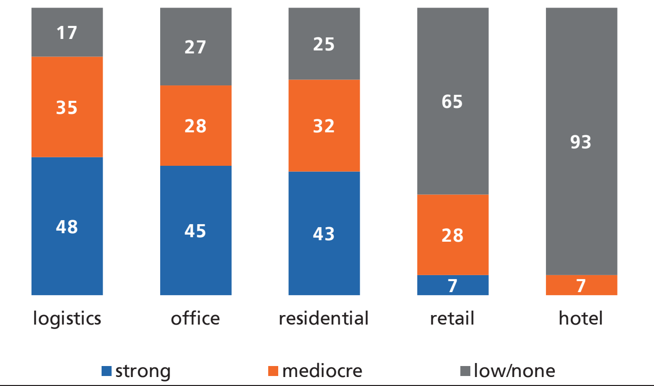
As bond yields have continued to decline, the divergence between initial rental yields and ten-year Bunds has remained substantial. Even with low rental yields for office properties in Berlin and Munich, it was still possible to achieve a yield advantage of around 300 basis points. The yield pickup for logistics properties and hotels was more than 400 basis points. The pandemic could however lead to a shift in the largely fixed yield structure. In the retail sector, yields for shopping centres were already increasing in the second quarter.

INSURANCE COMPANIES SIGNIFICANTLY INCREASE PROPORTION OF PROPERTY IN INVESTMENT PORTFOLIOS
PROPERTY RATIO IN PER CENT



Source: EY Trendbarometer Real Estate Investment by Insurers 2020

INSURANCE COMPANIES WILL CONTINUE TO INVEST IN PROPERTY IN 2020 DESPITE THE PANDEMIC, BUT NOT IN ALL ASSET CLASSES
FOCUS OF PROPERTY INVESTMENT 2020 (SHARES IN PER CENT)



Source: EY Trendbarometer Real Estate Investment by Insurers 2020

Insurance companies as an example: property ratio rising steadily

A UBS survey on the investment preferences of international family offices indicates growing interest in property investment. The results of the annual EY Trendbarometer Real Estate Investment by Insurers point in the same direction. The steady increase in the proportion of real estate in insurance companies' portfolios since 2009 has grown further to nearly 11 per cent in 2020; this represents almost a doubling of the proportion within ten years. Asset managers plan to continue to invest in property despite the pandemic. However, levels of investor interest diverge widely between the various asset classes. Demand for logistics properties, housing and office properties is strong. Conversely, investors are steering clear of retail properties, and hotels in particular.

Asset managers still expect relatively high yields from property investments

The major importance of the property market in terms of the total return generated by insurance investment portfolios is underscored by the relatively high projected total yields for property portfolios. The average yield from directly owned property is said to be 3.2 per cent. The figure is significantly higher for indirect property investment which should generate a return of 5.2 per cent. Asset managers were asked about the (net) total annual return which they expected to achieve based on 2020 market values.

Demand for German residential and commercial properties remains high

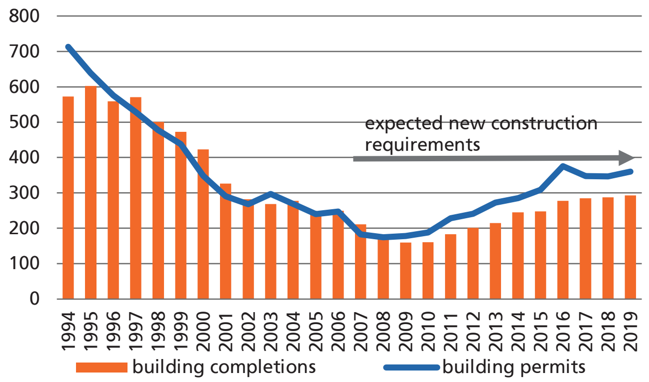
We expect investor interest in German residential and commercial property to remain high. Apart from the likelihood of capital market yields remaining low, this view is supported by Germany is comparatively successful in managing the pandemic so far, and the fact that its strong economy will enable it to effectively mitigate the economic consequences of the crisis. Economic output will probably fall much more sharply in other European economies. This will enhance the “safe haven” status of the German property market. However, there could also be a wider divergence than before between rental yields within the various asset classes. Residential property and fairly low-risk core properties in particular could be in even greater demand than previously despite their already low yields.

New build bottleneck: Continuing shortage of property

Muted response by residential and commercial construction to growth in property demand

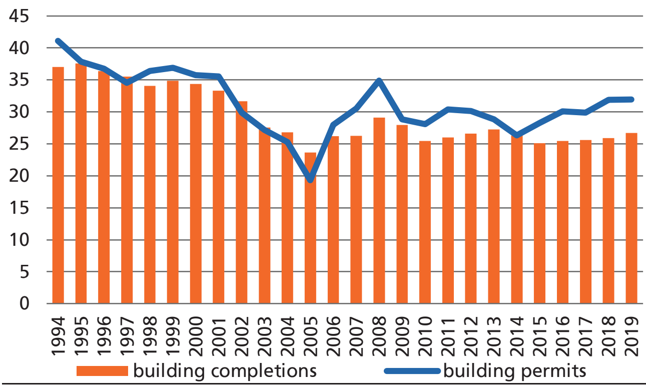
The last decade has seen a strong economic upturn, a sharp increase of around 4 million in the number of people in work, and strong demographic growth of around 3 million after a prolonged stagnation. However, new construction activity has been slow to respond to growing demand for housing and commercial space, despite the fact that the number of completions of residential and commercial properties had fallen to a historic low as a result of the excess supply created by the post-reunification boom. This is leading to a general property shortage in Germany. The main bottlenecks are for housing, and office and logistics space.

HOUSEBUILDING: INSUFFICIENT, BUT HAS AT LEAST PICKED UP NOTICEABLY
HOUSING UNITS IN THOUSANDS (INCLUDING REFURBISHMENTS)



Source: bulwiengesa, Federal Statistical Office (2019)

NON-RESIDENTIAL CONSTRUCTION: VOLUME OF COMMERCIAL AND PUBLIC SECTOR NEW BUILDS ALREADY STAGNATING FOR YEARS
COMMERCIAL SPACE IN MILLION SQM (NEW BUILD ONLY)

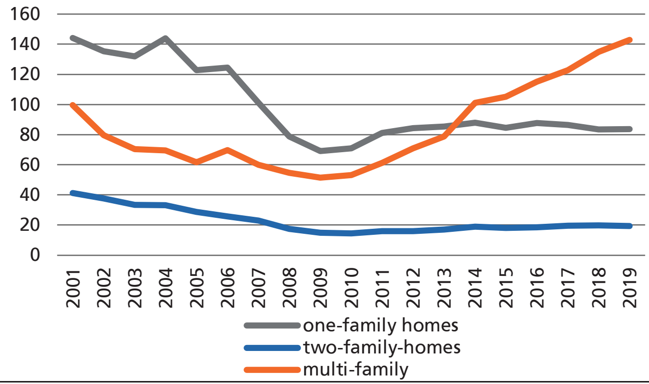


Source: bulwiengesa, Federal Statistical Office (2019)

Residential construction mainly driven by apartment blocks

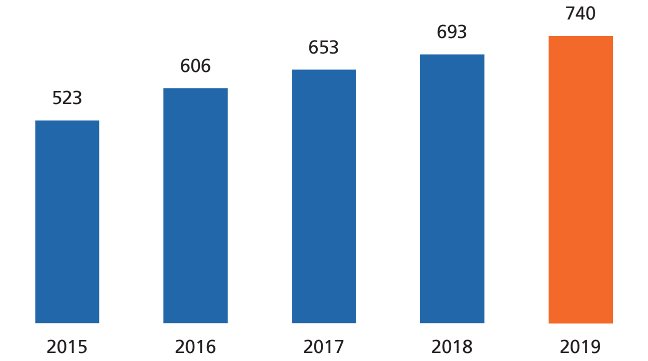
However, while housebuilding has gradually gained pace, commercial construction has virtually stagnated until recently. There is also a widening gap for both housing and commercial construction between planning approvals and the number of completions. Throughout Germany, the overhang of approved, but as yet unbuilt housing units, has risen to nearly three quarters of a million. In contrast to ten years ago, housebuilding is today mainly focused on multi-storey dwellings. This type of new build activity has more than tripled in this period and is attributable to migration into cities and a high level of investor interest in apartment buildings. Conversely, there has been no significant increase in either planning approvals or completions for single-family and two-family homes.

UPTURN IN HOUSEBUILDING DRIVEN SOLELY BY APARTMENT BLOCKS
IN THOUSAND APARTMENTS



Source: Federal Statistical Office

BACKLOG OF APPROVED, BUT UNCOMPLETED APARTMENTS GROWS FROM YEAR TO YEAR
IN THOUSAND APARTMENTS



Source: Federal Statistical Office

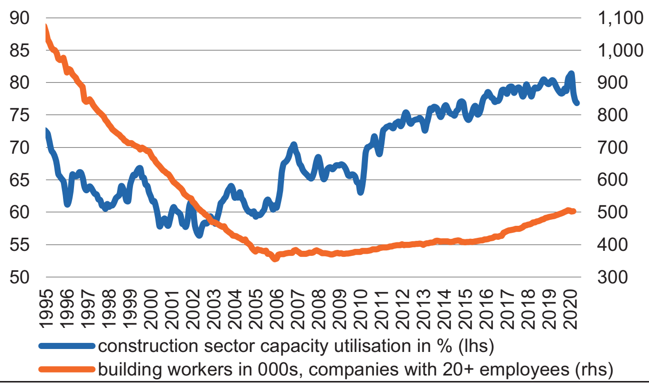
Space shortage, capacity bottlenecks and rising construction costs curb new building

There are several possible reasons for the subdued level of new build activity. Building land is in increasingly short supply, particularly in cities and conurbations. New build projects are also often resisted by residents and environmentalists. Even the factory of the US electric car producer Tesla, which is being built on a commercial site in the structurally weak area of Brandenburg near Berlin, has attracted criticism. Another obstacle is the high level of capacity utilisation in the construction sector. Despite a slight, probably coronavirus-related decline in May and June, calculations from the ifo Institute show a very high level of capacity utilisation. There is also a shortage of skilled workers in the labour-intensive construction sector. Jobs shed during the construction crisis since the mid-1990s have not yet been replaced. Construction costs have also increased sharply over a period of some years; combined with a shortage of land which has also become much more expensive, this could have a potentially negative impact on the economic viability of construction projects.

Sluggish new construction unlikely to pick up much in future

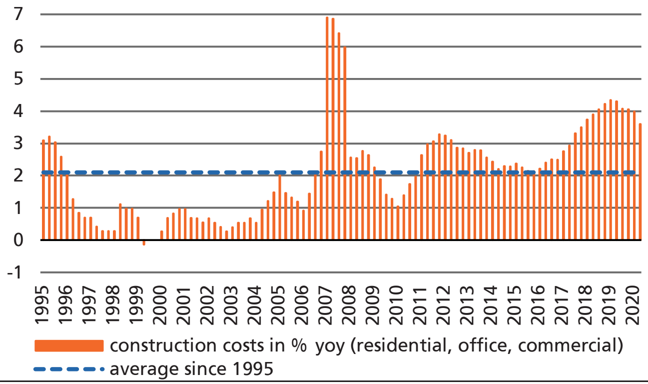
The negative factors for the development of residential and commercial space to date are likely to continue to hamper new construction. There is no prospect of any significant increase in the number of completions. This means that the strained conditions in the housing market will only improve gradually. However, demand for commercial construction could be lower after the pandemic, and the demand backlog therefore correspondingly smaller.

THE HIGHLY UTILISED CONSTRUCTION INDUSTRY LACKS SKILLED WORKERS



Source: ifo Institute, Federal Statistical Office as of July 2020

CONSTRUCTION COSTS HAVE INCREASED MUCH FASTER RECENTLY THAN IN THE PAST



Source: Federal Statistical Office as of Q2/2020

RESIDENTIAL

Rent cycle already past its zenith before coronavirus outbreak

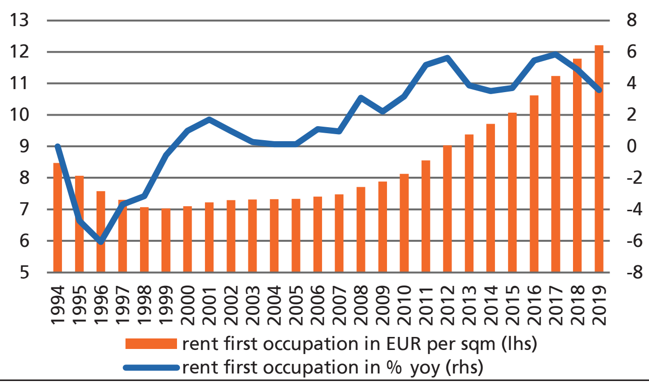
Investor interest in the housing market cooled in the 1990s

Residential letting is regarded as a low-risk and fundamentally solid business model. Thanks to the housing shortage, rents are increasing, while vacancy rates are low. However, this was not always the case. In the mid-1990s investor interest in residential rentals cooled. The high volume of completions triggered by post-reunification euphoria led to oversupply in the housing market and drove rents down. The populations of large cities also contracted, because people preferred to live in rural areas. And at that time it was still possible for investors to generate high yields from sovereign bonds. Consequently, by 2009 housebuilding had slumped by nearly three quarters from its peak level of the mid-1990s.

Low bond yields and rising rents make rented apartments a sought-after commodity

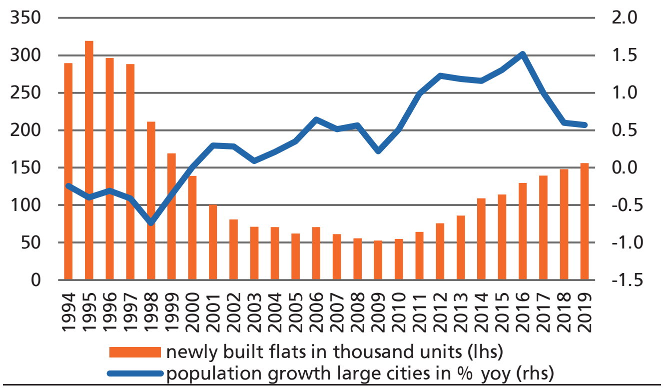
The tide began to turn with the new millennium. Interest in urban housing grew and large cities experienced slow population growth again. However, the large housing supply meant that this was not immediately reflected in rents. The rent growth still ongoing today only started in the middle of the last decade as the supply shortage in the housing market intensified. Combined with the unsatisfactory yields available to bond investors, rented properties became a sought-after commodity. This situation has remained unchanged. As a result, prices of multi-family homes have increased until recently, reaching extremely high levels in some cases.

RENT TRENDS FOR NEW BUILD HOUSING UNITS IN GERMANY



Source: bulwiengesa data for 127 cities

APARTMENT BLOCK CONSTRUCTION AND DEMOGRAPHIC TREND



Source: bulwiengesa, Scope demographic trend in 19 large cities

Declining affordability could hamper rental market

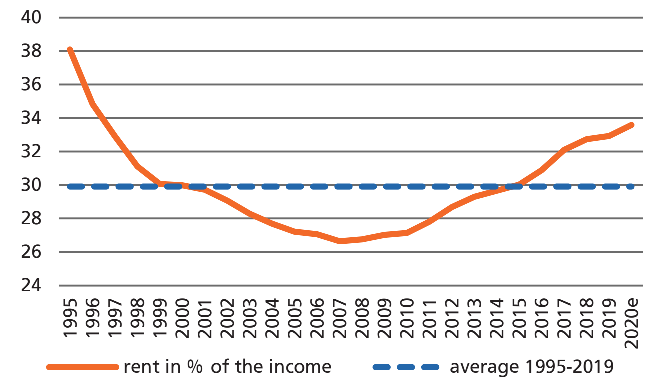
Relatively low rent arrears as a direct result of the pandemic

It was feared that the coronavirus pandemic would lead to growing rent arrears and consequently liquidity shortfalls for landlords. However, the actual extent of the arrears seems to have remained limited so far. The Hamburg Housing Association (Saga) – which manages 130,000 apartments – reports that about two per cent of rental agreements were affected by arrears in June – which is very close to normal levels. A heavy burden for landlords was therefore avoided, also partly due to the rent moratorium imposed from April to June to protect tenants against the termination of their rental agreements for reasons connected with the pandemic. However, the economic cost for private households should not be underestimated, particularly if the economic recovery is slow.

However, even without the pandemic, more and more households may be reaching financial breaking point. In recent years residential rents have risen faster than incomes. Particularly in expensive cities, the proportion of household income spent on rent has increased. This is borne out by the following example of a 70 m^2 newly built rented apartment. The likelihood of weaker income growth this year could increase the burden further even with only a moderate rent rise. It will become correspondingly more difficult to impose higher rents. Already high rents are also reflected in the declining fluctuation rate in the housing market. With rents set to increase further, tenants are often opting to stay in their existing property even if their housing needs have changed.

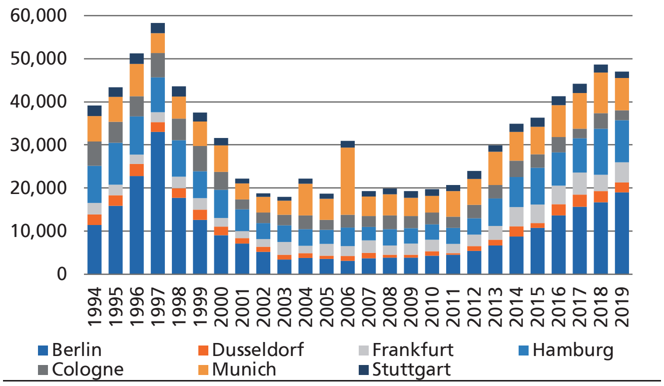
Even without the pandemic, the steep rent rise is imposing an increasing burden on tenant households

PROPORTION OF RENT TO INCOME FOR FIRST OCCUPANCY UP SHARPLY IN RECENT YEARS



Source: bulwiengesa, Federal Statistical Office, DZ BANK
Assumptions: average first occupancy rent for 70 m² apartment, average gross monthly earnings less 35 per cent taxes
2020: incomes stagnating, first occupancy rents +2 per cent

HIGH LEVEL OF CONSTRUCTION ACTIVITY, MAINLY IN LARGE CITIES
COMPLETET DWELLING



Source: Scope

Growth in housing supply slows rent trend

However, trends in supply and demand could also lead to slower rent growth. The pace was already decelerating in previous years. While the housing supply is gradually increasing, demographic growth in large cities has slowed. Whereas ten years ago only about 50,000 apartments were completed each year, the figure has now almost tripled.

Apartment block construction triples in ten years

Housebuilding has picked up particularly strongly in the seven largest cities. The number of planning approvals has already returned to the high level of the post-reunification construction boom. Since 2016, more than 60,000 housing units have been approved here each year. On a cumulative basis over the last ten years, the figure in the seven largest cities has reached almost 500,000 units, although only about 350,000 have been built. As a result of the prevailing backlog of approvals, a relatively large number of apartments will still be built even if the number of planning approvals slackens.

Construction activity particularly strong in seven largest cities

However, there is no risk of oversupply in the housing market at the moment, even if construction activity temporary exceeds new build demand due to fairly moderate levels of migration to cities. We see two reasons for this: firstly, the housing markets of many cities have almost dried up. This is borne out by the extremely low vacancy rates in some places. In cities which have previously experienced high levels of migration – such as Darmstadt, Frankfurt, Freiburg, Munich and Münster – the proportion of available housing stock which is vacant is often significantly less than one per cent. Secondly, the "shrinking household" is also having an impact. The number of

No sign of oversupply in housing market

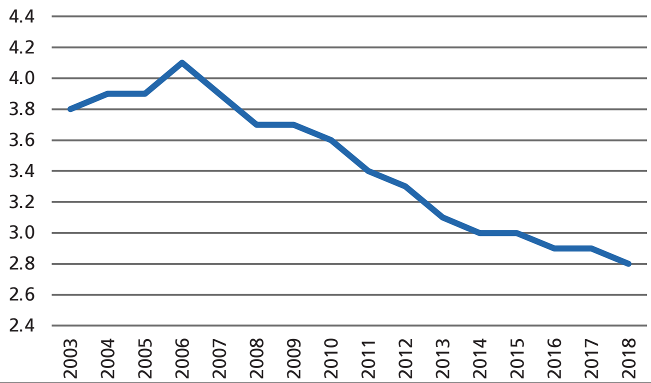
people per household is declining, and the number of private households as a relevant demand factor in the housing market is therefore increasing disproportionately.

Potential for major shift in housing demand

Demographic shift alters housing needs

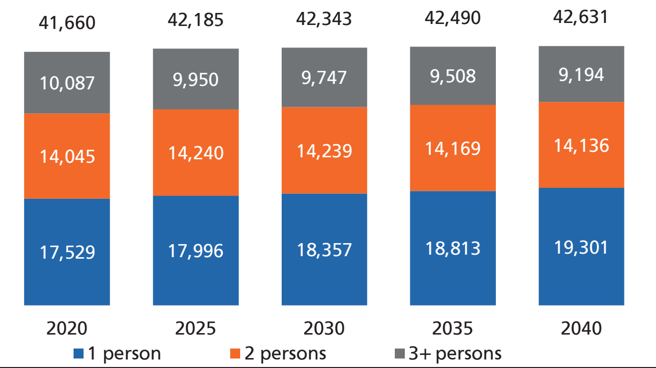
The demographic shift will in any case have an even greater impact on the housing markets in future than before. The most recent, 14th population projection from the Federal Statistical Office, is admittedly much less gloomy than previous estimates. However, despite assumed higher birth rates and levels of migration, the population is shrinking. The pace of the decline has nevertheless slowed. Conversely, the number of households is still increasing slightly because there are fewer people per household, and housing demand is therefore growing again slightly. Furthermore, the coronavirus crisis could boost housing demand in future years, if labour migration to Germany from countries more severely affected by the pandemic increases.

GROWING SHORTAGE OF LIVING SPACE IN GERMANY
VACANCY RATE FOR APARTMENTS THROUGHOUT GERMANY IN %



Source: CBRE empirica vacancy index

HOUSEHOLDS MORE NUMEROUS BUT SMALLER
HOUSEHOLDS BASED ON NUMBER OF PEOPLE IN THOUSANDS



Source: Federal Statistical Office
Data: 14th coordinated demographic "trend" scenario

More single-person households, fewer families

However, the rapidly ageing society, which is responsible for the decline in the number of people per household, is being accompanied by a decrease in the number of larger households. Conversely, the number of single-person households is growing. The number of two-person households is remaining largely stable over time. Demand for single-family homes and large apartments is therefore likely to weaken despite the overall increase in the number of households, while demand for one and two-bedroom apartments continues to grow.

WFH could boost demand for larger apartments

However, this is not set in stone. Firstly, demographic forecasts involve a high degree of uncertainty due to the long periods of time on which they are based. Secondly, housing demand may also alter due to changes in behaviour. The coronavirus could also have an impact here. Many people have spent much more time than usual at home in recent months as a result of short-time working, working from home and home schooling. Spacious apartments have the advantage of providing a place of retreat and quiet office space. If working from home becomes established as a fixed aspect of our working life, this could boost demand for large apartments in urban hinterlands. The disadvantages of living in outlying areas, such as long journeys to work, become less important if workers are not obliged to be present in the office every day.

Regulation plays an increasing role in the housing market

Housing market regulated by an increasing number of measures

While demographic effects or changes in housing needs only become evident over time, the impact of regulatory intervention is already clear today. The resentment felt by many tenants about strained housing markets and steep rent growth has led to various forms of intervention. In addition to the rent brake - which will now remain in force until 2025 – other measures include environmental protection systems and a cap on percentage rent rises. In many cities, new build projects must include a minimum proportion of social housing. The period used to compare rents in rent indices has also been extended from four to six years, in order to dampen rent levels by including the lower rents at that time.

Berlin rent cap a particularly decisive intervention in the housing market

One particularly far-reaching type of intervention in the housing market is the Berlin rent cap which came into force in February 2020, and which has frozen a large proportion of existing rents at their June 2019 levels. Rents may only be raised again by 1.3 per cent annually from 2022. Exceptions are social housing and new apartments built since 2014. From November 2020, "excessive" rents will also have to be reduced, if rents exceed by more than 20 per cent the levels fixed by the Berlin Senate based on the year of construction, number of apartments in the building, and the standard of fittings.

Rent cap already having an impact

The rent cap is already showing its effect. Data from F+B show a difference between market rent and capped rent of over 6 euros per square metre. Based on a survey carried out for estate agents Engel und Völkers, more than 80 per cent of Berlin landlords also expect to have to reduce rents from November, in most cases by 10 to 20 per cent. Reductions of up to 50 per cent are possible for individual apartments. Many landlords plan to offset losses of revenue with savings measures, for example by not carrying out any refurbishment or renovations when tenants change. The rent saved could therefore lead to a gradual deterioration in the quality of housing for tenants over a period of time.

If the rent cap is upheld by the court, other cities could follow suit

A final court ruling on the rent cap is still awaited. If it is not upheld, many rental agreements already make provision for an agreed higher rent which would then apply. However, if the Berlin rent cap goes ahead, it may well be used as a template for other cities. A flattened rent trend, partly due to the pandemic, could also nevertheless ease the pressure for additional regulatory measures. But the strained housing market is likely to become a political hot potato again during the economic recovery.

With the "ban of conversion" (Umwandlungsverbot) a further intervention in the housing market should take place

However, the next intervention measure in the housing market is already being prepared amid the coronavirus crisis. The draft Act on the Mobilization of Building Land represents an obstacle to the conversion of rented properties into owner-occupied housing to ensure that a sufficient supply of low-cost rented apartments is maintained.

Increasing legislation leads to more pitfalls

In addition to new regulatory measures and declining rental incomes, the new wave of regulation in the housing market also carries legal risks. The regulations have considerable potential to cause dispute in relation to both modernisations and "luxury refurbishment". One such area is upper rent limits, most of which are based on comparative local rents. However, comparative rents are not stated clearly and with legal certainty in each and every case. Only two thirds of rent indices for large cities are "qualified", or based on appropriate statistical processes. The reform of rent indices which the German government had planned to implement at the end of 2019 is also on hold.

Market for micro apartments could weaken

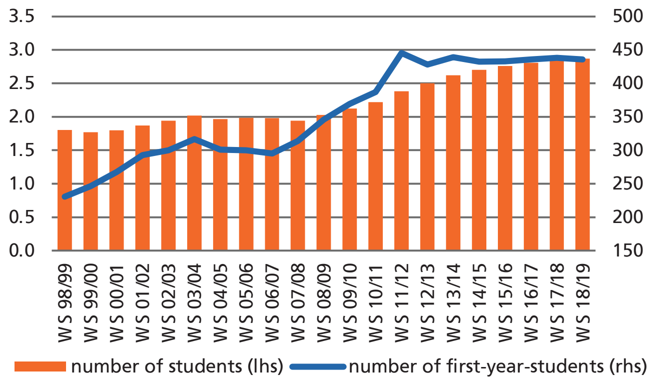
Micro apartments score with higher yields and low regulation

The micro apartment segment has grown strongly in recent years. It consists of relatively small apartments, usually of around 20 to 30 m^2, fully equipped and with internet access. Rents are "warm", i.e. they include additional costs. Target groups are mainly students and commuters. Advantages for investors are high rents per m^2, higher yields than for regular rented apartments, and less regulation.

High price of convenience

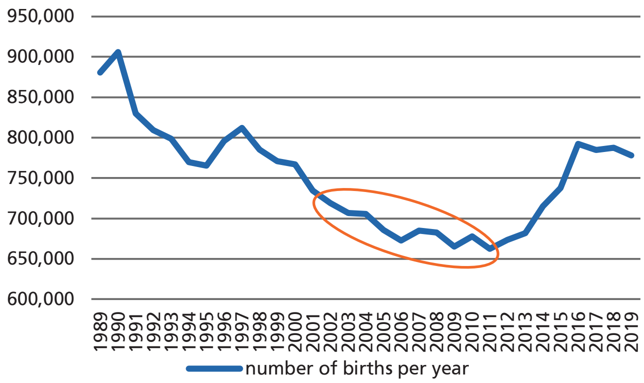
Demand for micro apartments has been boosted by the housing shortage in many university cities and growth in the number of people in work. Many long-distance commuters need city accommodation during the week. However, the convenience of all-inclusive apartments and their greater availability compared to the regular housing market comes at a price. Full rents for small apartments range from EUR 500 to 700 per month. High value, slightly larger apartments can also cost EUR 1,000 or more per month.

NUMBER OF NEW STUDENTS ALREADY STAGNATING FOR SEVERAL YEARS



Source: Federal Statistical Office WS = winter semester

AGE GROUP BORN WHEN THE BIRTH RATE WAS LOWEST WILL BECOME STUDENTS IN THE COMING YEARS



Source: Federal Statistical Office

Number of new students could decline

The relatively large supply of micro apartments in some places could be counterbalanced by weaker demand in the years ahead. One factor is the number of students, which has increased by more than 1 million within 20 years to nearly 2.9 million in the winter semester of 2018/19. However, numbers of new students are stagnating, with virtually no overall growth recently, and could decline in the years ahead. On the one hand, the proportion of pupils attending high school is already relatively high. On the other hand, the birth rate fell between 2000 and 2010. As a result of urbanisation, more families also live in centres of population. Fewer students therefore need their own apartment.

Demographics and working from home could dampen demand for micro apartments

Demand for micro apartments could also be dampened by other factors. For example, the number of long-distance commuters could decline. However, the economic crisis might not be the only contributor here. In the years ahead the potential labour force will contract as society ages. And the growing importance of working from home is likely to reduce the need to commute. Working remotely has particularly significant advantages for people who have previously needed a second home. The same applies to students who can now access university lectures remotely from home.

Rental prospects for micro apartments no longer as favourable

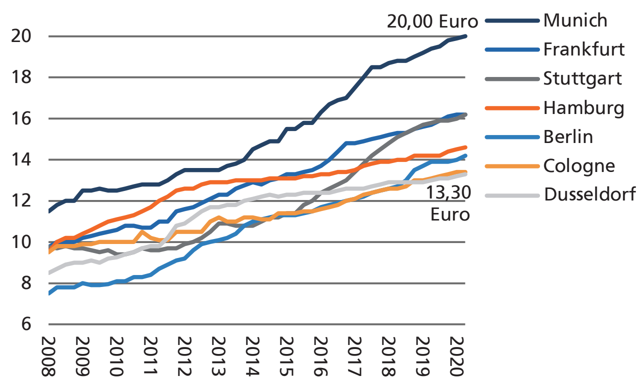
Micro apartments have become established in the housing market. Although the housing shortage is likely to persist in many cities, the rental prospects for fairly expensive small apartments could deteriorate in the coming years. Profitability would be likely to suffer as utilisation declines and as a result of rent concessions. The upper price segment could be hit harder.

Residential letting should remain a solid business model

Prolonged boom in the housing market has already peaked

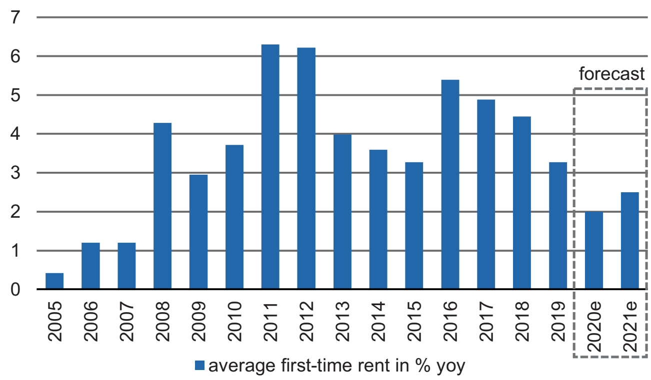
The past decade has been exceptional for the housing market. A tight housing supply, significant population growth driven by migration, a strong move to the city along with an ongoing upturn in the economy and employment led to a strong rise in rents and steady decline in vacant housing. Fast growing cities often have no reserves of empty properties and housing markets are therefore correspondingly tight. However, this trend has now peaked as was already evident from a slowdown in rental growth prior to the coronavirus pandemic.

RENTS FOR HOUSING IN TOP LOCATIONS RISING FURTHER
AVERAGE INITIAL RENT IN EURO PER SQM



Source: bulwiengesa

FORECAST HOUSING RENTS – MAJOR AND LARGE CITIES
POPULATION-WEIGHTED AVERAGE RENT RISE



Source: bulwiengesa, DZ BANK seven largest cities + 12 further large cities

Rents likely to remain largely stable in 2020, but could still increase subsequently

The impact of the pandemic on the housing market should be limited. After all, demand for housing will be unchanged. Moreover, fears of a substantial rise in rent arrears have so far proved unfounded. On balance, however, the impact of the economic crisis on households is likely to slow down the rise in rents. All in all, rents are likely at best to increase slightly in 2020. Next year, though, rent could start to pick up again. A fall in rents is possible, but should be limited to high-end space or flats in weaker locations or sub-standard flats.

Excess demand in the housing market gradually being whittled down

Housing supply improving through increase in building of high-rise flats

Excess demand in the housing market is likely to ease. The pace of migration to many cities has already slowed down. Apart from high rents, working from home could also slow down the influx of people into Germany's cities. For demographic reasons, the number of students taking up university places is set to decline. However, immigration to Germany could pick up momentum. However, even in the event of a stable demographic trend, the number of households is still expected to increase in view of smaller households. An ageing population means that demand is shifting more towards smaller flats tailored to older people's need. Supply is growing above all in metropolitan areas through a marked rise in the construction of high-rise blocks of flats. However, a surplus in the housing market is unlikely in the foreseeable future.

Valuations for apartment buildings could come under pressure

On balance, the flat rental business is likely to remain solid. Even so, the sharp rise in rents seen in the past decade is unlikely to continue since excess demand is set to dwindle and there will be more regulation. This could put pressure on rents which have risen sharply and on some high valuations for apartment blocks. On the other hand, a marked fall in prices for blocks of flats is unlikely since many investors are reliant on the yield advantage against bonds and stable cash flows.

OFFICE MARKET

Working from home forever – from temporary measure to successful model?

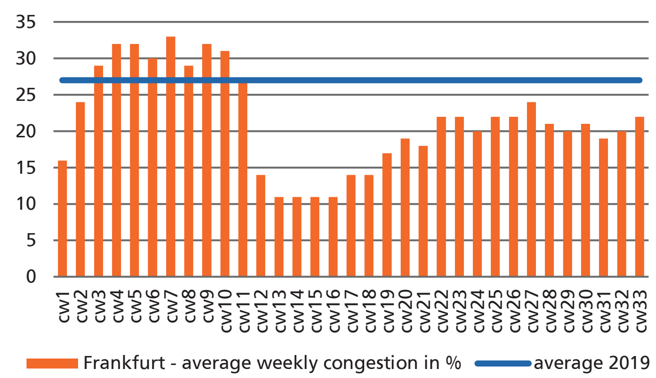
Working-from-home experiment a success – does that mean a breakthrough for flexible working?

The coronavirus pandemic has brought about a decisive change in the way we work. The need to protect the public from infection meant that there was no choice: overnight, from March onwards, most German office workers had to switch to working from home. In spite of minimal time to set up the necessary office equipment, and although it was born out of necessity, working from home has been a successful experiment. Almost immediately, people asked whether, in future, working from home − also known as "flexible working" − might enjoy a much higher status than it does at present.

Lockdown and working from home have had significant impact on road and data traffic

The impact of working from home has been clear from both traffic on the roads and the flow of data. From mid-March onwards, video conferences instead of meetings and other online offers led to a surge in data going through De-Cix, Frankfurt's internet exchange. At the same time, there was a great improvement in the volume of road traffic on Frankfurt's main arteries which are normally notoriously congested. With the end of the lockdown and a gradual return to offices and businesses, road traffic has increased again, but it is still well below the usual level.

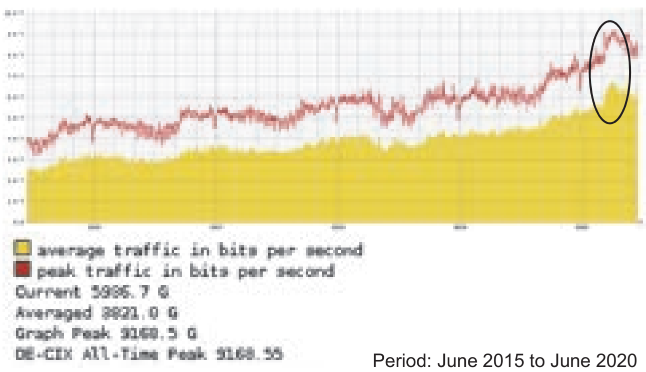
IN MARCH, COVID PANDEMIC LED TO MARKED REDUCTION IN TRAFFIC GERMANY'S MAIN COMMUTER HUB − FRANKFURT…



Source: TOMTOM

CW = calendar week

…AT THE SAME TIME, IT LED TO A MARKED INCREASE IN DATA TRAFFIC THROUGH FRANKFURT'S DE-CIX INTERNET EXCHANGE



Period: June 2015 to June 2020

Source: De-Cix

Period of five years, data as of 15.06.2020

Brave new world of work? Flexible working patterns offer many opportunities for employees and employers

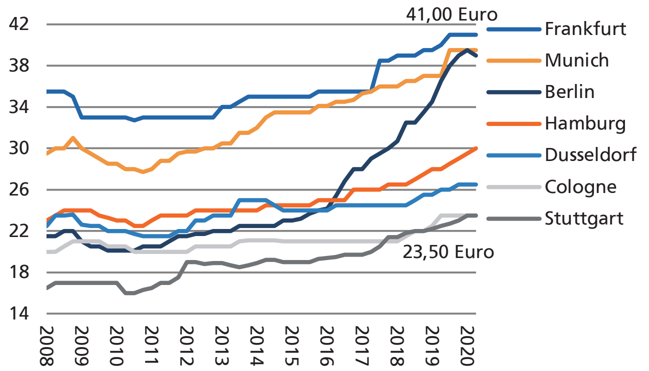
The relief on normally very busy urban roads is only one advantage of remote working. Working from home means that time usually spent on the way to work can be used in other ways which can help people reconcile the demands of family and professional life. It could also ease pressure on the housing market in big cities since it is easier for those who do not commute into the office every day to live outside the city. In addition, employers may benefit because they will need less office space and will therefore be able to reduce their rent costs. This might make it easier to recruit new members of staff if the opportunity to work from home were to obviate the need to move house.

Pre-corona virus, tight supply was the main issue affecting the office market

Half-year data on office market of limited indicativeness

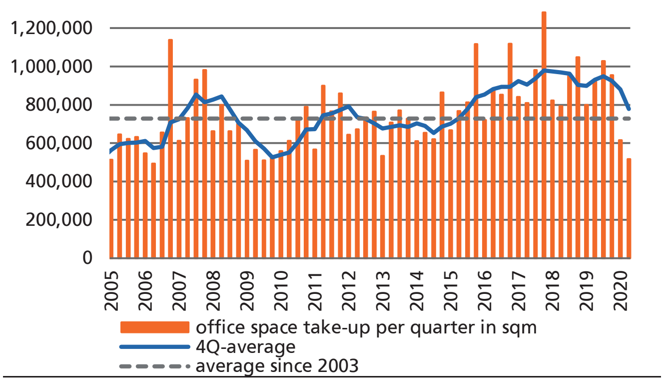
Activity in the office market has eased off significantly in the first half of 2020. Take-up fell by one third against the same period last year. However, the impact on the vacancy rate and prime rents has been limited. Since the bulk of office space due to be completed in 2020 was pre-let, the increase in vacant space is also only likely to be moderate. As regards prime rents, the indicativeness of half-year data has been hampered by lower letting activity brought about by the lockdown. Actual demand in the office market and the impact on rent levels are only likely to become clear in the second half. By then though, the economy could already be starting to recover.

RENTS FOR FIRST-CLASS OFFICE SPACE STABLE
PRIME RENT IN EURO PER SQM



Source: bulwiengesa

SLUMP IN TAKE-UP OF OFFICE SPACE IN TOP LOCATIONS
OFFICE SPACE TAKE-UP IN SQM

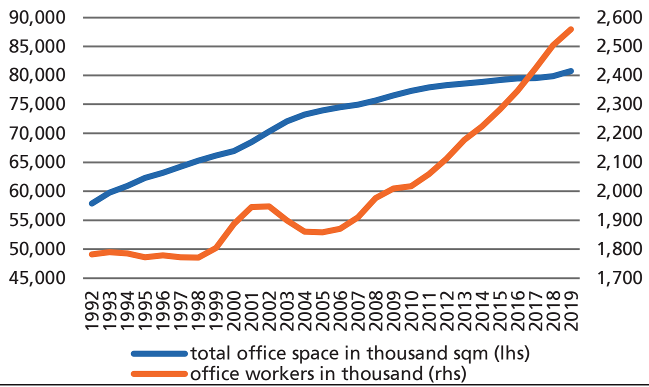


Source: bulwiengesa

Pre-Covid-19 tight supply was the central issue in the office market

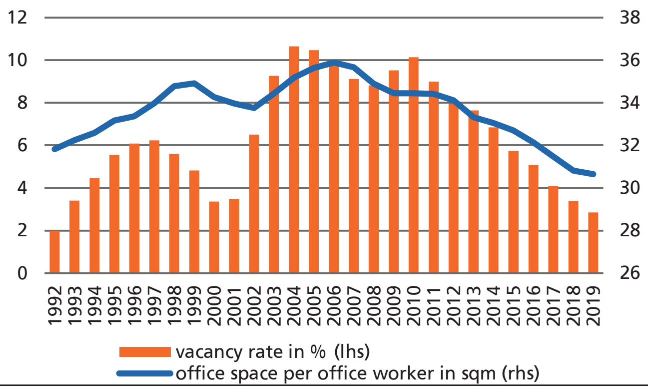
Prior to the outbreak of the coronavirus pandemic, flexible working tended to be a marginal issue; the focus of attention was mainly on a growing shortage of available office space. The upturn in the labour market over many years led to a much sharper increase in the number of office workers in most office locations than in available office space. Supply in the office market has lagged behind demand just as it has in the residential market. One reason for this was excessive building in the past which meant that many office markets struggled for a long time with a surplus of space and high vacancy rates which even reached two-digit levels for a while.

RISE IN OFFICE EMPLOYMENT IN THE LAST FEW YEARS NOTICEABLY FASTER THAN GROWTH IN THE AMOUNT OF OFFICE SPACE



Source: bulwiengesa, Scope, DZ BANK Data for the seven largest cities

SUPPLY IN THE OFFICE MARKET HAS CONTINUED TO DWINDLE STEADILY



Source: bulwiengesa, Scope, DZ BANK Data for the seven largest cities

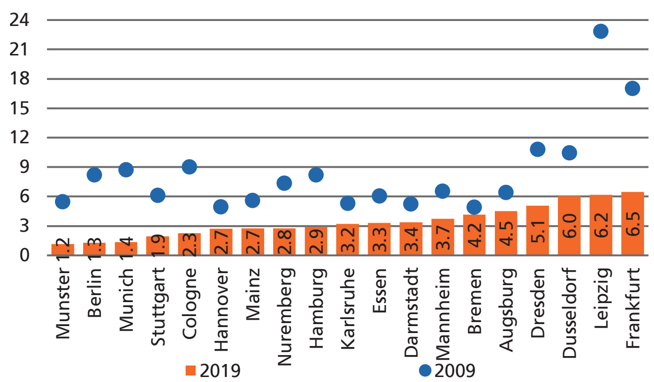
However, the situation in the office market changed radically. By the end of 2019, with vacancy rates in the low one-digit bracket, it had become virtually impossible to find any available office space. Moreover, the little space still available has tended to be spread across entire cities, as a result of which it has been virtually impossible to find any larger amounts of office space all in one block. Consequently, companies seeking office space have often had to opt for project developments and in some cases wait for some years until completion. Under such conditions, developments or extensions which might be available in the near future are virtually impossible.

Tight supply: in 2019, vacancy rate fell to lowest level since 1993

High demand for office space and tight supply have pushed up office rents. In Berlin, Frankfurt and Munich, rents for first-class space have increased to EUR 40 per m^2 and more. Rents for flexible workspace available at short notice from suppliers such as WeWork or Design Offices, which companies are increasingly using because of the lack of availability, are often even more expensive.

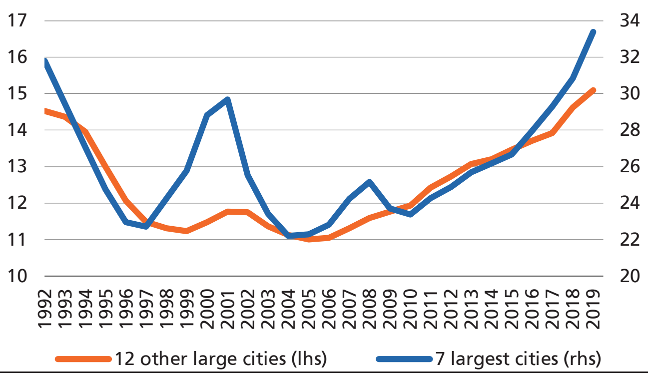
Sharp rise in cost of offices on the back of tight supply

OFFICE SPACE NOW HARDLY AVAILABLE IN MANY CITIES
VACANCY RATE (%)



Source: bulwiengesa

DWINDLING AVAILABILITY HAS PUSHED OFFICE RENTS
PRIME RENT FOR OFFICE SPACE IN EURO PER SQM



Source: bulwiengesa, DZ BANK

Can flexible working become a universal problem solver?

More widespread flexible working could ease conditions in a tight office market. Although the recession is leading to an improvement in the market, economic recovery is likely to bring a return of scarce office space. It would therefore make sense to explore the possibilities offered by flexible working.

Flexible working could ease tight situation in office market

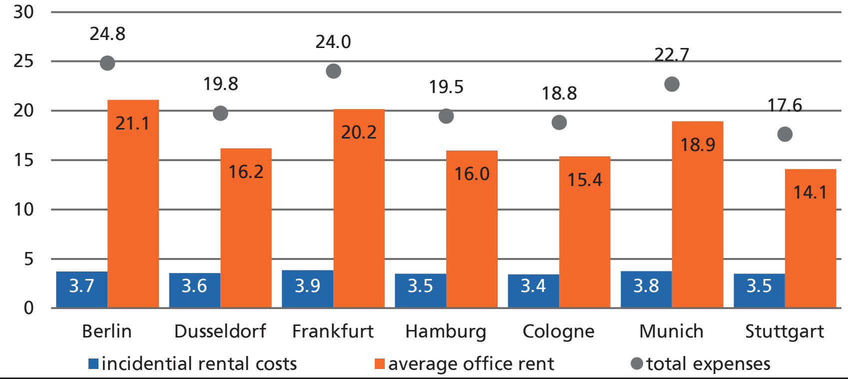
In spite of tight supply and a rise in office rents, available office space is often not used efficiently. This is illustrated by the following example: after deducting week-ends, high days and holidays, office space is used 250 days per year. In fact, desks are only used 190 days or 38 weeks per year. On average, employees take 30 days' leave, they have ten days off as flexitime; they have ten days' sick leave or work from home and are away on business or on training courses for a further ten days. In addition, 30 per cent of employees work part time (half days). On this basis, employees are absent from their desk around 65 per cent of the time − albeit with a broad spread.

Over a third of office space unused at present through temporary absence of employees

Working-from-home arrangements involving one flexible working day per week would lead to a reduction in the average annual office use to just over 50 per cent. Two days' flexible working would reduce average office use to under 40 per cent; in the case of three days' flexible working, it falls to around 25 per cent. Although maximum workstation use would be higher, the example shows that there is definitely potential for reducing the amount of office space used.

More extensive remote working arrangements could lead to a further marked reduction in office space use

EXPENSIVE OFFICES: WORKING FROM HOME COULD HELP REDUCE COSTS
AVERAGE MONTHLY OFFICE COSTS IN EURO PER SQM (2019)

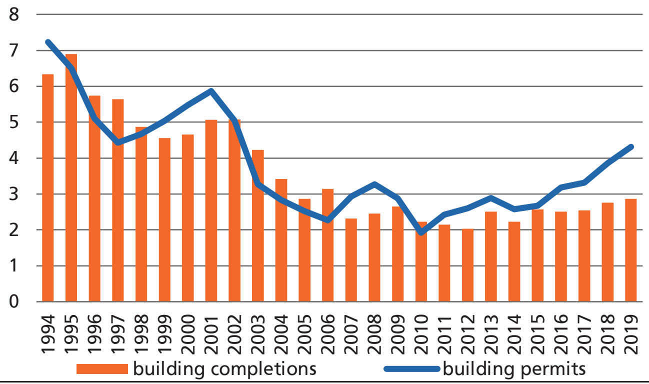


Source: JLL

Significant scope for cutting office costs

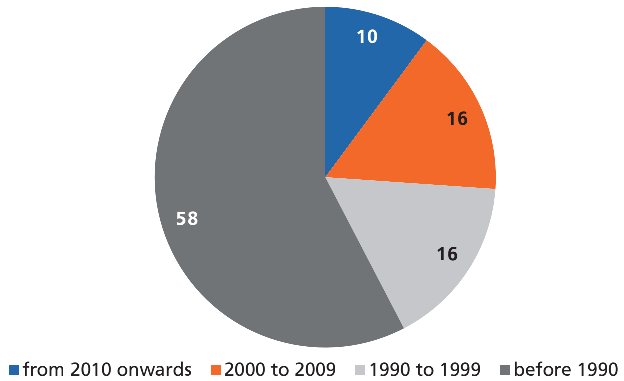
The above graph shows that companies had to pay rent and peripheral costs of between EUR 18 and EUR 25 per m^2 in the seven largest cities in Germany in 2019. Based on an average of 30 m^2 of space per office worker, one workstation generates an annual cost of EUR 6,500 - 9,000. The figure is likely to be over EUR 15,000 in the case of top locations in Berlin, Frankfurt or Munich. However, the potential for cost savings cannot be realised directly through working from home; it can only be achieved by a fall in the number of workstations.

INCREASE IN NUMBER OF PLANNING PERMISSIONS FOR OFFICE AND ADMIN BUILDINGS
OFFICE BUILDINGS USABLE SPACE IN MILLION SQM



Source: Federal Statistics Office

OUTDATED STOCK: WELL OVER HALF OF OFFICE SPACE IS OVER 30 YEARS OLD
PERCENTAGE OF OFFICE SPACE BY YEAR OF CONSTRUCTION



Source: bulwiengesa Data for the seven largest cities

Regular working from home raises questions

By now, many employees are well set up at home and familiar with video conferencing, so theoretically, there should be nothing to stop them from working from home. However, the switch is not entirely straightforward; if nothing else, working on a laptop from the kitchen table is not a sensible solution in the long term. In the following, we look at a number of issues which have to be taken into account.

» How high is acceptance for home working? A sufficiently large number of employees would have to be willing to work from home to achieve any meaningful reduction in office space. But not everybody wants to work from home, or has a suitable space for doing so. Moreover, many people appreciate direct communication with their colleagues.

- In principle, the labour law requirements applicable to home working are the same as those that apply in the office. In addition, employees have a right to an ergonomic workstation. An arrangement will therefore have to be found which ensures legal certainty for employers and allows flexible working.
- One hurdle is providing a dedicated workstation in the office. Companies can only reduce their office footprint if the number of workstations is reduced: members of staff present in the office have to "hot-desk", i.e. they will not always sit at the same desk. Personal items and materials are stored in a wheeled container. At the end of the day, each employee is required to clear their desk, even if they are in a hurry.
- Flexible working can only function in a (largely) paperless office, so that employees can have access to all necessary documents at any time. Where necessary, paper files have to be digitalised in advance.
- Can the cost of premises be reduced in the near term, even in the case of long-term rental agreements or in owner-occupied offices? This could require having to let space which has been vacated to other users.
- Other aspects relate to staff management, working hours, data protection or even reimbursing employees for the cost of working from home.

Demand for offices is changing – and not just because of working from home

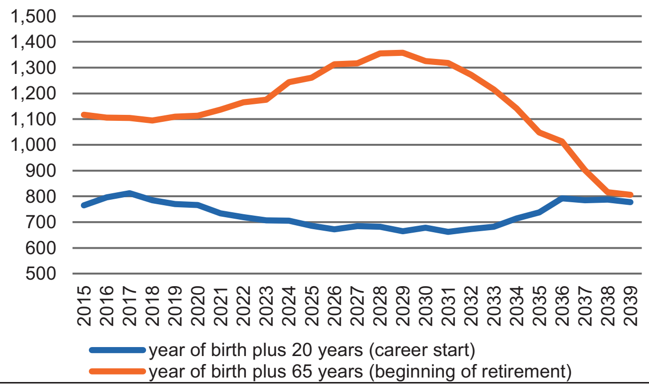
Issue of flexible working patterns would have come onto the agenda in any case

Employers would have had to address the issue of flexible working sooner or later even without the coronavirus outbreak. The number of "digital natives" for whom flexible and mobile working are perfectly natural is rising in the world of work as a result of a gradual generational change. Moreover, in view of a persistent shortage of qualified labour, the only way for employers to be highly attractive to potential employees is if they also offer flexible working options.

Generational change speeded up by baby boomers retiring from the workforce

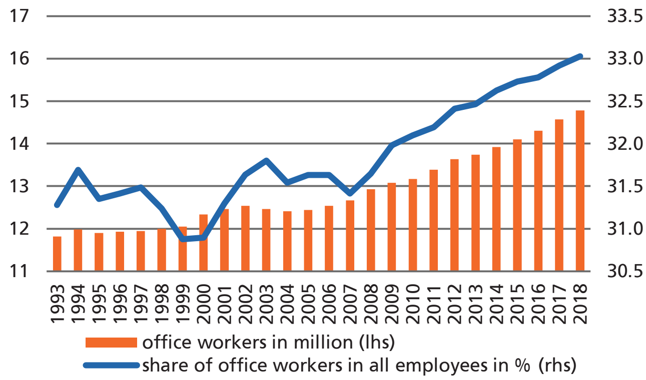
The office space which will be required in the next few years is likely to decline in any case because of demographic changes. At present, around 15 million people work in offices in Germany. The number has increased both in absolute and relative terms, not least on the back of Germany's transformation from an industrial to a knowledge economy. However, the trend is not expected to continue since the baby-boomer generation is coming up to retirement age. The number of babies born in subsequent years was in some cases down by half, which means that the number of office workers is likely to decline gradually.

SHORTAGE OF QUALIFIED STAFF LIKELY TO BE EVEN GREATER AS BABYBOOMERS GO INTO RETIREMENT



Source: Federal Statistics Office

OFFICE WORK BECOMING INCREASINGLY IMPORTANT; NUMBER OF OFFICE WORKERS GROWING IN ABSOLUTE AND RELATIVE TERMS



Source: bulwiengesa, DZ BANK

Type of office work changing

Apart from the question of how the amount of office space needed might change, we should also look at the structure of the office space required. In future, traditional office work involving processing paperwork could be replaced increasingly by systems based on artificial intelligence. In contrast, creative, project-oriented development work is likely to become more important. However, the kind of two- or four-desk offices off long corridors found in many office buildings are not the first choice of working environment for innovative teams.

Office stock outdated: will supply meet future demand?

A large proportion of office buildings – the majority over 30 years old – are arranged in precisely that manner though. Until now, it was still quite easy to let less attractive offices because of tight supply and lively demand. In view of dwindling demand for office space triggered by the crisis, many outdated office buildings already face a greater vacancy risk. Providers of office space must quickly get to grips with the issue of how to reconfigure the layout in order for it to meet future demand. Otherwise a trend could emerge in the office sector of the kind experienced in the retail sector where the momentum of online shopping was underestimated at a time of constant expansion of inner-city retail space which now faces the prospect of lying empty.

Offices not about to become obsolete

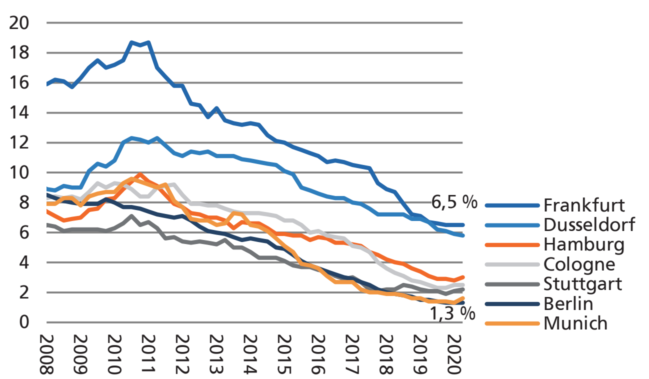
Economic crisis dampening demand for office space

The pandemic has led to an economic slump and is therefore dampening the cyclical office market. Job cuts announced by companies such as BMW, Daimler, Fraport, Lufthansa and ZF point to a slowdown in demand for office space. However, the damage is likely to be limited by comprehensive support measures such as the German government's EUR 130bn coronavirus recovery package. Even so, the vacancy rate could increase by 1 to 2 percentage points. In view of a low starting point, though, the vacancy level would remain manageable and therefore at most, property companies would face a moderate fall in rents. However, a sharper rise in vacancy rates in the event of a lengthy economic crisis would lead to a more serious fall in rents.

Working-from-home effect likely to permeate the office market slowly

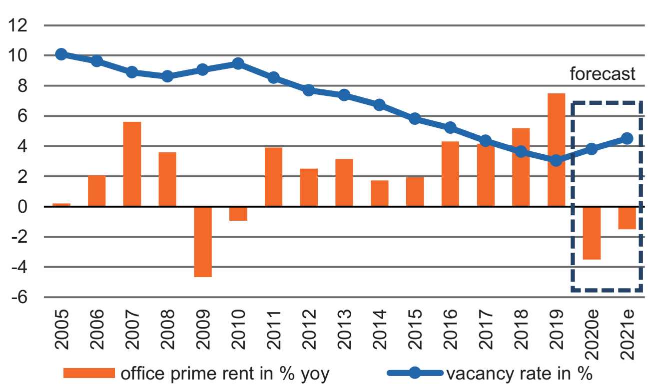
At present, demand for space per employee present in the office is greater than normal because of minimum distancing requirements through Covid-19, but this will be a temporary effect. In the next few years, the amount of office space required could fall both as a result of demographics, but also through more options for flexible working which will become gradually more widespread. However, these effects could

EVER DWINDLING AVAILABILITY OF OFFICE SPACE
PROPORTION OF VACANT OFFICE SPACE IN SEVEN LARGEST CITIES



Source: bulwiengesa

OUTLOOK FOR OFFICE MARKETS (MAJOR AND LARGE CITIES)
SPACE-WEIGHTED AVERAGE RENT/VACANCY RATE



Source: bulwiengesa, DZ BANK 7 largest cities and 12 further large cities even feed through in the near future if, for example, decisions about new office space are delayed in order to analyse future demand for space. Companies could resort to flexible workspaces in response to temporary shortages of space.

More and more companies likely to enhance flexible working options

The current debate about working from home is definitely not likely to be a passing phase; temporary measures have become the norm since the pandemic is dragging on. Many office workers have created a suitable workspace at home. The temporary additional burden of childcare and homeschooling should be eliminated with the regular operation of daycare centres and schools after the summer holidays. Many employers are already likely to have taken a close look at the regulations which might apply to permanent remote working arrangements. Siemens, for example, is planning to allow its employees to work from home several days a week. Overall, it is likely that many more office workers will be able to work from home regularly than was the case prior to the pandemic, and perhaps this perk will lead to the loss of a designated desk in the office.

Offices definitely not becoming obsolete

Even so, flexible working arrangements will not make the office superfluous; only some of the working week is likely to be spent working from home or in a coffee shop. Human beings are social animals and, in the long run, direct communication and team work lead to better results than 100% remote working. Office buildings offering a suitable working environment and which therefore encourage better results are not about to become obsolete. However, it is likely that less rather than more office space will be needed in future, leading above all to a deterioration in prospects for outdated and unattractive office buildings. The variation in the level of vacancy rates and rents could be more pronounced than it is now, depending on the location and specifications of individual offices.

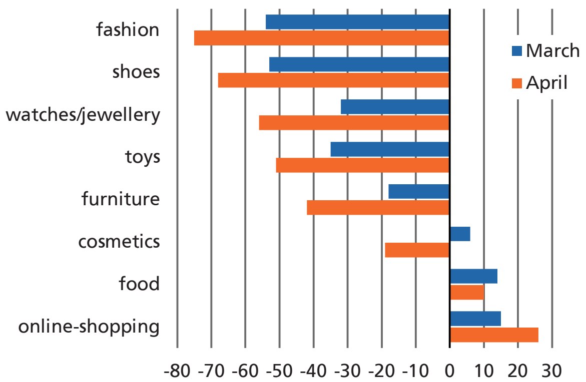
RETAIL

Retail woes started pre-coronavirus

Pandemic dampening retail even after end of lockdown

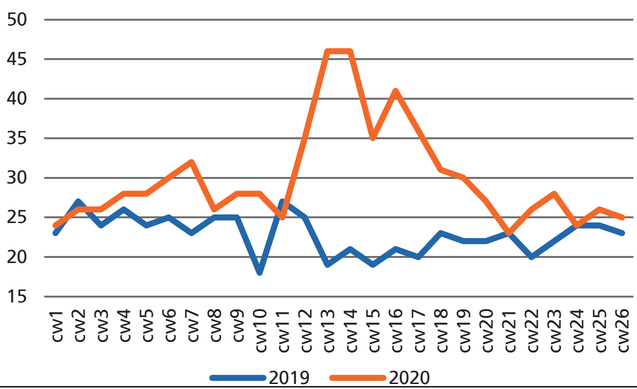
Along with the hospitality industry, measures to reduce corona infection figures have mainly affected the retail sector. During lockdown, practically all shops had to close apart from those catering for daily needs. Only supermarkets, pharmacies and DIY stores remained open in Germany. However, no sales were generated from fashion items, shoes, electrical/electronic goods or jewellery in inner cities over a number of

HIGH STREET RETAIL SECTOR HIT HARD BY LOCKDOWN
PERCENTAGE CHANGE IN NOMINAL SALES VS. PREVIOUS YEAR



Source: HDE/Federal Statistics Office

SHARE OF ONLINE SHOPPING NORMALISING AFTER LOCKDOWN
ONLINE SALES AS PERCENTAGE OF NON-FOOD MARKET



Source: HDE/GfK

cw = calendar week

weeks, and even after a gradual reopening of stores, sales in inner city locations have remained below their usual level. Given the rules on social distancing and face masks, a shopping outing is no longer much fun. On balance, the HDE retail trade association expects a loss of sales revenue of up to EUR 40bn in 2020.

Retail and property market code of conduct

Because of the fall in sales revenues, many retailers were unable to pay their rent. According to press reports, rent arrears during the six-week lockdown period alone amounted to around EUR 2.4bn. In response to the crisis, the HDE retail trade association and the ZIA which represents the property industry have worked out a code of conduct for issues relating to rent during the coronavirus pandemic. The recommendation to members − namely that they should stick to existing contractual arrangements − aims to prevent any further deterioration in the situation. In addition, seeking clarification of the legal position via the courts would be expensive and time-consuming.

Pandemic could accelerate structural change in the retail sector

Corona virus has speeded up structural changes in retail sector even further

It is impossible to say how long the pandemic will last and how long it will continue to depress the economy. Ultimately, however, it will be a temporary phenomenon. The impact on retail though could be long-lasting, in so far as it is likely to speed up the structural change in the retail sector which had already begun. The pandemic has increased pressure on a sector already weakened by successful online shopping. A large number of retail chains are filing for bankruptcy or applying to go into administration. They include many well-known names such as Appelrath & Cüpper, Bonita, Colloseum, Dielmann, Esprit, Karstadt/Kaufhof, Hallhuber, Promod and Sinn.

Streamlining of branch network forced by e-commerce being brought forward

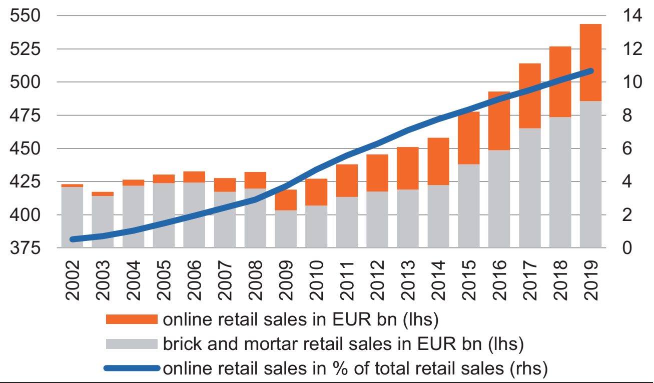
The trend is going hand-in-hand with a streamlining of branch networks, which would probably have happened in any case, but over a longer period of time. In addition, shopping habits could shift more rapidly towards online shopping. Retail chains will be taking this into account and factoring it into the scale of their future branch structure. Apart from the loss of rental revenues, landlords are likely to be faced with the prospect of rising vacancies and having to renegotiate existing rental contracts.

Momentum of online shopping was underestimated

Expansion of city-centre retail space took place in spite of growing e-commerce

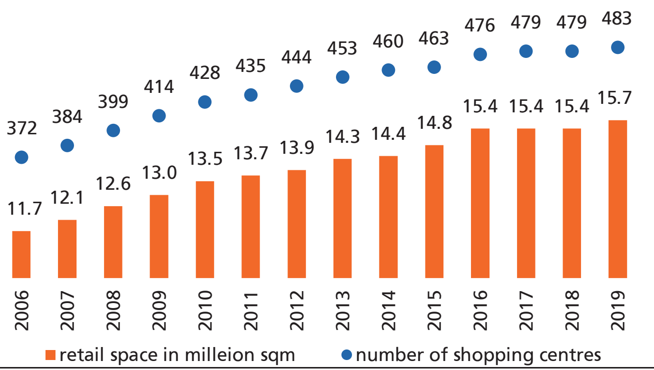
It appears that the momentum of online shopping was underestimated in the past. While the share of e-commerce in relation to total retail sales has climbed in an almost straight line to over 10 per cent since the beginning of the new millennium, retail space in many cities was being expanded by smaller and even large project

RETAIL SALES MAINLY GROWING ONLINE



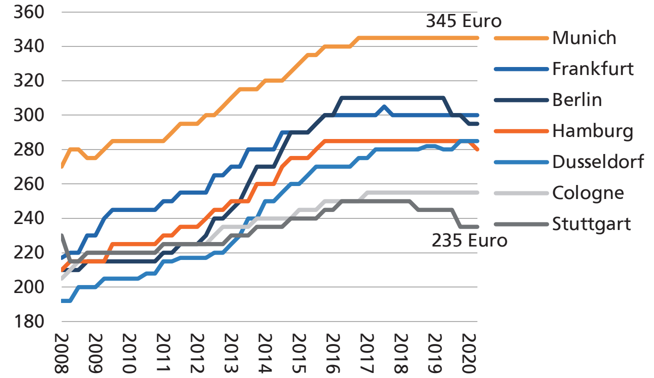
Source: HDE

BUILDING OF NEW SHOPPING CENTRES CONTINUED UNABATED IN SPITE OF ONGOING E-COMMERCE BOOM



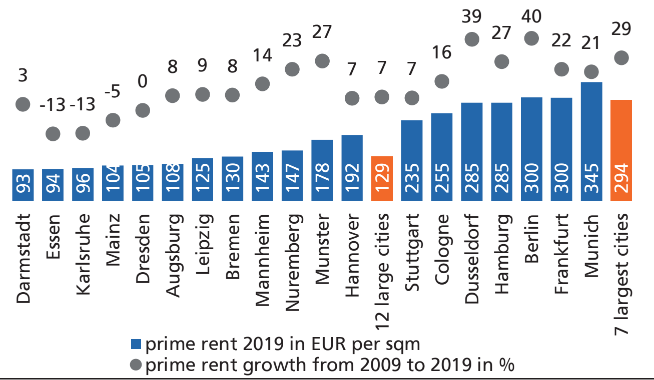
Source: HDE / EHI Retail Institute

SHARP RISE IN RETAIL RENTS CAME TO AN END BACK IN 2016
PRIME RENT IN SEVEN LARGEST CITIES IN EURO PER SQM



Source: bulwiengesa

BIG DIFFERENCES IN RENT TREND IN RETAIL DEPENDING ON LOCATION



Source: bulwiengesa, DZ BANK

developments. For example, two city-centre shopping centres opened at once in Stuttgart in 2014. Across Germany, around 70 new shopping centres opened their doors between 2009 and 2019. Moreover, many existing centres were expanded and there was also strong demand from retailers for new retail space.

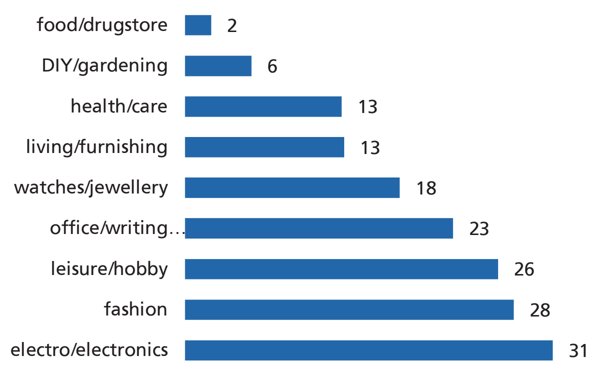
Headwind from e-commerce ended rise in rents in top retail locations

This is illustrated by the trend in prime rents which rose sharply, above all in top locations, in spite of the increase in retail space. However, the rise in rents was concentrated in prime locations. As a rule, only such locations are of interest for retail chains in view of a high footfall. This is also why retail space in peripheral areas or non-city-centre districts did not enjoy the same rent rise. However, growing headwind from ever more successful online retailing has led to a visible flattening in rental growth from 2016 onwards. Prime rents in the retail sector peaked in 2017. On average, the average prime rent in the seven largest cities was almost EUR 300 per m^2. From 2018 onwards, prime rents were declining and by 2019, they were even falling in top locations.

Advantages of close-knit branch network clearly fail to justify high costs

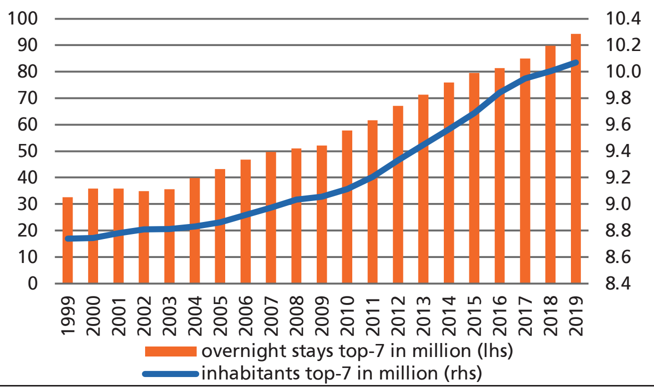
But what exactly prompted the expansion of branch structures which brought about the high demand for retail space and increase in rents in prime locations which we have described? After all, high-street retailers have not missed out on the success of e-commerce. Online orders of the kind of goods typically available in high-street

ONLINE SHOPPING MAINLY DAMPENING PRODUCT GROUPS SOLD IN THE HIGH STREET
PERCENTAGE SHARE OF ONLINE SALES BY PRODUCT GROUP



Source: HDE Data for 2018

GOOD FOR RETAIL: BOOMING TOURISM AND FURTHER POPULATION GROWTH
AGGREGATE DATA FOR THE 7 LARGEST CITIES

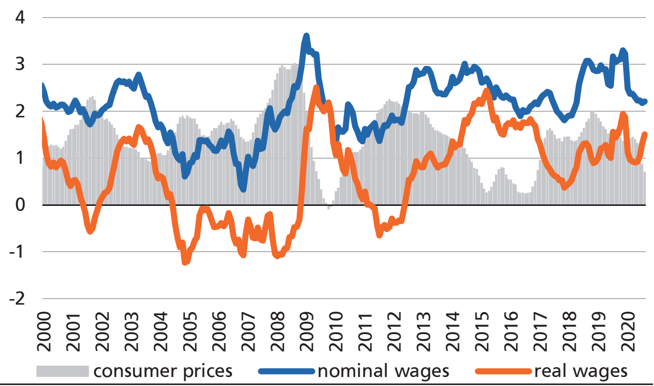


Source: bulwiengesa, Municipal Statistics Offices, DZ BANK shops such as clothes, shoes, watches/jewellery or electronics goods account for up to one third of retail sales. One aspect is customer proximity which is achieved through a good accessibility of the shops. In addition, many retailers bank on hybrid sales concepts involving branches plus an online shop and there is a general feeling that products can only really be "experienced" in a bricks-and-mortar store. Whether a product is then bought in-store or at the click of the mouse at a later stage is of secondary importance. However, it seems that the advantages of a close-knit distribution structure do not justify high rental and personnel costs.

Growing population and tourism boosting number of customers

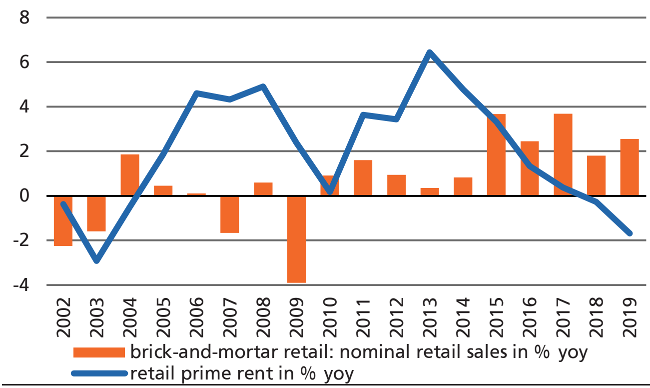
Another reason which explains why retailers expanded as they did was a growing customer potential in many large cities from population expansion and flourishing tourism. There were high growth rates above all in the seven largest cities in Germany where the number of inhabitants grew by 15 per cent to over 10 million in the period from 1999 to 2019. Overnight stays trebled to almost 100 million a year during the same period. However, the trend has come to a halt and it is likely to take years for the tourism industry to return to the level of 2019 after the slump experienced in 2020. In addition, population growth is now being slowed down by a tight housing market and high rents.

INCREASE IN REAL WAGES FROM 2013 TO 2020
YEAR-ON-YEAR PERCENTAGE CHANGE IN PRICES AND PAY



Source: Refinitiv, Federal Statistics Office, DZ BANK

RENTS FAILED TO BENEFIT FROM RISING HIGH STREET SALES FROM 2015 ONWARDS AFTER YEARS OF STAGNATION



Source: bulwiengesa, HDE, DZ BANK
Prime rent: average for seven top locations and 12 further large cities

Rising sales in physical stores since 2015 could not offset success of online retailing

Earlier optimism in the retail sector was also helped by favourable economic conditions which led to a high level of employment and strong income growth among households. Private consumer spending clearly benefited from this. After a long period of stagnation, sales in bricks-and-mortar stores picked up noticeably from 2015 onwards. However, even that increase could not offset the growing success of online retailing. The trend in rents slowed down in tandem with rising sales in physical stores.

Retail in city centres must shrink back to a healthy level

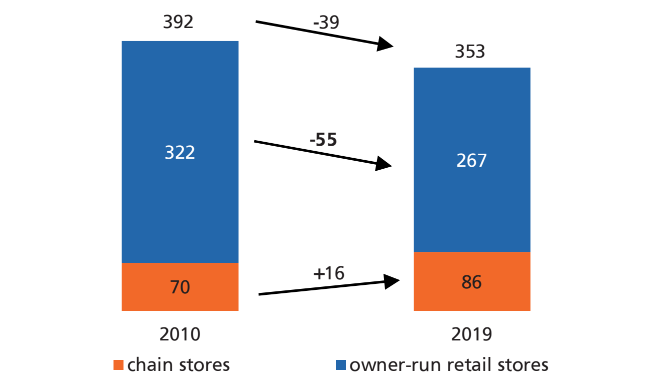
Accelerated downtrend: rents were already falling in hitherto favourable conditions

Retail rents in inner cities and shopping centres were already slowing down when economic conditions were still favourable. Bearing in mind a deterioration in conditions, the downtrend is likely to accelerate even further. Almost all the factors which have so far supported the retail sector have deteriorated. Population growth in big cities has eased off; the purchasing power of households is being dampened by the economic crisis and it is likely to take a long time for tourism to get back to the level of 2019.

In addition, the growth of online retailing is likely to accelerate. Even consumers who shied away from ordering online in the past are now likely to have shopped online because of lockdown. We can therefore assume that the coronavirus-led closure of many shops has increased the customer base for e-commerce.

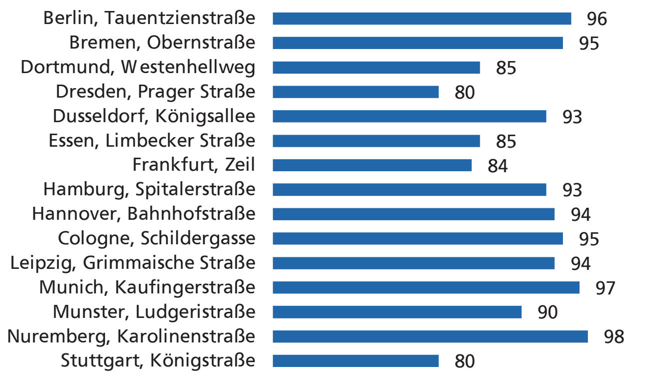
Number of online shoppers may have increased during lockdown

HIGH STREETS DYING OUT: RETAIL CHAINS HAVE INCREASED STORE NUMBERS WHILE NUMBER OF INDEPENDENT SHOPS HAS DWINDLED
NUMBER OF STORES IN THOUSANDS



Source: HDE

DECLINING CHOICE: SHOPPING MILES INCREASINGLY "CLONED"
DEGREE OF HIGH-STREET "CLONING" AS PERCENTAGE



Source: BNP Paribas Real Estate   Data for 2019

Germany has a large number of strong shopping destinations; they include not only the seven largest cities, but also various regional centres such as Dortmund, Dresden, Hannover, Leipzig, Mannheim, Münster and Nuremberg. Many project developments have improved the number of shops on offer. On the other hand, a growing "cloning" of high streets means that one shopping mile looks much the same as another. The degree of "cloning" in prime locations is often greater than 90 per cent. The range of local, family-run businesses is dwindling. On balance, though, strong shopping destinations should continue to show a high footfall for prime locations.

Attractive shopping destinations should continue to generate high footfall

KARSTADT – KAUFHOF – KARSTADT SPORTS: LOCATIONS WHERE CLOSURES ARE PLANNED

city	Karstadt	Kaufhof	Karstadt Sports	Stadt	Karstadt	Kaufhof	Karstadt Sports
Berlin	x	x	x	Karlsruhe	-	-	x
Bonn	x	-	-	Kiel	-	-	x
Brunswick	-	x	x	Cologne	x	-	x
Bremen	-	x	x	Landau	-	x	-
Bremerhaven	x	-	-	Lubeck	x	-	x
Bruhl	-	x	-	Mainz	x	-	-
Dessau	x	-	-	Mannheim	-	x	-
Dortmund	-	x	x	Monchengladbach	x	-	-
Dusseldorf	x	x	x	Munich	x	x (2)	x
Essen	-	x	x	Neubrandenburg	-	x	-
Flensburg	x	-	-	Neumunster	x	-	-
Frankfurt	x	x	x	Neunkirchen	-	x	-
Fulda	-	x	-	Neuss	-	x	-
Goppingen	-	x	-	Norderstedt	x	-	x
Gummersbach	x	-	-	Osnabruck	-	x	-
Gutersloh	x	-	-	Rosenheim	-	-	x
Hamburg	x (2)	x	x (2)	Stuttgart	-	x	x
Hamm	-	x	-	Sulzbach MTZ	x	-	-
Hanau	-	-	x	Trier	x	-	-
Hannover	x	-	-	Wiesbaden	-	-	x (2)
Ingolstadt	-	x	-	Witten	-	x	-
Iserlohn	x	-	-	Worms	-	x	-

Source: Immobilienzeitung   as of 19 August 2020

Gloomy picture already evident in many pedestrian shopping areas

Outside outstanding shopping destinations, however, there were already growing signs of gloom even before the outbreak of the coronavirus. This is clear from the spread of bargain stores and a growing number of shops which are lying empty in the best retail locations. For some time now, there have been warnings about a gradual decline in footfall in high streets. These trends often go hand-in-hand with a contraction in prime locations. The sections of high streets which can be regarded as prime locations in the retail sector because of their footfall are dwindling at the edges.

Smaller shopping locations could be especially hard hit by closure of Kaufhof/Karstadt branches

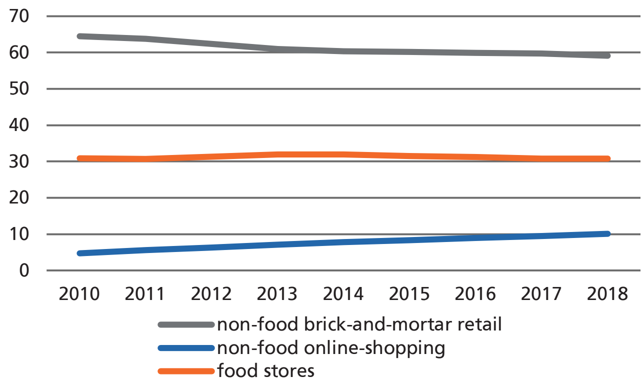
Attraction of city centres could dwindle even further with branch closures reducing shopping choice. One example of this is the Spanish clothes chain Inditex with the Zara stores. The retailer is planning to close down 1,200 smaller stores worldwide and to replace these with 450 new and larger outlets. Other chain stores operators are expected to go down the same avenue. For example, the stricken fashion chain Esprit is planning to restructure with the closure of half its 100 branches in Germany. City centres are likely to be hit much harder by the extreme measures being taken by the Galeria Karstadt Kaufhof retail group. Although concessions to tenants have prevented the closure of a number of branches, we still count about 50 stores earmarked for closure. Department store buildings are being abandoned − a move which could lead to a noticeable weakening of all neighbouring shops since big department stores often serve as a reference point for customers and therefore play a central role.

Convenience stores benefiting from coronavirus crisis

Eating at home instead of at work: working from home and short-time work leading to higher demand in supermarkets

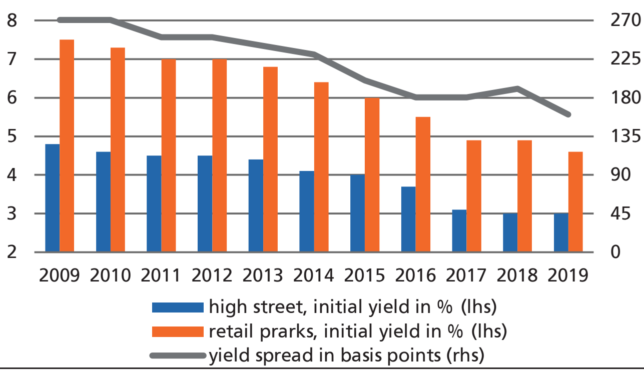
Whereas conventional retailing involving clothes, shoes and electronics goods lost huge amounts of sales, stores in other segments are doing well, including bike shops, garden centres and DIY stores. The focus is on local shopping. Although the temporary spike in sales from hoarding is being evened out over time as consumers work their way through the stores they built up, supermarkets and pharmacies are nevertheless likely to generate higher sales this year because people are spending more time at home than usual through short-time work and working from home.

SHARE OF SALES IN FOOD RETAILING STABLE
PERCENTAGE SHARE IN RELATION TO TOTAL RETAIL SALES



Source: HDE, DZ BANK

SHARP FALL IN YIELD FOR CONVENIENCE STORE CONCEPTS
FRANKFURT NET INITIAL YIELD IN RETAIL



Source: bulwiengesa, DZ BANK

Image of retail sector has improved

In addition, convenience stores have been able to improve their image since the pandemic has brought home the importance of a functioning system of local shops and plain discounters have become systemically important companies. It is likely that this greater appreciation will decline again over time, although the trend towards more quality and better food could be strengthened.

On balance, convenience concepts have proved to be a stable and resilient business model. Accordingly, investor interest in retail concepts which concentrate on the necessities of daily life is likely to increase further. Growth prospects for neighbourhood stores are mainly tied to demographic trend. However, a growing interest in healthy food and higher-quality products could ensure sales growth. Local suppliers may also experience strong growth in online orders.

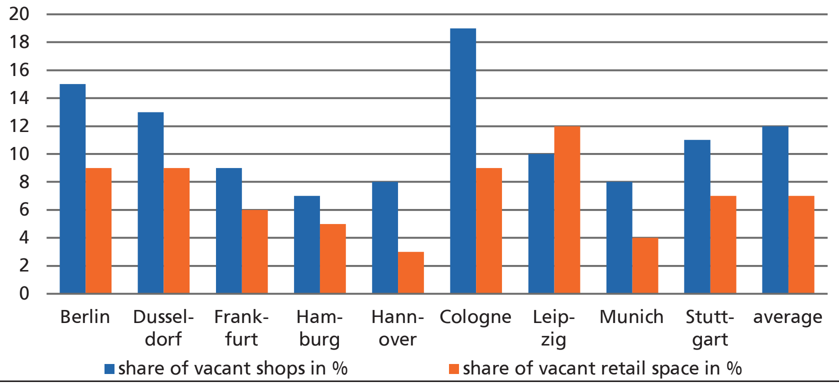
Local shops have generally turned out to be a stable and crisis-proof business model

Outlook

The pandemic has compounded problems experienced by retailers in prime locations, but not caused them. The decline in the retail sector had already begun some time ago through strong growth in online shopping which is limiting sales potential. Another problem has been that one prime shopping mile increasingly looks just like another through a growing "cloning" of high streets, offering a sometimes middling visitor experience. In future, the attraction of inner cities is likely to continue to be hit by store closures. In this respect, retail plays a big part for inner cities, and without customers, they will become a desert. In their own interest, cities, landlords and retailers should work together to counter such a trend. Attractive inner cities, offering a high quality visitor experience are the best preconditions for good retail sales, strong demand for retail space and higher rents.

Problems in the retail sector exacerbated but not caused by the pandemic

TENANTS BEING SOUGHT FOR MANY INNER CITY SHOPS
AVAILABLE UNITS IN INNER CITIES AS PERCENTAGE OF STOCK (Q1/2020)

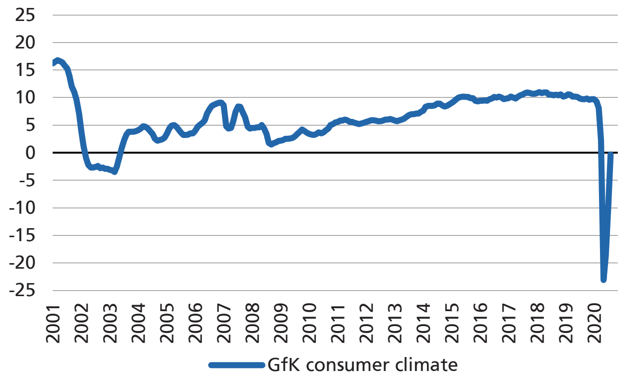


Source: JLL

However, even in the best-case scenario, landlords of retail space in inner cities and shopping centres will have to come to terms with lower demand for space and falling rental revenues. Many retail concepts may struggle permanently to generate the rents originally agreed. A renegotiation of rental contracts and rents based on sales are likely to lead to a decline in rental revenue. In addition, there will be a loss of rent from insolvencies and rising vacancies. It is also likely that some of the existing retail space is obsolete. However, it should be possible to find alternative uses, especially in inner city locations.

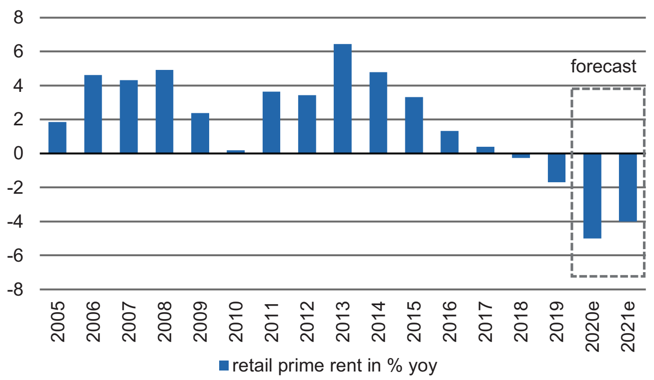
Rental revenue could decline in the long run

ALTHOUGH CONSUMER SENTIMENT HAS RECOVERED, IT IS STILL BELOW THE PRE-CRISIS LEVEL



Source: GfK as of August 2020

FORECAST FOR RETAIL RENTS IN BIG CITIES
SPACE-WEIGHTED AVERAGE



Source: bulwiengesa, DZ BANK 7 largest cities and 12 further large cities

Rents dampened by growing availability of retail space coinciding with weak demand

According to figures from JLL for the first quarter of Q1 2020, tenants were being sought for 12 per cent of city centre stores in nine major shopping locations. The figure was stable in relation to Q1 2019. However, available retail space is likely to increase over the course of the year. Many retail chains are set to give up outlets and bank branches are also expected to close. In other words, weaker demand for space is coming at a time of growing availability. Accordingly, rents for retail space are likely to come down noticeably. It remains to be seen whether there will be any marked recovery in demand for sales space.

LOGISTICS

Steady rise in parcel volume through e-commerce

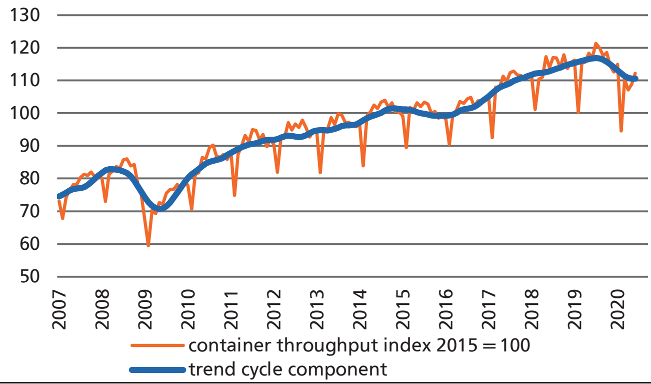
Worldwide logistics business hit by lockdown and recession

Lockdown in large parts of a globally networked economy has seriously depressed the economy. Although goods turnover is recovering as the economy gets back into gear, it is unlikely to get back to pre-crisis level any time soon because of the recession brought about by the pandemic. This is also hitting the cyclical logistics business. However, the traffic of goods had already weakened noticeably last year, reflecting flash points such as the trade dispute between China and the US along with a general slowdown in global economic growth. The container turnover graph on the following page shows that, compounded by the pandemic, a declining traffic of goods has gone back to its level of 2017 from its peak in mid-2019.

Strong demand for logistics space in view of online shopping boom

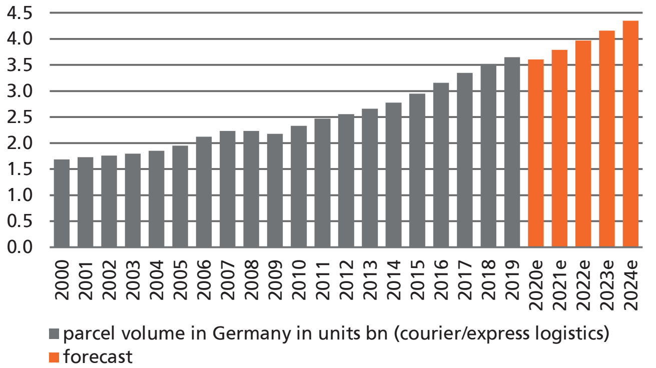
Unlike in the case of global trade, that part of the logistics business which is based on e-commerce has not slumped as a result of the pandemic − on the contrary. Because most businesses had to shut down for six weeks, even more goods than usual were ordered online. The success of online shopping has significantly boosted investor interest in logistics space in any case. The sharp rise in the traffic of parcels in Germany mainly reflects online shopping and the trend may be boosted permanently by the pandemic.

WORLDWIDE TURNOVER OF GOODS ALREADY DOWN PRIOR TO OUTBREAK OF PANDEMIC



Source: RWI/ISL Index reflects around 60% of global container turnover

FLOOD OF PARCELS: MORE THAN DOUBLE THE VOLUME OF PARCELS SINCE THE BEGINNING OF THE NEW MILLENNIUM



Source: BIEK Bundesverband Paket & Expresslogistik

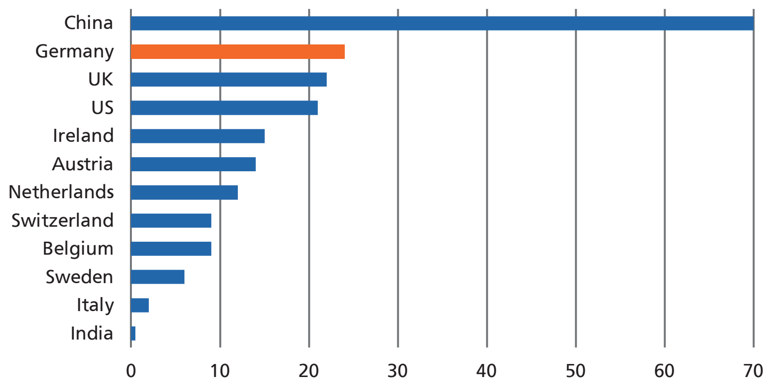
Only a marginal decline in parcel volume in crisis year 2020 thanks to online shopping

In the last ten years, the traffic of parcels in Germany has grown by an average of over 5 per cent p.a. to around 3.7 billion parcels in 2019. Of this, B2B parcels accounted for 44 per cent. At 52 per cent, the share of parcels from companies to customers (B2C) is now greater. Shipments between households (C2C) are virtually insignificant at 4 per cent. B2B parcel traffic is expected to decline this year because of the pandemic. The association representing German parcel carriers, BIEK (Bundesverband Paket & Expresslogistik), anticipates a share of less than 30 per cent. In contrast, the share of B2C should climb to around two thirds and therefore parcel traffic may remain stable overall on the back of more online purchases.

Parcel volume and hence demand for logistics space likely to rise further

In light of this trend, the market for logistics real estate should remain largely unscathed by the crisis. In fact, the segment could even benefit in future if a permanent change in shopping habits speeds up the growth of online shopping. In the wake of the economic recovery, parcel traffic should pick up again. BIEK expects the number of parcels in Germany to grow to around 4.4 billion shipments p.a. by 2024 – 20 per cent more than in 2019. This would also lead to an increase in demand for logistics space. There could also be growing demand from companies if pandemic-led production downtime leads to more storage or production transfer back to Germany as a result of a break in supply chains.

SHOPPERS ALREADY ORDERING LARG AMOUNTS ONLINE IN GERMANY
E-COMMERCE-RELATED NO. OF PARCELS PER CAPITA (2017)

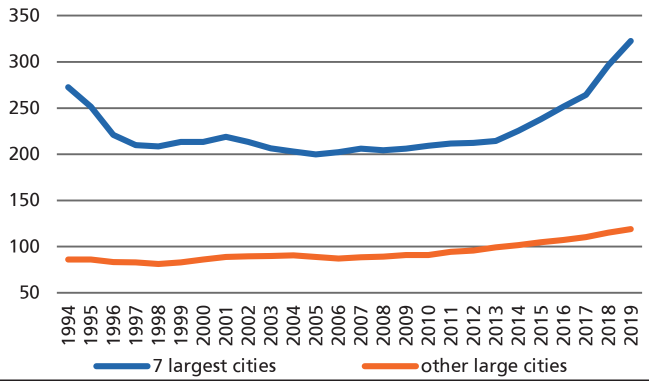


Source: McKinsey & Company

Many large logistics spaces are often outside conurbations, close to strategically-placed motorway intersections. However, rapid delivery times call for logistics centres to be close to recipients. For this reason, there is increased demand for smaller warehouses in urban areas even though this is precisely where there is a shortage of space. Any available space is often needed for building housing or for other commercial uses. In addition, there can be a problem of acceptance for urban logistics businesses in view of the number of delivery vans driving in and out of such premises.

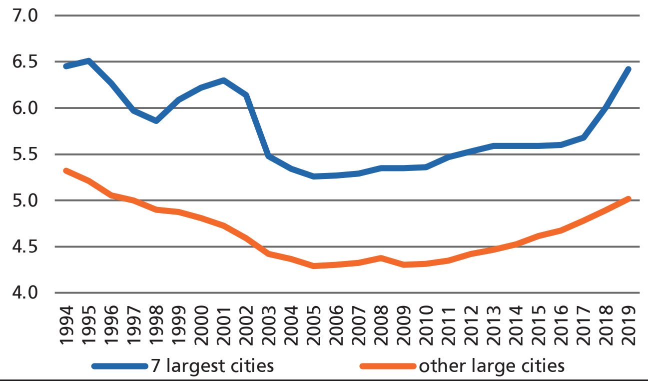
Space close to cities increasingly in demand for logistics

COMMERCIAL SPACE IN SHORT SUPPLY: PURCHASE PRICES IN MAJOR CITIES UP SHARPLY
AVERAGE PRICE FOR COMMERCIAL SPACE EURO/SQM



Source: bulwiengesa

LOGISTICS RENTS NO HIGHER THAN 25 YEARS AGO IN SPITE OF E-COMMERCE BOOM
PRIME RENT FOR WAREHOUSES/LOGISTICS SPACES IN EURO/SQM



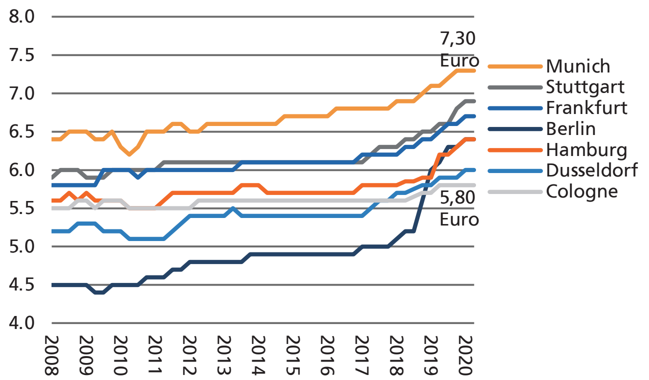
Source: bulwiengesa

Tight supply of logistics space likely to lead to further rise in rents

Tight supply and high demand have caused prices for commercial space to rise since 2014, particularly in the seven largest cities. Before that, however, they hardly moved at all for 20 years. Top rents for warehouse and logistics space also rose in response to growing demand, but despite e-commerce were unable to exceed the rents of 25 years ago. The lack of space in conurbations makes it difficult to meet the growing demand for logistics space for online trading. As a result, rents for logistics properties could develop better than in other segments of the commercial property market. However, this does not apply to all logistics properties. The situation is worse

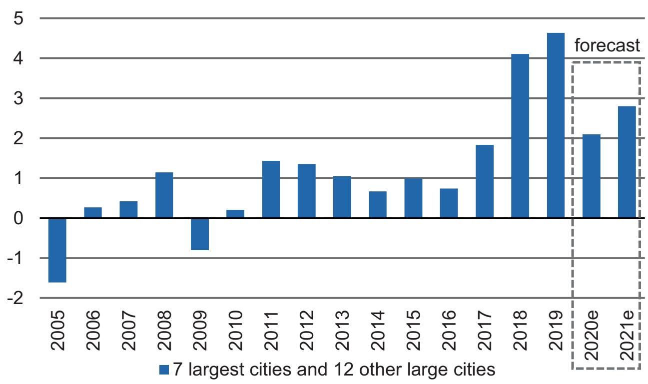
Sharp rise in rent for logistics space, but no higher than 25 years ago

LOGISTICS RENTS IN SEVEN LARGEST CITIES
PRIME RENT FOR WAREHOUSING/LOGISTICS SPACE IN EURO/SQM



Source: bulwiengesa

RENTS FOR LOGISTICS SPACE LIKELY TO RISE FURTHER
PRIME RENT FOR WAREHOUSING/LOGISTICS SPACE YOY (%)



Source: bulwiengesa, DZ BANK

for properties that focus more strongly on the industrial handling of goods. Here, things will probably not start to improve again until 2021 in the course of the economic recovery.

HOTELS

Fewer business trips and trade fairs may dampen number of guests

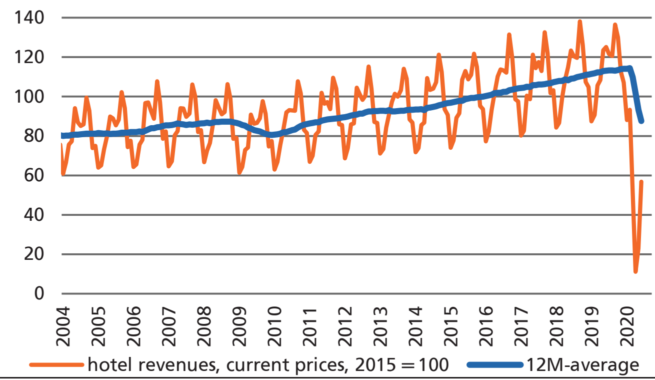
Lockdown brought booming hotel market to an abrupt end

Hotels have been hit even harder by the pandemic than the retail sector. After all, the retail sector has been able to make up for some of the sales lost during lockdown through online shopping or catch-up effects. In contrast, hotels will have no way in the coming months to compensate for the fact that their sales from overnight stays and the often crucial restaurant business plummeted to zero virtually at a stroke.

2020 set to go down in the annals of the hotel trade as an "annus horribilis"

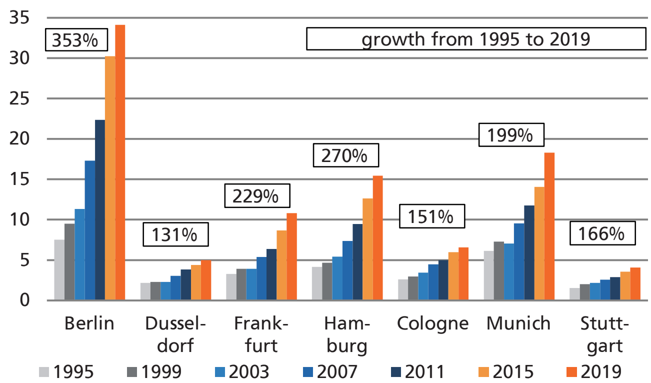
However, this is not the only reason why this year is likely to go down in the annals of the hotel trade as an "annus horribilis". Even after hotels have reopened, sales are likely to remain well below their 2019 level for a long time. Measures to protect from infection in hotels and restaurants can only be achieved by reducing occupancy – which will be lower sales. One hopeful sign is likely to be the current trend towards holidaying in Germany. In spite of this, hotel operators face substantial losses this year in view of ongoing costs and a large number face insolvency or having to give up their business. Property owners will be hit by reduced rent payments or rent defaults.

TOURISM IN GERMANY ALMOST COMPLETELY WIPED OUT BY THE PANDEMIC



Source: Federal Statistics Office data up to Juni 2020

TOURISM BOOM – MANY LARGE CITIES A MAGNET FOR VISITORS

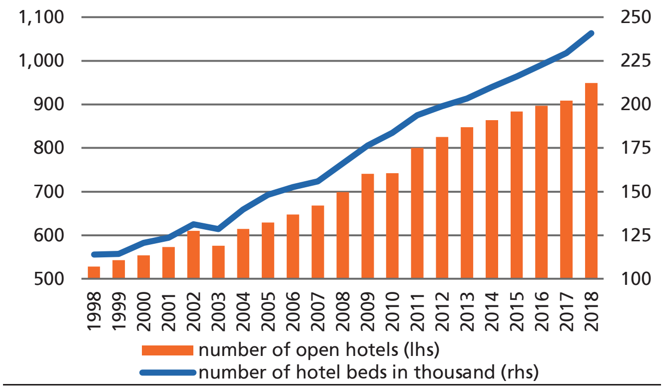


Source: bulwiengesa, Municipal Statistical Offices (2019)

Tourism has been experiencing strong growth for years

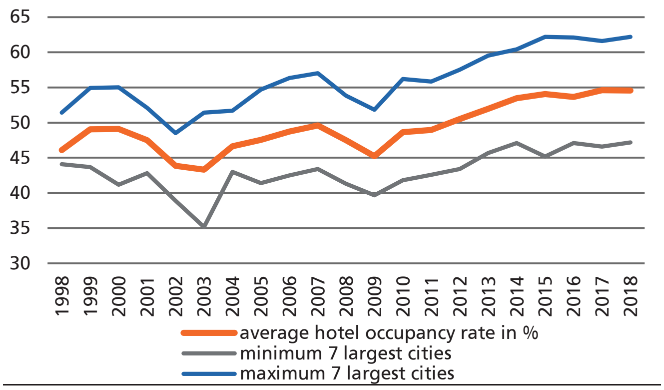
However, whereas the retail sector was already struggling with structural problems prior to the pandemic, the crisis hit hotels right in the middle of a boom. For many years now, tourism in Germany has been growing strongly. Annual visitor numbers have increased from slightly over 100 million to over 190 million since the beginning of the new millennium. The tourism industry has done even better in attractive major cities and there also, it has provided a major boost for retailers. Without the boom in tourism, problems in the retail sector would have been even greater.

SEVEN LARGEST CITIES: HUGE RISE IN AGGREGATE NUMBER OF HOTELS AND HOTEL BEDS



Source: bulwiengesa, DZ BANK

SEVEN LARGEST CITIES: OCCUPANCY IN HOTELS UP IN SPITE OF INCREASE IN BED-PLACE CAPACITY



Source: bulwiengesa, DZ BANK

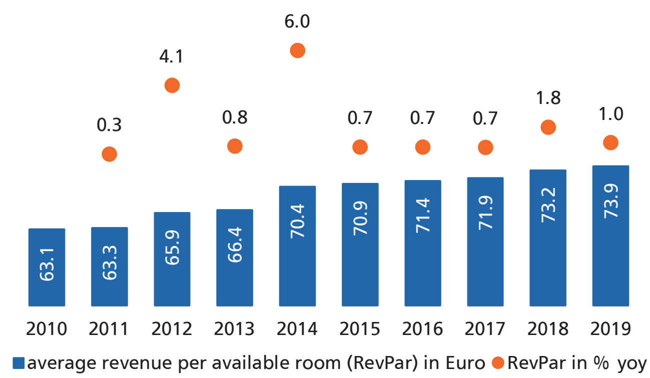
Without Covid, overnight stays might have broken through the 100-million mark in the top-7 in 2020

The seven largest German cities have been major beneficiaries of the boom in tourism. In the mid-1990s, overnight stays did not even come up to 30 million p.a. By 2019, however, the figure had more than trebled to almost 95 million − with Berlin well ahead of all the other cities with 34 million overnight stays last year. Frankfurt, Hamburg and Munich also make it into the eight-figure bracket. Calculated on the basis of 1,000 inhabitants per year, Frankfurt is in the lead with over 13,000 overnight stays. The figure in Stuttgart is not even half that number. However, business generated from German and foreign visitors has not only boomed in the seven major cities; tourist magnets such as Dresden, Leipzig, Nuremberg, Regensburg and Wurzburg have also attracted high visitor numbers.

Substantial increase in hotel bed capacity

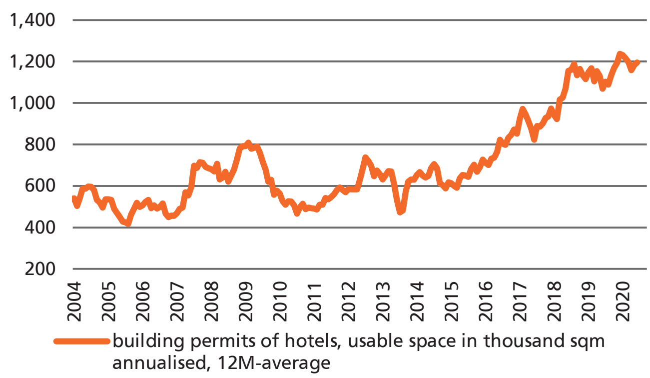
Strong growth in tourism has led to a substantial increase in hotel capacity. This is also clear from the example of the seven largest cities. The number of hotels has grown has around 80 per cent within the last 20 years. Available hotels beds increased by even more − up by 110 per cent. As such, the seven largest cities together accounted for around 240,000 hotel beds in 2018. The supply of bed-places is likely to have increase further in 2019.

LATELY, AVERAGE REVENUE PER HOTEL ROOM IN GERMANY ONLY ROSE SLOWLY



Source: E&V Research (Hotel Market Report Germany 2020)

NEW HOTEL BUILDING: DOUBLING IN SURFACE AREA WITH PLANNING PERMISSION SINCE 2014



Source: Federal Statistics Office

data up to June 2020

Signs of saturation even prior to pandemic outbreak

However, there now seem to be signs of saturation; at least there was no further increase in the average hotel occupancy last year. So far, though, there is no overcapacity. Occupancy rates in 2018 were at their highest level since 1998. Revenue per hotel room in Germany rose from 2010 to 2019, although the annual increase in the last five years was only higher than one per cent in 2018. From 2017 to 2019, the average revenue per room rose slower than inflation and was therefore down slightly, adjusted for this factor.

Fewer trips because of the recession, video conferences and sustainability?

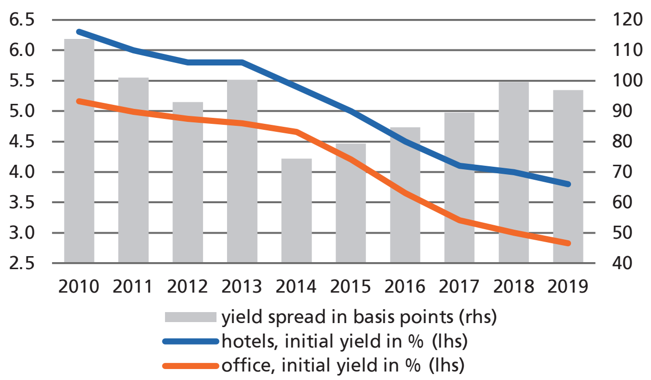
When will tourism industry be back to pre-crisis level?

The tourism industry should recover from poor figures in 2020 in the next few years. After all, people are unlikely to lose their enjoyment of travelling and going out. However, it is likely to take some time before the industry gets back to the record level of 2019. Hotel operators at least are optimistic. In a survey carried out by real estate company Cushman & Wakefield, over 90 per cent of them expect to be back to last year's figures at the latest by 2023. This fits in with an assessment by events manager Messe Frankfurt, according to which the trade fair business should be back to pre-crisis level by 2023. In view of this outlook, over 80 per cent of hoteliers surveyed plan to stick largely to their existing expansion course.

Difficult years ahead for hotels, even in the event of a rapid recovery

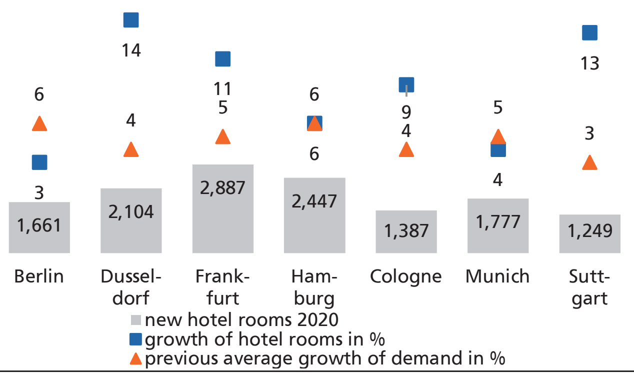
This means two things: Firstly, even in the best-case scenario, hotel capacity, which has been much expanded in the last few years, will have to cope with lower booking figures for quite a while longer and hence also with lower sales revenue than in the past. Stiff competition is also likely to dampen room rates. This will probably affect mainly less attractive hotels, which were hitherto still fairly well booked because of high visitor numbers. Secondly, the number of hotels on offer should continue to grow, as indicated not only by hoteliers' expansion plans, but also by a more than doubling in hotel planning permissions in relation to 2014 which will mean that even higher guest numbers will be required in future in order to achieve revenues comparable with those of 2019.

PRE-CORONA HOTELS WERE SEEN AS AN ATTRACTIVE INVESTMENT IN VIEW OF A YIELD ADVANTAGE AND FLOURISHING TOURISM



Source: bulwiengesa, E&Y Research, DZ BANK
Data for seven largest cities/top locations

FURTHER MARKED INCREASE IN HOTEL ROOMS ON OFFER IN MAJOR CITIES IN 2020



Source: Treugast (taken from ahgz)

However, recovery could also be rather sluggish, e.g. in view of less business travel

Recovery in the hotel market could very well be rather sluggish because of the severity of the pandemic in the country of origin of major tourist groups. For example, GDP could slump by over ten per cent in 2020 in the big European economies, France, the UK, Italy and Spain. In addition, unemployment is rising sharply and it is quite possible that the key business from business travel, conferences and trade fairs will be weaker in future. Business trips or product presentations are increasingly likely to be replaced by video conferences or virtual reality, not least in view of the savings they offer in terms of cost and time. In addition, the issue of sustainability is becoming more important, not least because investors are paying greater attention to it. This is likely to stand in the way of extensive travelling and frequent flying.

Long-term prospects for tourism are good, but not rosy

Lasting decline in the importance of business travel on the cards

Until the outbreak of the pandemic, hotels were a sought-after investment asset in view of a high yield and booming tourism. However, hitherto high demand for hotel real estate could ease up considerably for the time being on the back of falling revenues and the likelihood of a sluggish recovery for business travel. Hotel owners are likely to be hit not only by a loss of rent, but also to some extent by falling property values. In the long term, however, the outlook for tourism is definitely good, even though strong expansion of hotel capacity is likely to dampen the profitability of hotels. One uncertainty factor is sales revenue from business travellers. A number of reasons suggest that this segment faces a lasting weakening, and it is by no means certain that the seven largest cities in Germany can already get back to 95 million overnight stays by 2023.

I. Imprint

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