



German property market outlook 2020

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The corona crisis is currently overshadowing all other aspects of the property market. In our baseline scenario, we work on the assumption of a significant slump in economic development in the first half of the year followed by a strong recovery. The pandemic will have many negative effects on the property market on a temporary basis. **That being said, a flight to safety and the potential increased immigration could have a positive impact in the medium term.** As a consequence, if the COVID-19 crisis is rapidly overcome, the structural issues should return to the foreground. We will be looking into both of these aspects in this preview of the year ahead.

We are sticking with our assessment that the house price cycle will sustain itself until 2022 at least. There are two reasons for this: The first of these is the sluggish supply of new homes, with numbers having virtually stagnated in recent years. Secondly, the credit cycle jumped sharply in 2019, which could spark even more dynamic growth in house and apartment prices.

Besides a long and drawn-out corona crisis, there are two other main reasons why this cycle could come to a premature end. The first is the more rigorous rental policy. What's more, macroprudential headwind is also likely to pick up after the corona crisis now that the countercyclical capital buffer has been lowered to zero on account of the pandemic.

This analysis would have become more complex anyway, even without the corona crisis, due to the increase in market intervention. Even marginal regulatory changes could lead to a reassessment. This applies equally to fundamental market factors. Lower levels of immigration in the summer of 2019 temporarily dampened demand for housing, for example. Factors such as these can have a much greater impact now than they would have had at the beginning of the cycle.

The corona crisis is having an unusual effect on the office market. Aside from the anticipated decline in employment, it remains to be seen whether widespread opportunities for people to work from home could trigger a structural break and bring an end to the cycle. We believe it is too early for such predictions. Regulatory obstacles and the importance of the industrial sector, as well as health-related disadvantages for employees, all mean that we only expect the number of people working from home to increase gradually. As a result, fundamental factors could regain their importance in the second half of 2020, putting the extremely low vacancy rates and the existing shortage of office space back on the agenda.

Risk outlook: We look at global risks and risks specific to Germany and their impact on the property market. In our view, only those risks specific to Germany have the potential to end the cycle. Risks are set to rise significantly moving forward on the back of declining competitiveness and innovativeness, challenges to the automotive sector, the energy transition and demographic changes.



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Coronavirus and the property market

Top issues in 2019 and 2020 before the pandemic

1

- Rent cap in Berlin
- Expropriation of private investors
- Tightening of the rent brake
- Lengthening the reference period for calculating average rent levels
- Raising of the countercyclical capital buffer by BaFin

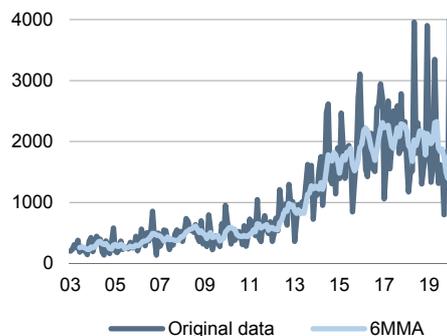
Source: Deutsche Bank Research

The corona crisis is currently overshadowing all other aspects of the property market. Our baseline scenario¹ is based on the assumption of a deep recession caused by restrictions on social contact and the temporary collapse of many global supply chains. Based on the figures reported at the end of 2019, we expect GDP in Germany to tumble by some 12% in the first half of 2020 before regaining significant ground. In our scenario, GDP is expected to return to pre-crisis levels by midway through 2021. Correspondingly, structural topics are then again in the foreground. In this outlook we will be focusing on the interplay between the effects of coronavirus and fundamental factors. An ad-hoc assessment of what short- and medium-term effects the corona crisis could have can be found in our article “The COVID-19 crisis and the German real estate market” published in early April 2020.

Berlin: Residential permits

2

per month



Sources: Deutsche Bank Research, Federal Statistical Office

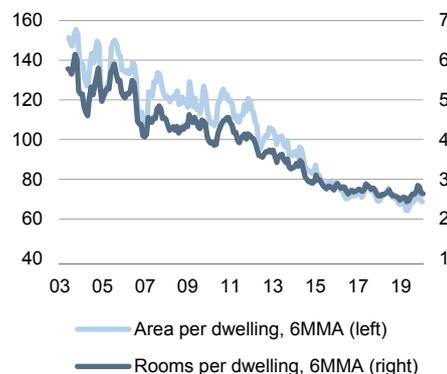
German house and apartment market

We wrote about the increasing complexity of the current price cycle in our preview for 2019. Even though we outlined the increase in regulatory measures in this area, we were still caught on the wrong foot by the depth and breadth of the intervention. In this outlook, against the backdrop of the corona crisis, we discuss the increasingly restrictive housing policy, tightened macroprudential regulation, credit growth driven upwards by low interest rates and the macroeconomic and construction industry environment. All of the arguments are weighed up in the summary.

Berlin: Residential permits

3

left y-axis: Area in sqm per dwelling
right y-axis: No. of rooms per dwelling



Sources: Deutsche Bank Research, Federal Statistical Office

Berlin regulatory control unsettles investors

The year 2019 saw an abundance of new regulatory measures to be implemented. The top issue was undoubtedly the rent cap in Berlin², which is likely to be effective in freezing rents in Berlin in the short term. However, it is also likely to lead to a significant number of loopholes and regulatory arbitrage. That’s why we expect Berlin to remain an interesting location for long-term investors (see also our Germany Monitor “Berlin housing market” from February 2020). The rent cap in Berlin is also relevant in the national context. Many politicians on the left-hand side of the political spectrum have welcomed developments in Berlin. In Bavaria, the federal state with the strongest economy, we could see a petition for a referendum³ in the next few months that could ultimately lead to a referendum on a six-year rent freeze.

The second major issue of 2019, calls for the expropriation of major private housing companies, also has its roots in Berlin. A city-wide referendum could be called on the “expropriation of private housing companies with more than 3,000 housing units” in autumn 2020. After a majority of citizens were found to be in favour of the referendum in early 2019, polls now suggest that the majority of voters are against the proposal.⁴ As a result, the referendum has lost significance for the time being at least. The city’s constitution provides for the possibility of a legally binding referendum if Berliners were to vote in favour of the proposal and

¹ David Folkerts-Landau et al. (2020). Impact of Covid-19 on the global economy: Beyond the abyss. Deutsche Bank Research.

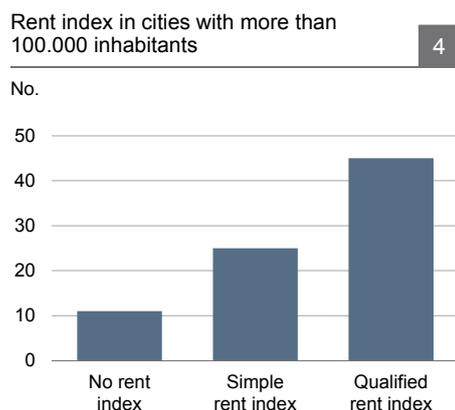
² A law enacted by the Berlin state government and not a federal law from the German government.

³ On 17 April 2020, the Bavarian interior ministry submitted the petition for the referendum “#6-year rent freeze” to the Bavarian constitutional court.

⁴ Morgenpost.de. Survey: Berlin citizens in favour of rent cap but against expropriation Accessed on 19 February 2020.



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Source: Deutscher Bundestag

the Berlin House of Representatives were to not implement it. However, political decisions have also been made in the past that were indeed implemented by the Berlin House of Representatives but then modified subsequently. The finer legal points of this initiative are therefore likely to be significant here, not least because the question posed in the referendum is only a minute part of the final legal text. The mayor of Tübingen, Boris Palmer (Greens), openly discussed the possibility of expropriation and obligations to construct buildings on undeveloped areas in Tübingen at the start of 2019. Debate on this matter has since subsided, apparently without consequence. Polls suggest that Germans are generally against expropriation as a form of market intervention – or at least that has been the case in the past. This is not likely to have changed a great deal, even taking the coronavirus pandemic into account. As a result, the effects of the referendum in Berlin are likely to be minor, provided the referendum is allowed and takes place at all.

Tighter rental legislation throughout Germany, too

Overview of major laws

Entered into force	Outline
1 Jun. 15	Tenancy Law Amendment Act: rent for a new lease cannot exceed local average rent by more than 10%.
1 Jan. 18	Baukindergeld: state benefit for the purchase of first homes of EUR 1,200 per child per year.
1 Jan. 19	Rental Law Amendment Act forces landlords to be more transparent regarding the rent brake
1 Jan. 20	Act to extend the reference period for local average rent.
1 March 20 or later	Rent brake extended to 31 December 2025 and tightened: ability for tenant to make claims for repayment of excess rent from landlord extended to 30 months.
H1 2020	Real estate transfer tax reform: aim to eradicate share-deal exemption.
1 Jan. 25	New value-based or non-value-based terms for real estate taxes possible depending on the federal state.

Sources: bundestag.de, Spring Report Real Estate Market 2020

Besides the rent cap/expropriation shock in Berlin, stricter laws were also implemented at federal level. The reference period for the calculation of rent indices was extended from four years to six years at the end of 2019. Rent indices are historical records of average rents published by many towns and cities as a guideline. The extension of the reference period is aimed at slowing down the upward trend in average rent. Average rent acts a benchmark for rental increases and also for the rent brake. In legal practice, significant regulatory uncertainty has so far surrounded the use of rent indices. One court has referred to the rent index of one city as “unscientific” and therefore an invalid instrument for setting rents. The federal government intends to reinforce the legal certainty of qualified rent indices and the regulatory framework on which it bases its rent laws by passing further legislation (probably in the course of 2020, provided the matter is not deferred due to the corona crisis).

Furthermore, the rent brake introduced in 2015 was tightened up in February 2020. So far, when properties are rented by a new tenant, the rent may not exceed 10% of the average rent level for comparable units in the area. Based on the evaluation of the rent brake by the German Institute for Economic Research (DIW Berlin), the federal government has determined that rent rises were reduced as a direct result of the rent brake introduced for a five-year period in 2015.⁵ A tighter version of the brake has now been introduced to increase its effectiveness and reduce the numerous attempts to circumvent it. The new rent brake allows renters to claim back excess rent paid up to 30 months in the past. It continues to apply for five years. Now the federal states have the opportunity to re-assess which residential markets are subject to tight supply situations under these stricter requirements.

Regulatory activity expected to curb loan approvals

Aside from the tightening of rental law, macroprudential regulation is also likely to influence the German residential property market on an increasing basis over the next few years. In 2019, banks’ overall mortgage books rose for the first time in this cycle, at times at a double-digit growth rate. This rapid growth fuelled a major increase in apartment prices. The ECB’s zero-interest policy is likely to continue for a number of years owing both to the corona crisis and the familiar structural

⁵ We consider two fundamental criticisms of this measure to be justified. (1) On page 40 of its report summary (Evaluation of the Rent Brake 2018), DIW Berlin writes: “Empirical analysis *consistently* [emphasis added] shows that the introduction of the rent brake has slowed down the growth of rents in regulated markets.” This conclusion is based on three causal studies for the Berlin market and two nationwide studies. There are two notable factors here. (1) One of the



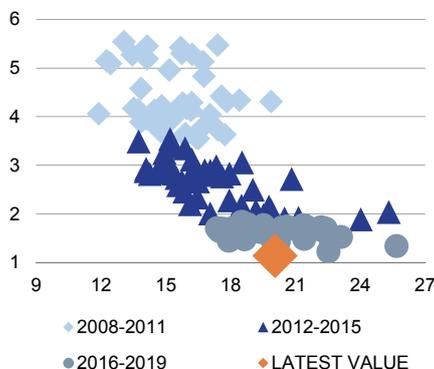
problems. The residential property market is likely to experience loan-driven price impetus once again after restrictions are lifted on social contact in the second half of 2020. There is a risk that a house price bubble will form in subsequent years if we see high credit growth. According to guidance from the European Systemic Risk Board (ESRB) in 2019, risks are set to increase in the German residential property market in the medium term. The ESRB sees spiralling price growth, overvaluation in city markets and the lack of quality data in lending standards as risks.⁶ Acting on recommendations from the German Financial Stability Committee⁷, BaFin has so far only introduced the minimum standards and made symbolic moves with its activation of the countercyclical capital buffer in spring 2019. If residential property prices continue to rise in the next few years, as we expect, the corona-induced reduction of the counter-cyclical capital buffer to 0% from April to the end of 2020 should soon be followed by a gradual increase.

Since 2017, the German government has also had two debtor-based instruments in its armoury to limit lending for residential properties. These instruments allow BaFin to set an upper loan-to-value (LTV) limit and specify amortisation requirements – or, in other words, to stipulate a proportion of the total amount of the loan that must be repaid within a specified period. The primary purpose of both of these instruments is to protect the banking system in the event of default. However, a look at the finer details of the upper LTV limit raises a number of questions, as there is no standard definition for LTV in Germany. What's more, it wouldn't come as a surprise if the German government were to introduce income-related instruments as proposed by the German Financial Stability Committee back in 2015 and recently called for by the ESRB. Limits on loan servicing and lending volumes based on income levels may lead to a decline in default risk and therefore protect risk-friendly borrowers and lenders.

Volume of new mortgages

6

y-axis: Mortgage rate in %
x-axis: New volume in EUR bn per month



Sources: Bundesbank, Deutsche Bank Research

Construction sector and general economic environment: Supply remains scarce and significantly below demand

Assuming we are able to bring the coronavirus pandemic under control and economic recovery begins in the second half of 2020, there will be barely any changes in the fundamental German residential property market in 2020. The nationwide imbalance of supply and demand will continue to exist. According to the German Federal Statistical Office, just over 285,000 residential units were completed in both 2017 and 2018. This means that construction is significantly below the 375,000 units per year that will be required for the German government to achieve its target of 1.5 million new units by the end of the current legislative period in 2021. With many factors impacting supply, the number of completed

Berlin studies ended with the following conclusion: "The analytical investigation outlined here must be conducted in greater detail once longer time frames are available *before* [emphasis added] conclusions can be drawn on the success or failure of the measure." The final report's reference to "consistent" results in this study was therefore not the interpretation shared by the study authors. Cf. Thomschke, Lorenz and Sebastian, Hein (2015b). Things don't happen quite that fast. Effects of the rent brake in Berlin, p. 9, Empirica AG; according to the list references in the DIW report 2015b, but always stated as 2015 in the text. One of the two nationwide studies, both of which were published by DIW Berlin, concludes that the rent brake has "no significant effects". The data could be considered insufficient for Berlin and particularly for the rest of Germany. (2) On page 29, the DIW Berlin report summarises the influence of the rent brake on new construction as follows: "It appears that the exemption in the rent brake system has had the desired effect and resulted in construction activity increasing in the municipalities in question. However, it remains to be seen whether this situation will be confirmed by building completion statistics in 2017 and beyond." Now we know that building completion all but stagnated in 2017 and 2018. The issue is not whether more buildings are constructed, but rather whether so many buildings are constructed that vacancies arise. Without vacancies, pressure on prices and rents continues even if attempts are made to regulate them.

⁶ European Systemic Risk Board (2019). Vulnerabilities in the residential real estate sectors of the EEA countries. September 2019.

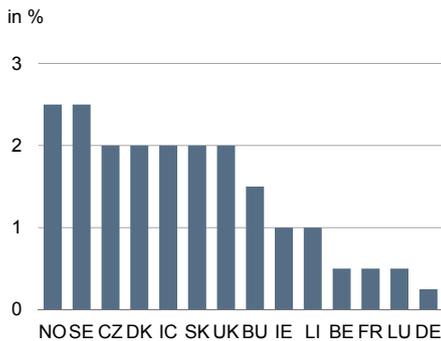
⁷ A board made up of the Federal Ministry of Finance, the Bundesbank and BaFin that is responsible for drawing up regulatory requirements.



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Beginning of 2020: Countries with anticyclical capital buffer above zero

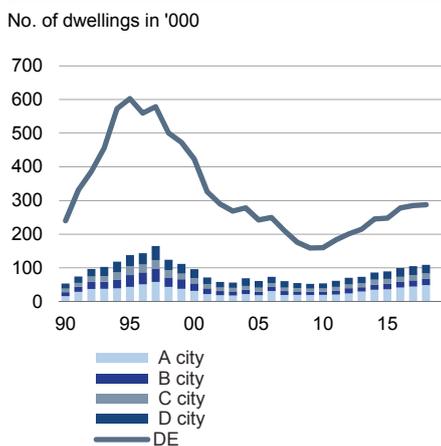
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Source: ESRB

1990-2018 Completions

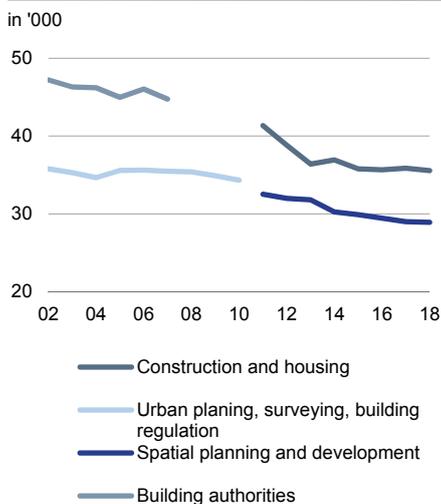
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Sources: riwiv, National Statistical Office, Deutsche Bank Research

Staff in the public service of municipals for construction and housing

9



Source: Federal Statistical Office

units is only likely to have increased marginally in 2019.⁸ By contrast, the number of completed units in 2020 should tumble, due to the negative impact of the corona crisis. We consider a decline to 260,000 units, a drop of some 10%, to be realistic given the bottlenecks in supplies of building materials, a lack of spare parts for machinery and, perhaps even more importantly, the lack of available skilled and unskilled workers. General restrictions on capacity mean that only a small portion of this 10% will be able to be recovered in years to come, and so the number of completed units should only gradually climb beyond the 300,000 mark. According to estimates, demand for residential units⁹ in Germany in 2019 should amount to up to 350,000. With approximately 360,000 building permits issued in 2019, this estimate is also plausible for residential demand in 2020. The corona crisis is likely to result in demand for residential properties declining much further than the anticipated 10% decline in housing supply. Efforts to safeguard jobs and businesses, as well as pay cuts for millions of workers under the “short-time work” scheme, should have a significant negative impact temporarily. Demand should pick up considerably in 2021 once the anticipated economic recovery takes hold, particularly as demand has consistently not been met for many a number of years now. According to the figures recently published by the Federal Statistical Office (Destatis), the bottleneck in construction – in other words, residential units that have building permits but have not yet been completed – climbed from some 320,000 to almost 700,000 between 2008 and 2018!

Given potential demand does not always translate into a building permit, demand should actually be higher than the figure implied by the construction bottleneck. Even though a situation in which demand remains unsatisfied over a period of several years may only have limited market relevance, we still believe that there is a shortage of over 1 million units over the cycle as a whole since 2009. In light of this, and even if we are able to overcome the corona crisis swiftly, we are sticking with our belief that the current cycle will last until 2022 at least. Rents and prices should rise further from a fundamental perspective. Even if demand for residential properties were to subside, the need to free up the construction bottleneck and serve unsatisfied demand will still support the market. If annual completions exceed demand for residential units, this would probably bring an end to high price growth sooner rather than later. This trend is likely to be extremely varied from region to region. The cycle may exist in certain urban centres and metropolitan regions with a high level of appeal for internal migrants for some while yet, even against this backdrop.

The lack of land zoned for construction, which is particularly problematic in urban centres, remains a primary obstacle to the construction of new units. Laborious planning and approval processes are also hampering construction, a factor often exacerbated by low staffing levels at building authorities. The number of civil service positions in municipalities for the areas of building and living has declined by around 10% since 2011, in line with the general decline at building authorities. Many investors have complained about the laborious procedures in building authorities. Once a building project has overcome this obstacle, the high capacity utilisation rate and, above all, the shortage of skilled workers at construction companies are the next hurdles to completing the construction of new residential units more quickly. According to figures published by Destatis, although the number of employees in the construction industry and finishing trades increased by 30% between 2009 and 2019, the order backlog tripled in the same period. If surveys show that the number of companies complaining of a lack of skilled workers has reached an all-time high. The corona crisis is making this perennial issue even worse. In some cases, skilled workers from abroad are unable to enter the country, as some of Germany’s neighbours (Poland, Czech Republic,

⁸ Published in May/June 2020.

⁹ Federal Ministry of the Interior, Building and Community: 350,000, DIW Berlin: 342,000.

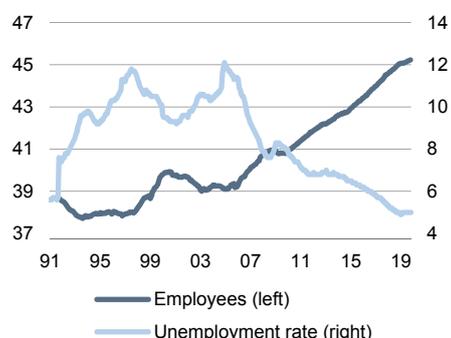


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Germany: Labour market

10

left y-axis: in m
right y-axis: in %

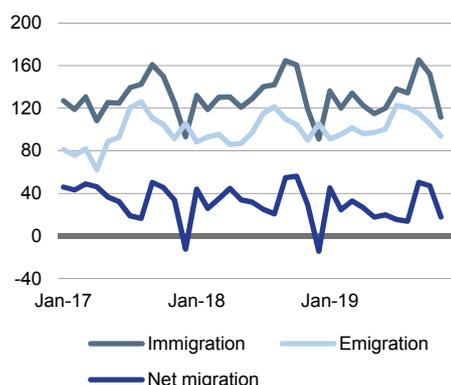


Sources: Bundesagentur für Arbeit, Federal Statistical Office

Migration

11

in k per month



Source: Federal Statistical Office

Net immigration 2018: Top 20 countries of origin

12

	in '000
Romania	68.1
Syria	34.4
Croatia	28.9
Bulgaria	26.8
Poland	20.2
India	16.9
Turkey	16.5
Italy	15.5
Iran	14.3
Bosnia and Herzegovina	12.4
Kosovo	11.9
Iraq	11.8
Serbia	8.5
North Macedonia	7.8
Nigeria	7.8
Greece	7.6
China	7.6
Albania	7.5
Russia	7.2
Ukraine	6.5

Sources: Federal Statistical Office,
Deutsche Bank Research

Denmark) have imposed border restrictions. There is likely to be no let-up in the general shortage of skilled workers in the construction industry in the long term as the baby-boomer generation reaches retirement age. This means that structural pinch points will continue to have a long-term impact on new construction activity. The rise in construction costs observed over the past few years is likely to intensify in this context. Another consequence of the shortage of skilled workers may be a significant decline in building quality.

Demand for living space structurally stable

If the rate of economic growth picks up again in the near future, two factors that have been influential in the robust demand for residential property thus far will return to the agenda in the second half of 2020. Besides the low-interest environment, the situation on the employment market, with record-breaking numbers of people in work and solid wage growth, is also bolstering the sector. According to provisional figures published by Destatis, wages rose by 2.6% in nominal terms and by 1.2% in real terms in 2019. Both of these figures are up on the ten-year average. Wage growth is expected to be significantly lower in 2020 and 2021. Safeguarding employment is likely to be given greater priority in most collective bargaining agreements, as recently demonstrated in the agreement for the metalworking and electrical industries. On account of the massive economic slump anticipated in 2020, it is expected that the almost unprecedented upward trend in terms of job creation observed up to 2018 will come to an abrupt end, with employment set to decline by some 300,000 in 2020. The self-employed and low earners are expected to be primarily affected by this trend. In 2021, the number of people in employment could then rise back over the 45-million mark in the wake of the economic recovery. Despite a shortage of skilled workers in the booming construction sector and in the public sector, and the continued recruitment efforts in both sectors, industrial employment was already in decline prior to the corona crisis. As in the labour-intensive service sector, the expansion of the short-time work scheme could help shore up employment here too, as can be seen by the enormous rise in applications in the first quarter (725,000 by 15 April). That being said, with service providers being primarily affected by the social distancing measures, jobs are expected to be lost here in the medium term. We expect to see the unemployment rate rise to approximately 6% in 2020 but decline again to 5.5% on average in 2021 on account of the anticipated economic recovery.

The booming employment market, the high income differential compared to countries of origin and a generally high standard of living have been a guarantee for immigration and demand for residential properties in recent years. Net annual immigration has stood at roughly 400,000 on average over the past few years. The decline in immigration over several months in summer 2019 was merely a short-term dip. We suspect this was due to the fall in demand for temporary employees over the course of the industrial recession. Border closures as a consequence of the corona crisis are likely to once again temporarily hinder immigration, and therefore also housing demand. As the economy begins to recover, border openings should soon return to the agenda once again. Germany will then be able to offer new immigration magnets besides its employment market. The healthcare industry has proven to be extremely robust in the corona crisis. Many German politicians have calmly and purposefully guided the country through the crisis – a feat that should not be taken for granted. Both of these factors should make Germany even more attractive as a destination for immigration, both in Europe and around the world. Recruitment of workers from outside Europe in particular has been made simpler by the Skilled Labour Immigration Act, which has been in force since 1 March. It is therefore likely that the fall in residential property demand due to demographic factors will be offset for a number of years to come. As in the past, major cities and metropolitan



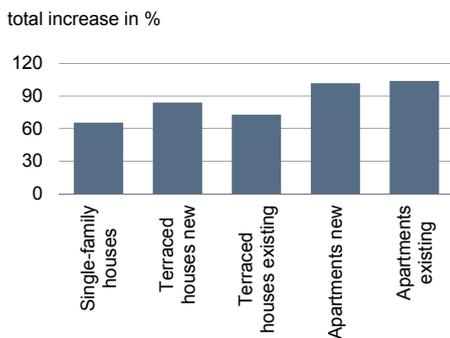
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regions are likely to be the preferred destinations for immigrants. Further rises in Germany's population through immigration should stimulate demand in the residential property market, particularly in regions with weak infrastructure. This applies in particular to regions that are or could be relatively well connected to metropolitan regions. Prior to the corona crisis, the Bundesbank had forecast that immigration would amount to 300,000 in both 2020 and 2021. Considering the impact of the corona crisis, the estimate for 2020 is likely to be overly high. Positive impetus could have an effect on 2021, resulting in this estimate being raised.

Besides employment- and immigration-related developments, demand in the residential property market is also rising due to higher living floor space per capita. Higher income and asset levels, and the trend towards one-person households, mean that living floor space per capita has risen almost continuously over the past few years. According to Destatis, living floor space per capita rose from 42.5 sqm in 2009 to almost 47 sqm in 2018. The total number of households increased by 3% between 2008 and 2018, while one-person households were up by 6%. According to the Destatis household projection (2020), the number of one-person households will rise by some 3% by 2025 and around 5% by 2030.

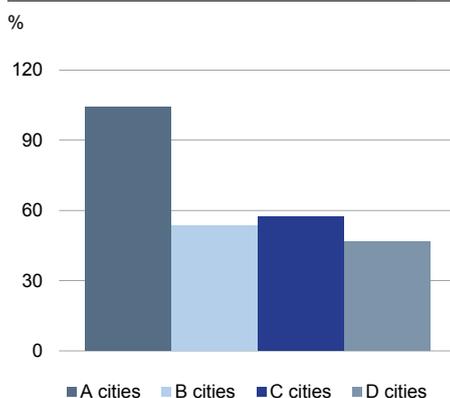
Dynamic price developments likely to decline in 2020

2009-2019 House and apartment prices 13



Sources: riwis, Deutsche Bank Research

2009-2019: Prices for plots for single-family houses in prime locations 14



Sources: Riwis, Deutsche Bank Research

Strong internal migration and an ongoing shortage of supply saw house and apartment prices¹⁰ rise further in 2019. However, the rate of growth was down following the sharp rises in 2017 and 2018. In A cities, prices were up by 7.2%. All other city categories saw prices rise less sharply too, with prices in B and C towns and cities up by 6.5% and 5.8% respectively in 2019. In D towns and cities, prices climbed by 5.3%. The upward price trend slowed to an average of 6.3% across all 126 towns and cities, which marks an average decline of almost 2% compared to 2018. Price growth declined noticeably in some towns and cities. Prices in Bremerhaven had increased by over 50% since 2009, but actually fell by 1.7% in 2019. This was mainly due to a fall in the price of existing apartments of over 6%. The highest levels of growth were once again in the double digits and were found in places such as Fürth, Leipzig and Ludwigshafen. Land prices for single-family houses in good locations have risen by more than 50% throughout Germany over the course of the cycle. Metropolitan regions with increases of more than 100% are exceptions to this. Growth in land prices remained constant overall in 2019. Prices in A cities, for instance, rose by 10% and in line with prior years. Faced by relatively significant increases in house and apartment prices (2009 to 2019: A cities: 109%, B towns and cities: 79%, C towns and cities: 86%, D towns and cities: 69%), many households will have found it increasingly difficult to purchase properties for private use despite favourable financing conditions. An increasing number of potential buyers are likely to have abandoned their search and remained in their current property. This factor should further dampen price rises in 2020.

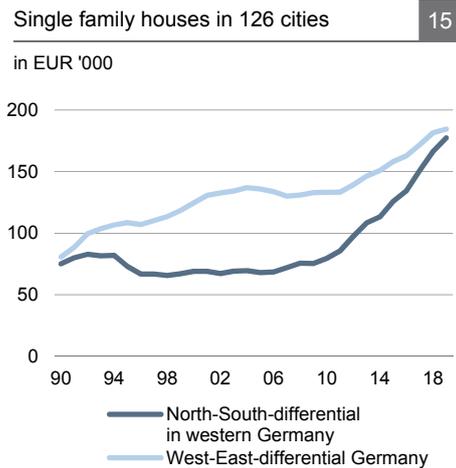
The north-south divide¹¹ when it comes to the price of single-family houses increased further in 2019. The average single-family house cost EUR 370,000 in northern Germany and EUR 580,000 in southern Germany. Until 2009, the price of the average single-family house in the south was consistently around EUR 75,000 more expensive than the average single-family house in the north of the country. However, since 2009, this gap has widened to just under EUR 178,000. The divide is a reflection of the economic divergence between northern and southern Germany. Properties in eastern Germany also remain

¹⁰ Weighting according to the Bundesbank.

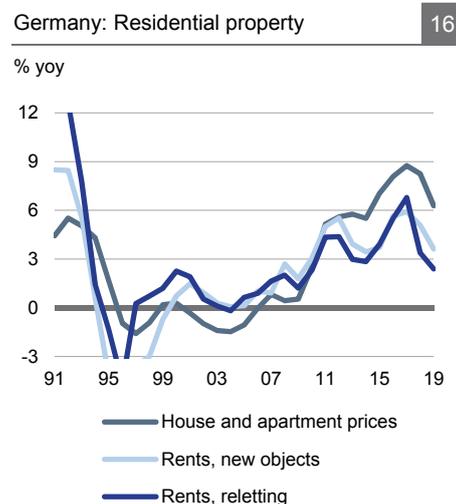
¹¹ Referring to the federal states of the former West Germany. North: 53 towns and cities in the federal states of Schleswig-Holstein, Lower Saxony, North Rhine-Westphalia, Hamburg and



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Sources: riwis, Deutsche Bank Research



Sources: riwis, Deutsche Bank Research

significantly cheaper than in western Germany. On average, a single-family house in eastern German cities cost EUR 302,000 in 2019 (+7.9% year on year) but EUR 486,000 in the western part of the country (+5.4% year on year). Between 2009 and 2019, prices rose by just under 55% in western Germany and by 66% in eastern Germany.

The decline in price growth for houses and apartments in German towns and cities is also reflected in moderate rent growth. Rents for newly rented properties increased by a comparatively moderate 3.6% in 2019, while rents for existing rental properties were only up by 2.4%. This marks the second year in succession of declining growth, both for newly rented properties and for existing rental properties. Demand is likely to shift from metropolitan areas to city outskirts given the high rent levels in the cities themselves. The tightening of rental laws and debate over even stricter housing policy is also likely to have contributed to a slowdown in rent growth. Rent growth slipped to 3% back in 2014, the same year in which Bundestag debate and media coverage concerning the rent brake was the most intensive (the law was passed in March 2015). Given that the housing shortage is likely to intensify, the subdued rent growth is probably just a temporary breather in the market. What's more, pressure on rents and prices in an increasingly strict regulatory environment without any substantial increase in supply is likely to lead to loopholes and regulatory arbitrage.

Calculating profitability and amortisation is becoming increasingly challenging given the falling rental yields. With purchase prices some 30 times annual rent, there is also little breathing space for maintenance and unforeseen expenses. Even though the pressure to invest remains high, prices are likely to have risen in various regions to a level that will force investors to reconsider additional commitments. From this perspective, growth in house and apartment prices should continue on its upward trend after the corona crisis in 2020 but not exceed the growth rates recorded last year.

The steeper rise in prices compared to rents is lowering rental returns. Despite mortgage rates moving sideways, price growth could decline due to regulatory intervention and the threat of recession. Prices are expected to fall temporarily as property is sold due to job losses and more risk-friendly financing is agreed. In spite of this, we still only expect to see a "corona-related" breather and no end to the price cycle, as all the structural factors that characterised the cycle from 2009 to the start of 2020 remain in place. Assuming our expectations regarding price increases materialise, there is a risk of a house price bubble forming if the cycle lasts until 2022 or beyond. Investors may lose some of the future price increases at the end of the cycle. There is an unusually high level of uncertainty with regard to this assessment. Any second wave of infections in the winter of 2020/2021 or other risks sparked by the pandemic may require re-assessment.

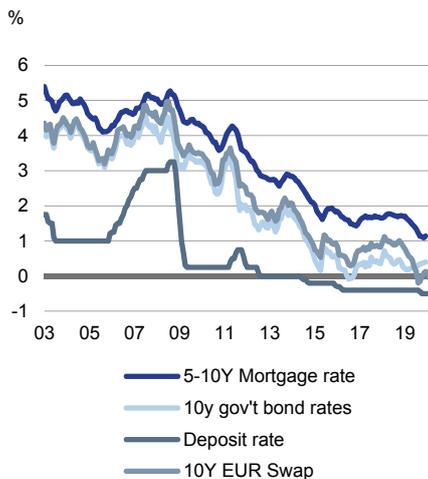
Bremen, South: 47 cities in the federal states of Rhineland Palatinate, Saarland, Hesse, Baden-Württemberg and Bavaria.



German property market outlook 2020

5-10Y Mortgage rate vs. ECB deposit rate

17



Sources: ECB, Deutsche Bank Research

Interest rate outlook: Baseline scenario has mortgage interest rates running sideways up to 2021

Mortgage interest rates began their descent in 2008. By 2019, five- and ten-year mortgage rates (ECB benchmark) had fallen from over 5% to almost 1%. The major decline in interest rates and the lack of alternative investments have boosted lending activity significantly. New lending business was booming until the outbreak of the corona crisis, with outstanding lending volume rising rapidly due to a slight decline in repayment rates. Mortgage lending volumes increased temporarily by 10% compared to the previous year in 2019.¹² Not only have mortgage rates declined significantly, ten-year swap rates are also down. Swap rates are trading at practically zero and even dipped into negative territory temporarily in 2019 and at the peak of the coronavirus pandemic. These lows are a direct consequence of the further loosening of monetary policy and the recommencement of ECB bond buying activity on 1 November 2019, as well as the corona crisis from March 2020. The ECB has announced that it will be purchasing bonds worth around EUR 100 bn per month until the end of 2020. There are a number of factors that go against paring down or even not ramping up bond-buying once this initial phase is complete. The consequences of the corona crisis will mean that interest rates will have to remain low for many years to come. However, even in the relatively unlikely case that the ECB moves to target less expansive monetary policy and dials down its bond buying, it is still likely to continue to reinvest maturing bonds for some time. As a result, it will remain the main buyer on the sovereign bond market for the foreseeable future, and low interest rates will be here to stay. A reversal of interest policy is not likely in the short term at least given the high number of non-performing loans on the balance sheet of many banks even before the corona crisis, particularly in southern Europe, subdued economic growth in the eurozone and a large number of political conflicts. The negative economic consequences of the corona crisis mean that we can expect to see perhaps more unorthodox measures. This appears all the more likely the worse the economic effects of the current crisis become. Sovereign debt and the employment market in southern Europe are two particular focal points. Here, inflation should remain below the ECB target of “below, but close to, 2%” for some time yet. Implied inflation expectations from the financial markets have not been pricing in any higher inflation for years and have collapsed in the corona crisis. Most of the economists regularly surveyed by the ECB expect inflation to fall some way short of the target rate over the next couple of years.¹³ We anticipate inflation of just 0.4% and 1.1% in 2020 and 2021 respectively. In light of this, we expect¹⁴ mortgage rates to hover just above the 1% mark until the end of 2021, while swap rates should also only gradually distance themselves from the baseline.¹⁵ This is shown by the spread between the 5-10-year mortgage rates and swap rates, which has declined significantly over the past few months after rising sharply to a new all-time high of over 140 basis points midway through 2019 and is likely to return to the double-digit range in the long term (long-term median: 85 basis points).

ECB monetary policy and risk premium

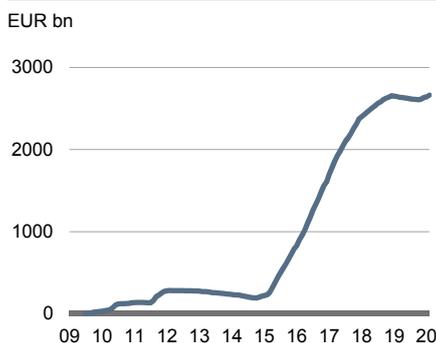
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In our preview for 2019, we had forecast a slight rise in interest rates. This was due to the extremely dynamic development of prices in some cities and regions. As a result, banks have increasing incentives to request higher risk premiums when calculating interest rates. The ECB measures introduced in 2019 counteracted these incentives. These developments show why the ECB intends to take the negative side effects of its monetary policy into greater account moving forward as part of its strategic review.

Source: Deutsche Bank Research

ECB asset purchases

19



Sources: ECB, Deutsche Bank Research

Summary: Complexity is growing, thereby increasing forecast sensitivity

Since 2018, we have been expecting the price cycle to last until 2022 at least. Weighing up all the arguments, we continue to consider these expectations to be plausible, assuming that the corona crisis remains manageable and a period of

¹² Focus Germany (2019). Economic weakness, political turbulence. Deutsche Bank Research. November 2019.

¹³ Survey of Professional Forecasters (SPF).

¹⁴ Unlike the outlook for the year 2019, in which we forecast a slight rise in interest rates.

¹⁵ DB forecast on 10-year swap rates for the midway point of 2021: 0.275.



major economic recovery begins by the second half of 2020 at the latest. We derive this assessment from the shortage of housing space. That being said, the situation has become significantly more complex. Firstly, price growth remains high, which is leading to overvaluation in certain regions and sub-markets. Secondly, the number of influencing factors and their interdependencies are also increasing. Marginal changes in factors such as demand for housing or the regulatory environment could also lead to forecasts being revised. In this Germany Monitor, we have put forward two arguments in favour of the cycle extending beyond 2022 and two main arguments on why it will come to a premature end. The sensitivity of our forecast is correspondingly high, a factor exacerbated hugely by the corona crisis.

Price-driving factors:

- i. There continues to be a fundamental shortage of supply on the housing market. We believe that demand will continue to outstrip supply for a number of years to come. However, we have considered revising our forecast due to the summer dip in immigration in 2019. A significant decline in migration would curb demand for housing by a considerable margin. The corona pandemic has the potential to trigger another wave of migration, which could provide some major impetus in terms of housing demand.
- ii. The credit cycle jumped sharply in 2019. New lows on mortgage rates have bolstered new business. At the same time, repayment rates stagnated after rising in line with falling interest rates in accordance with expectations in the first ten years of the cycle. Germany's mortgage lending book swelled on account of these two developments up until the corona crisis. Interest rates are likely to remain low after the corona crisis and the subsequent phase of economic recovery, which could kick start credit growth again. The crisis-related flight to safety could provide renewed impetus. Incentives to take on debt at low interest rates rise particularly if inflation expectations increase significantly.

Constraining factors:

- iii. The lowering of the countercyclical capital buffer to 0% until the end of 2020 due to the corona crisis should be reversed once the situation has been resolved. Renewed and significant post-crisis credit growth should quickly trigger macroprudential headwind. In this scenario, regulators will likely be aiming to keep a lid on the price rise. However, no regulators will want to be held responsible for a significant decline in house prices followed by a rise in non-performing loans. There is one major uncertainty for the individuals in charge when it comes to achieving this aim: increasingly strict housing policy that could be tightened even more once the corona crisis has been confined to history. As a result, regulators are likely to continue pursuing their current strategy of only tightening the macroprudential environment with care and on a gradual basis. From their point of view, it's time for the housing policymakers to make their move.
- iv. Housing was declared to be the most pressing issue in society prior to the corona crisis.¹⁶ Regardless of whether the Berlin rent cap is constitutional or not, political pressure is likely to lead to additional attempts to tighten the reins on the German housing and apartment market even further in the coming years. The pre-coronavirus proposal by the co-leader of the Social Democrats (SPD), Norbert Walter-Borjans, to introduce a tax on land value growth once again shows that the symptoms and not the causes of the current housing predicament are defining the agenda. There will be calls to redistribute the burden after the corona crisis on account of the loss of income, which could

¹⁶ Following interior minister Horst Seehofer's statement that "housing is the social issue of our time".



German property market outlook 2020

Rent cap in Berlin: Regulatory arbitrage and diversion effects*

20

The construction industry is building more single-family houses and terraced houses, but fewer multifamily houses, and is therefore failing to meet the needs of the rental market.

Tenants are becoming owners.

Tenants and landlords will de jure adhere to the rent cap, but will de facto circumvent it.

Prices for additional services related to housing as a commodity are rising.

Investment in maintenance is falling, as is the quality of the buildings and that of the indoor environment.

Aggressive investors are buying up housing stock and leaving residential units vacant in order to drive up the pressure on prices.

Increased use of residential space for tourism.

Investments in Berlin's commercial real estate market.

Investments in the housing market in Berlin's surrounding area (no rent cap in the state of Brandenburg).

*Berlin housing market: Rent cap may decouple real estate cycle from economic supercycle for a number of years. Germany Monitor, Feb. 2020.

Source: Deutsche Bank Research

in turn spark even greater inequality and significant additional government debt. Introducing an asset tax or making even greater interventions into the market, such as compulsory mortgages, were mere ideas just a handful of years ago but cannot be ruled out now, given the raft of regulation sweeping through the political landscape.

Given that the housing shortage and the lack of guidelines in housing policy are expected to have severe social implications, we refer to the list in the sidebar that is taken from our article on the Berlin rent cap. The article also includes a number of potential loopholes and opportunities for regulatory arbitrage, which could become increasingly relevant to the German housing market.

When will the price cycle end? Not in 2020

One of the main questions surrounding the corona crisis is whether it will end the house price cycle. Our baseline scenario assumes a significant economic recovery in the second half of 2020. We view evidence of significant price falls as anecdotal and temporary in nature, which is why we tend more toward the interpretation that the situation marks a breather in the cycle. Renewed price rises can be expected in the medium term due to the flight to safety caused by extensive monetary and fiscal measures, perhaps a higher rate of inflation and further impetus for immigration. As in the past ten years, prices look set to rise at a faster pace than rents going forward. While this would put further downward pressure on initial rental returns, property market assets ought to be more attractive than capital market investments – for both private and institutional investors. In terms of returns, this applies as much to long-dated German government bonds as it does to risk-return profiles on equity markets. As a result, initial rental returns of around 4% per year nationwide could remain attractive. Following temporary price falls in the corona crisis, investors could seek out safe havens, which could reflate demand for residential properties and lead to rising prices.

Housing policy and macroprudential regulation have ambivalent effect

There has been much debate as to whether further regulatory interventions could bring about an end to the cycle, but the effect of housing policy is ambivalent. In our view, the sole objective of stricter housing policy should be to dampen rent increases to gain more time for investment in new construction. One cause of the current wave of regulation is that experts are signalling to policymakers that the rent brake is having the desired effects on rents but no negative effects on new construction. In our view, available data on this issue is not sufficient. What's more, there could be a variety of short- and long-term effects. In particular, the interplay between all housing policy measures should ultimately have a negative impact on the number of completed residential units. As we have shown above, construction of new units stagnated between 2016 and 2018 (most recent data available). The real question is therefore not what effect a single regulatory measure will have, it is how construction of new units can be stimulated to a point at which vacancies begin to arise.

All of the measures in the German federal government's current housing initiative, such as investment incentives through special accelerated depreciation allowances (which we called for five years ago¹⁷), activation of land use and reduction of construction costs, are going in the right direction. However, they

¹⁷ David-Folkerts Landau (2015). Misguided policy raises risk of housing bubble. Standpunkt Deutschland. Deutsche Bank Research.



German property market outlook 2020

could still fall at hurdles such as increasingly complex building requirements and a lack of skilled workers, local investment incentives and political incentives. What's more, the special accelerated depreciation allowance also subsidises rental properties in regions where supply is not tight. With figures published by the German Economic Institute (IW) in Cologne suggesting that there are almost 2 million vacant apartments in Germany¹⁸ – not all of which are located in urban centres – this could lead to misallocation while the shortage of housing in metropolitan regions remains a problem.

Other measures, such as child benefits for homes (Baukindergeld) introduced in September 2018, are likely to have raised prices and rents in a buyer's market even though this is exactly what the issue here is. The net impact of strengthening social housing and worker housing schemes remains unclear. It may be the case that the number of privately owned houses ends up falling at the same rate. In summary, a scattergun approach is being taken to housing policy. Regulations are being introduced here and there, in the hope that they will have the desired effect at some point in time. An overall concept is lacking, in both in the political world and the real estate industry. If a concept were in place, we would be able to make a detailed analysis now, after a ten-year boom, of how many residential units are required for which tenant segments in which towns, cities and regions, and under which demand trend assumptions.

The lack of an overall concept and low vacancy levels mean that the housing policy measures are having an ambivalent effect. They are reducing the appeal of investments but also signalling to all investors that there are fundamental shortages on the housing market. As a result, and given the attractiveness of investment properties with positive returns, we still expect German residential properties to be in high demand.

There is also a fundamental problem with the macroprudential measures. These measures are not having a targeted effect, as no distinction is being made between new buildings and existing properties. Overly loose regulation only constrains existing prices to a marginal extent, while price-restricting regulation also constrains new construction activity and the shortage of supply continues. Regulators do not have sufficient information to regulate the housing market in a targeted manner. In Germany, no data is available about the extent to which mortgages are used to finance new buildings or purchase existing units. European central banks have been working on its AnaCredit statistical framework, one of the most extensive credit data surveys ever seen, for years and aims to publish the first set of figures at the end of 2020. But not even this will be able to provide the required data. The regulatory dilemma described in this article is likely to remain an issue for some time yet.

One undesired side effect of the shortage of living space and increasingly strict housing policy, coupled with the lack of targeted macroprudential measures, may also be the segmentation of the tenant and landlord market. Better-off tenants are leaving the rental market, leading to increasing stigmatisation of renting as a form of housing. In addition, risk-averse landlords who are not prepared to engage in regulatory arbitrage have more and more incentives to de-invest. In this twofold market segmentation, low-earning households are coming across risk-friendly investors in the rental market. This trend could increase the strain on social cohesion. Paradoxically, politicians' measures are supporting the very investors and landlords they are attempting to regulate.

¹⁸ Michael Voigtländer and Ralph Henger (2019). 4.7% of all apartments are vacant. 24 June 2019.



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Bundesbank: Overvaluation in the housing market due to Financial Stability Reviews and 2020 Monthly reports (Feb)* **21**

Year	Overvaluation	Region
2020*	between 15% and 30 %*	in the cities*
2019	between 15% and 30 %*	Urban areas
2018	between 15% and 30 %*	Urban areas
2017	between 15% and 30 %*	127 German cities
2016	from 10% to 20%	German cities
2015	-	-
2014	25% and 10-20%	7 major cities on average 25%, in additional 93 cities/towns on average 10% to 20%.
2013	up to 20%	Attractive major cities

Sources: Deutsche Bundesbank, Deutsche Bank Research

Regulatory uncertainty exacerbated by poor communication or none at all

Our criticism of communication from regulators is targeted primarily at the central banks. Only now, twelve years after massive intervention in the money market, are the side effects of this policy being taken into account as part of the ECB's strategic review. What's more, the Bundesbank lacks a clear idea of the fundamental value of German houses and apartments. With prices for apartments in many cities having more than doubled, the Bundesbank has assumed an almost constant overvaluation of 10% to 30% in its annual financial stability reports since 2013. The reason for this miscalculation in 2013 is an econometric time series estimate on the basis of national data. Here the Bundesbank attempted to derive fundamental values using historical data right in the midst of a structural break, namely the financial crisis. Prior to 2008, no national or international investors were on the lookout for dull investment properties with stable annual returns of just 4% to 5%. It was precisely this kind of investment that was then in short supply globally due to the financial crisis, leading to demand for German real estate skyrocketing not just from national investors but from international investors too.

There was no clear communication to investors about the fundamental value of German residential and commercial real estate. A macroprudential forward guidance could limit regulatory uncertainty, but for this to happen we would need a solid and reliable assessment of the fundamental value. For residential properties, we believe this could be a comparison of German cities with other European cities and on top of it corrections for competitiveness, income levels, quality of life and other factors. Based on a simple model such as this, ranges could be defined for under- and overvaluations of the fundamental value, with extreme ranges being defined as bubbles. This cross-comparison takes the appeal of residential real estate in the current low-interest environment throughout Europe into account and bypasses any influence the structural turning point may have on valuations. Such an approach can also be considered appropriate in light of the fact that the low-interest environment is likely to remain in place for some years to come. Using this model as a basis, regulators would be able to communicate – at least roughly – which measures will be taken when the fundamental value is exceeded by certain margins.

The German Financial Stability Committee meets in private and communicates its views primarily through its annual report to the Bundestag. It could follow the example set by the central banks and regularly inform the general public about the latest developments and assessments. Investors could then include potential regulatory changes in their deliberations. This would allow the German Financial Stability Committee to control the behaviour of investors in their own interests. In the best-case scenario, a macroprudential forward guidance fulfils its own purpose without any need to resort to instruments.

German office market

Vacancies declined further in 2019, with a shortage of office space in many cities

Around 270,000 jobs were created nationwide in 2019, taking the total number of employed persons in Germany to 45.4 million.¹⁹ The number of employed persons subject to social insurance contributions climbed by 530,000, almost double that margin. Even though data has not yet been released at city level for the year

¹⁹ Year-end 2019 vs. 45.3 million on average across the year.



German property market outlook 2020

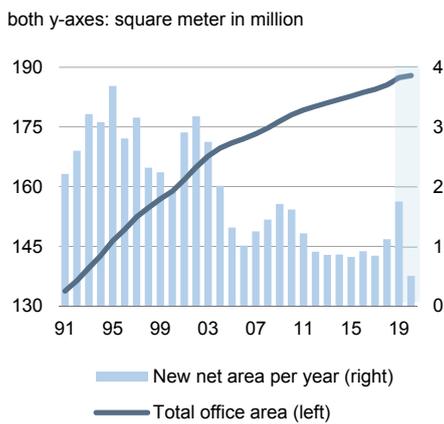
Office: Vacancy ratio 22



Sources: riwis, Deutsche Bank Research

2019, our calculations suggest that 140,000 and 240,000 additional employed persons respectively were attributable to the 126 bulwiengesa towns and cities.²⁰ As a rule, seven major cities (A cities) usually account for one-third of job creation. A further third is attributable to B and C towns and cities collectively. The final third is spread across over 80 D towns and cities. Most of the new jobs were office-based. In the 126 towns and cities, almost 100,000 additional office workers were employed in 2019 (DB forecast in 2019: 76,000). The number of office workers rose to almost 7.8 million. Assuming that each office worker requires just over 23 sqm of space, this translates into additional space requirements of approximately 2.4 million sqm in 2019. This is an increase of approximately 1.3%. However, when adjusted for loss of office space, the increase was merely 1.8 sqm or 0.9%. As a result, space requirements in the 126 towns and cities rose to over 187 million sqm. Due to this imbalance, the vacancy rate declined for the ninth year in a row to 3.5% in 2019 and dropped further behind the long-term average of 5.7%.

Total and new net office area 23

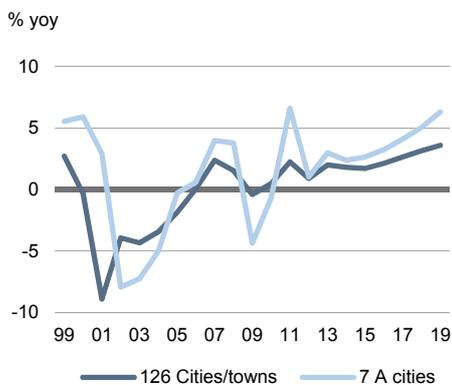


Sources: riwis, Deutsche Bank Research

Vacancy rates are distributed extremely unevenly across the 126 towns and cities. Larger cities tend to have lower office vacancy rates. In 14 of the 126 towns and cities, vacancy rates actually rose year on year, but increases were only marginal in almost all cases. This mostly happened in smaller towns and cities with relatively large new office space. Yet there are still a number of towns and cities with double-digit vacancy rates, particularly in eastern Germany. Cottbus reported the highest rate of almost 19%. There are indications that a large majority of vacant properties in eastern Germany can only be considered active on the market to a limited extent. In Brandenburg an der Havel, for instance, the vacancy rate fell from just under 20% in 2018 to below 7% in 2019, as a great deal of space considered to be active on the market last year is now no longer being marketed.

By contrast, in 88 of the 126 towns and cities, the vacancy rate in 2019 was under 5%, which is often defined as the baseline or natural vacancy rate. The vacancy rate in 40 cities is below 3%. In fact, it was lower than 2% in nine towns and cities in 2018 (Berlin, Erlangen, Freiburg, Göttingen, Ingolstadt, Ludwigshafen, Munich, Münster and Tübingen). Four other towns and cities fell into this category in 2019 (Braunschweig, Jena, Wiesbaden and Wolfsburg). In many areas of Germany, there was also an increasingly urgent need for office space as well as housing.

Office: Prime rents 24



Sources: bulwiengesa, Deutsche Bank Research

2019 office market: Robust rental growth continued

The shortages on the office market are also reflected in rents. In 2019, prime rents in city locations, peripheral city locations, peripheral locations and central business districts averaged slightly EUR 10.50 per sqm across Germany (126 towns and cities), with average rents rising to approximately EUR 8.00.²¹ This is the highest value recorded since midway through the 1990s. In addition, both series have seen significant growth of around 3.5% year on year, which is the highest rate of growth recorded since the start of the 1990s. Current bottlenecks are increasingly feeding through to rent growth, with rents rising sharply if vacancy rates are extremely low. This is also visible from average rents in metropolitan areas (A cities). Vacancy rates in these areas have declined to almost 3%, and both top and average rents were up by more than 6% year on year in 2019. Both series reached new all-time highs during the current cycle, at EUR 23 and EUR 16 per square metre respectively. These aggregated series have seen growth of some 40% across the cycle as a whole since the year 2009, with increases being spread relatively evenly across the eight¹⁸ individual sub-markets.

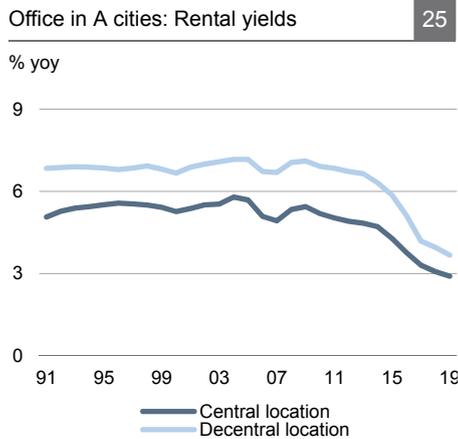
²⁰ The most recent available year at town and city level is 2018.

²¹ These rents are therefore each based on four sub-markets.



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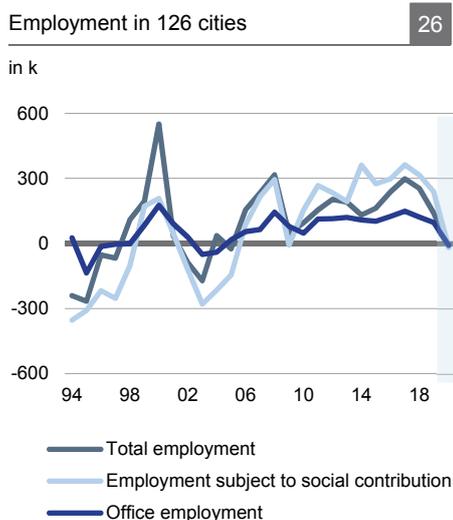
ECB fuels further decline in rental revenues in 2019



Sources: bulwiengesa, Deutsche Bank Research

The trend towards lower rental returns continued unabated in 2019. Across the cycle as a whole, nationwide rental returns for central locations fell successively from 7.1% to 5.2%, and from 8.7% to 7.1% for peripheral areas. Rental returns also declined to new lows in metropolitan areas at 2.9% and 3.7%. Returns on 10-year Bunds and swaps fell due to further monetary policy intervention midway through 2019, which is why risk premiums on offices in central locations in metropolitan areas did not decline, unlike in previous years. Due to the scarcity of investment opportunities across all major investor groups, office properties in central locations of metropolitan areas are increasingly priced like safe investments. This trend is understandable, seeing that people are moving towards Germany's metropolitan areas and interest rates are low. However, much of the development is due to the expectation that the large eurozone countries will register lower growth rates than Germany in the long run. This assumption might be wrong, at least in the very long run, as the demographic effects are highly unfavourable: the German population is ageing, and migration will only go part of the way to absorbing this trend.

Decline in employment figures in 2020 due to coronavirus



Sources: riwis, Deutsche Bank Research

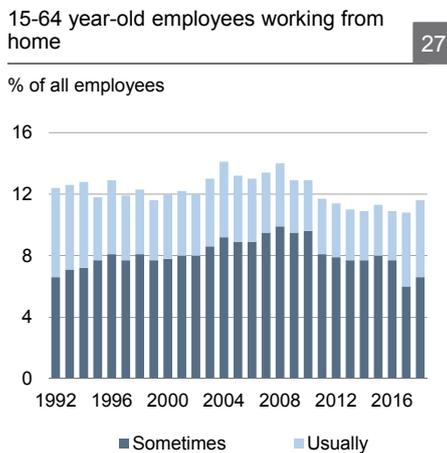
We expect employment to decrease by some 300,000 in 2020 on account of the corona crisis. The number of employed persons subject to social insurance contributions is set to fall by 100,000. According to our calculations, this translates into a decline in employment of 18,000 in the 126 cities and a fall of 12,000 in the number of employed persons subject to social insurance contributions. Our structural models do not take any corona-related effects into account. There may be a sharper decline in employment in metropolitan areas and major cities, as social distancing requirements will be more difficult to implement in highly populated areas. On the other hand, these areas are likely to be home to a particularly high number of company headquarters, which will not be as affected by the corona crisis as production and sales operations. The declines in employment numbers we calculated were the first in over a decade. This also applies to the number of office workers, which is set to decline by around 7,000 after having risen every year since 2009 throughout the entire cycle. The lowest annual increase so far was 47,100, and the annual average was more than 100,000. As a result of the forecast decline, required office space is likely to fall by 0.2 million sqm in 2020, or around 0.1% of existing space. Adjusted for demolished buildings, required office space is likely to decline by 0.8 sqm, and the vacancy rate is set to rise from 3.5% to 3.6% across all 126 cities.

Increase in working from home in 2020 only curbing demand temporarily

The corona crisis raises the question of whether the increase in the number of people working from home will ultimately curb demand for office space. The longer the crisis goes on, the more normalised and perhaps also more efficient remote collaboration within and between teams could become. However, there are a wide range of different experiences when it comes to the corona crisis. One major factor here is how well a team worked together prior to the corona crisis. Setting up new teams and onboarding new employees remotely could pose a challenge. There is likely to be a huge need for communication both from employers and employees in the aftermath of the corona crisis in particular. That's why we believe that there will only be isolated expansion in working from home in 2020 and don't expect this trend to have any impact on office demand.



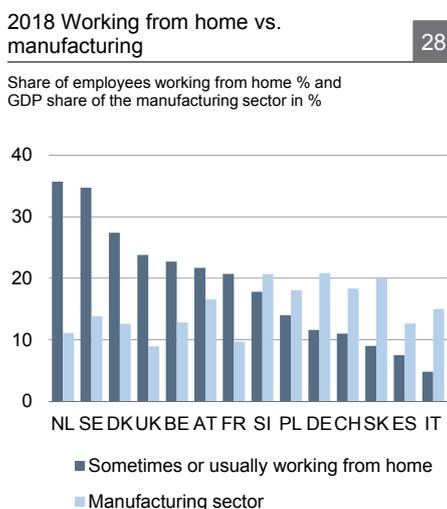
Working from home could become increasingly important in future



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In March 2020, small and medium-sized enterprises were able to apply to receive IT support services for working-from-home setups as part of the German government's package of measures. Subsidies, and perhaps even tax incentives, could become increasingly important in this area following the corona crisis. This trend could also find broad political support, as working from home would reduce the number of commuters and help reach carbon emission targets. Working from home may also become increasingly important, as some sectors in which working from home was almost unheard of, such as the public sector, have seen the corona crisis speed up the digitalisation of workflows and processes. But there are also arguments against more working from home. Many workplaces cannot be fully transferred to an employee's home due to legal and regulatory requirements. Although this does not represent an obstacle, a number of employee surveys reveal that working from home can have a negative effect on employee health. In particular, workers miss the clear separation between work and free time. There are also structural reasons, such as the significance of the manufacturing industry, that stand in the way of any widespread deployment of working from home. Countries where manufacturing is less important tend to have a larger share of people working from home. Compared with the rest of the EU-27, Germany has a below-average number of people working from home – a figure that has remained extremely stable over the past 30 years. Figures are spread relatively evenly across age groups and gender. In Germany, around 12% of people work from home regularly or occasionally (EU-27: around 14%). The percentage is higher in most neighbouring countries, with the Netherlands leading the pack at 36%. Weighing up all the pros and cons, we believe that there are good reasons for a gradual expansion in the number of people working from home. Growth is likely to amount to a couple of tenths of a percent per year, which is why we don't expect this trend to have much of an effect on demand for office space. Social distancing may actually see the amount of office space required by each office worker actually rise temporarily from its current level of approximately 23 sqm.

Conditions for an end to the office cycle



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Over the past ten years, the percentage of people working from home would have had to have risen by around 1 1/3 percentage points per year to even out the average annual growth of roughly 100,000 in the number of office workers in Germany's 126 largest towns and cities. Once the corona crisis has subsided and the economy has returned to normality, the necessary rise in this rate could be even lower if, contrary to our expectations, demand for office workers were to fall significantly. Many of the properties where construction has started but has not yet been completed would probably increase the vacancy rate. Based on these considerations, a significant rise in the number of people working from home – for example more than 1 percentage point per year – could herald an end to the office market cycle.

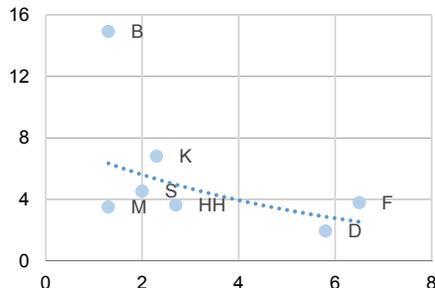


German property market outlook 2020

2019 A cities: Rents vs. Vacancies

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y-axis: in % yoy, prime rent, office city
x-axis: vacancy rate in %



Sources: bulwiengesa, Deutsche Bank Research

2020: Stagnating rents in the first half of the year

Prime and average rents rose by 3½% in 2018 and 2019. There are not likely to be any rent increases in 2020 while restrictions continue to apply on social contact and the economy is returning to normality. Rent rises are not likely to be seen until the second half of 2020 at the earliest, when the employment market is back in shape. However, given the huge amount of political uncertainty after the corona crisis, we only anticipate increases in line with inflation. Rent growth is expected to return to around 3% in 2021. If the spread of working from home does not lead to a structural break, as expected, rent growth in certain cities – particularly metropolitan areas with low vacancy rates – is likely to be twice as high at 6%. Such significant increases could raise the question of whether a rent brake is needed for the office market. The red-red-green senate in Berlin is already a major proponent of such a measure, but it would probably require legislation at federal level. In our view, this matter is not likely to return to the agenda for a foreseeable period of time. There is no nationwide majority for this proposal for the time being at least.

General economic risk outlook

In this section, we will outline a number of risks that could have a negative impact on demand for real estate. In addition, we believe they also have the potential to bring the current residential and commercial cycle that began in 2009 to an end. These risks are not taken into account in the base scenario due to their relatively low probability of occurrence individually. However, when taken as a whole, these scenarios do become increasingly significant. This is because Germany is facing numerous challenges at the moment, but also because real estate prices continue to rise, and any future price fall could therefore be all the more marked.

International risks very unlikely to end German cycle

We have discussed many different crisis scenarios over the past few years. Most risks, such as Brexit, trade conflicts, pandemics, etc., have the potential to trigger a recession and significant job losses. However, in spite of the potentially negative implications for the economy, they are not likely to bring an end to the German real estate cycle. The effects of weak economic development could be relatively low when it comes to demand for real estate, as experience shows that the majority of these effects can be absorbed by positive migration effects caused by the crisis itself. In the COVID-19 crisis migration effects will materialise later than they normally would due to travel restrictions. National and international investors' desire to seek safe havens for their investments should also be of even greater significance to price development. In this context, the effect is direct, as investors are keen to seek relatively low-risk investments at times of crises – such as, in many cases, real estate in Germany. What's more, demand for Bunds is also rising, which dampens mortgage rates and has bolstered demand for real estate even further, at least in the past. That being said, securing the future of businesses and households is at the forefront of efforts in the current crisis. As a result, demand for mortgage loans may fall before demand picks up again in the post-corona low-interest environment.

Competitiveness and innovation capacity in decline

While we believe that international crises will not bring an end to the cycle, Germany-specific risks should increase in importance over the next few years. To classify these risks, we need to take a look back at the extremely successful past



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decade. Offering high levels of competitiveness and innovation, the manufacturing industry benefited from the rapid pace of globalisation. This was the cornerstone of significant job creation and falling unemployment rates. At the same time, the situation also offered major incentives for migration. Coupled with the many monetary and also fiscal stimuli prior to the corona crisis, this meant that the German economy was able to generate robust, above-average growth. High demand for real estate and the subsequent boom were and remain the consequence of this extraordinary decade.

Major sectoral challenges ahead

The automotive sector is in the spotlight here. This sector is facing its most significant upheaval since the invention of the automobile, with the diesel and WLTP crisis, the major reduction in the carbon emissions of new-vehicle fleets, the switch to new drivetrains and autonomous driving. Germany is playing catch-up when it comes to developing high-speed internet, meaning that the use of digital services is below average compared to other developed economies. The public sector also has a number of challenges on the road ahead. Politicians and public-sector executives have often not been able to realise major infrastructure projects on time and on budget, which poses a risk to German industry, particularly in light of ambitious emissions targets and the energy transition. Its ageing population also poses demographic challenges to Germany. The labour force potential will decline significantly this decade, with migration likely to only be able to make up for part of this trend. The growth outlook is correspondingly subdued, with a potential growth rate of just over 1%. These risks could lessen Germany's appeal to migrants. Not only could this result in migration to Germany falling, it could result in net migration becoming negative. Given that migrants are often relatively young and versatile, this risk is heightened with every year that passes. A future period of weak economic performance could affect demand for housing threefold: firstly through lower growth and a deterioration in the employment market, secondly through negative net migration and thirdly through the significantly accentuated, demographic-related decline in housing demand.

Sharp fall in house and apartment prices

Following the corona crisis, house and apartment prices are more likely to continue rising until one or more of these risks materialise. By implication, prices will fall all the more sharply the longer it takes for the negative developments to affect the market. There are a number of examples in the history books. In the wake of the financial crisis, house prices peaked in 2007 and 2008 in nominal terms before declining considerably in some countries. They provide a rough indication of how severe the aforementioned Germany-specific risks could be to the German real estate market. Take Iceland, the UK, the Netherlands, Denmark, Spain and Greece as examples. Here, prices fell by at least 10% from peak to trough. In Iceland, house prices declined by some 15% for a period of three years beginning in 2008. As a result, the crisis was over relatively quickly and house prices recovered swiftly. In the UK, the first three-year price decline was followed by a sideways move lasting a further three years before prices began to rise steeply again. In the Netherlands and Denmark, prices declined by a total of 20% from high to low over a period of six years. It took around ten years for prices to recover to their former peaks in nominal terms. Existential crises in Greece and Spain saw prices decline for a period of at least six years. Prices in both countries are still significantly down on previous peaks in nominal terms. Interestingly, all countries referred to here saw similar price falls of roughly 10% to 15% for the first three years (12 quarters in the chart) of the cycle. Price trends did not diverge until after this period. That means that crisis management measures taken after



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a price fall and additional negative developments during the first few years of the price trend do have significance. Historically speaking, Germany has a solid track record of successfully overcoming many other economic crises. We therefore consider a well-managed crisis with swift recovery and price normalisation to be more likely than a deep and long-term downturn with only gradual recovery that takes a long time to manifest itself.

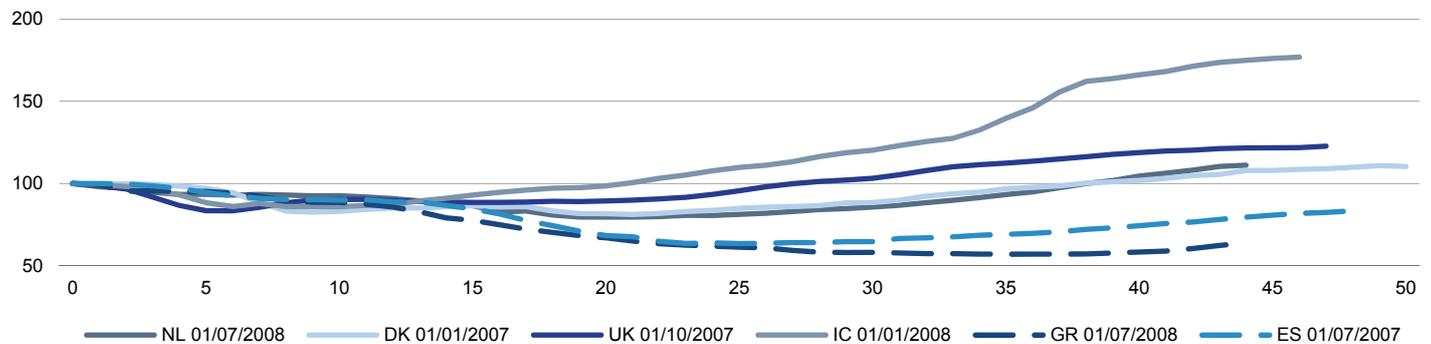
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House prices: Examples for substantial price declines

30

y-axis: Maximum before the decline = 100
x-axis: No. of quarters



Sources: Deutsche Bank Research, OECD

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