

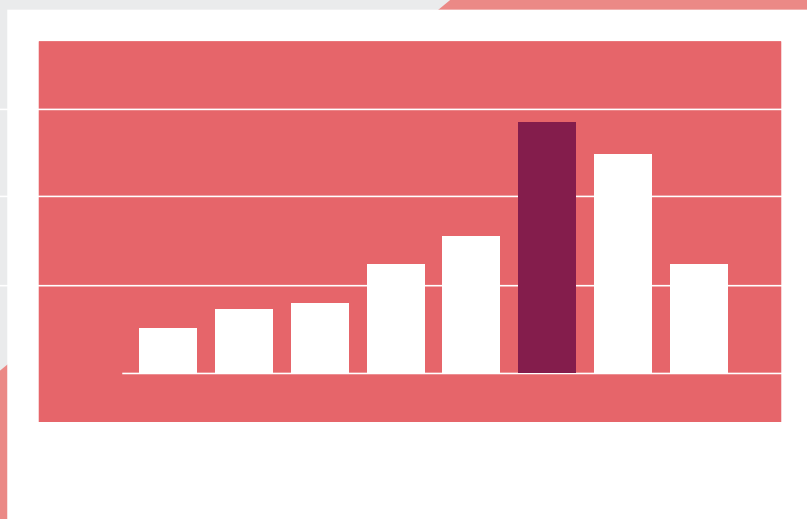
SPOTLIGHT

Real Estate Market

Q1. 2018

Real Estate Market in Germany in early 2018

by Dr. Franz Eilers, vdpResearch



Real Estate Market in Germany in early 2018

Residential and office properties are expensive and in short supply. This is especially the case in Germany's flourishing urban concentrations, which have been attracting high net population inflows for years now. In particular, young people – drawn by training and educational as well as job opportunities – are moving to the towns and cities. This, combined with the strong upswing in the German economy, has driven a powerful underlying momentum. Where the rental markets are concerned, this is clearly reflected in the brisk demand for housing and office premises, in falling vacancy rates and in the marked rise in new lease rentals. The upward trend is illustrated even more powerfully in the property ownership and investment markets. Fueled, in addition, by

the low-interest-rate setting, we have seen an increase in the propensity to buy for several years, as the persistently strong rise in prices and capital values demonstrates.

By focusing on selected indicators, the following pages provide an up-to-date overview of movements in the housing and office property markets in Germany. Given how sensitively real estate markets react to the economic situation, this overview is preceded by a summary of the macroeconomic conditions. As may be seen, economic growth as well as developments in incomes, employment, interest rates and consumer prices are important factors behind the current boom in the real estate market.



Macroeconomic developments

The beginning of 2018 finds Germany in a very good state of health in terms of the overall economy. In 2017, economic growth exceeded expectations, rising by 2.2%. The unemployment rate was reduced further while employment recorded another marked increase. Consumer price inflation is now approaching the target of 2%, and public finances are in extremely good shape.

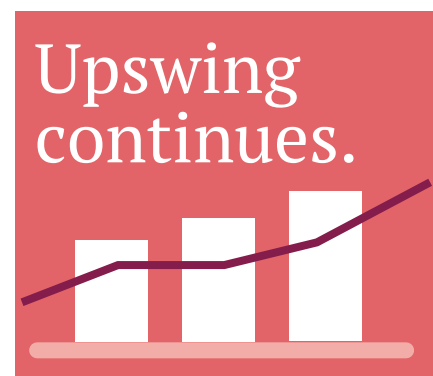
Moreover, there is considerable consensus to the effect that not only the current situation is positive but so are the prospects for the coming years.

The German Council of Economic Experts, the Deutsche Bundesbank and the leading research institutes are forecasting that the rise in real gross domestic product (GDP) will continue in 2018 and 2019, although it could lose some of its momentum over time. According to the Bundesbank's December 2017 forecasts, real GDP will rise by 2.5% in the current year and by 1.7% in 2019.

The buoyant economic situation is making itself felt in the labor market, in particular. Employment in Germany has been increasing steadily for years due, primarily, to the rise in employ-

ment subject to compulsory social security contributions. At the same time, the number of job vacancies is still recording growth while unemployment is on a continuous downward path. The upward trend will be maintained in 2018 and 2019. Forecasts predict that employment figures will keep on rising in both years. Thus, the labor market will again give the real estate market positive impetus. Higher unemployment leads almost automatically to stronger demand for housing and for working premises.

Consumer price inflation, which in 2015 and 2016 was very low at 0.3% and 0.5% respectively, picked up pace appreciably in 2017, and was ultimately up by 1.8% on average for the year. This was mainly due to higher energy and food prices. For this year and next, the Bundesbank and the Council of Economic Experts expect an increase of between 1.6% and 1.8%. Measured in terms of the high level of utilization of the German economy, these rates should be considered moderate. Nevertheless, they will provide stimulus to the real estate market, as the property supply side will try to raise rents and prices as



they take their cue from inflation.

The current yield on long-dated German sovereign bonds was already close to zero in 2016: this was as low as it could possibly go. In 2017, in the wake of the gentle interest rate turnaround in the United States, a slight rise was recorded. Nevertheless, yields remain at very low levels. In mid-March 2018, public-sector bonds with a residual maturity of between nine and ten years were yielding around 0.6%. This very low figure does not constitute a normalization of interest rates, especially since – as was mentioned above – inflation is near the 2% mark. The interest-rate setting in early 2018, then, remains expansionary.

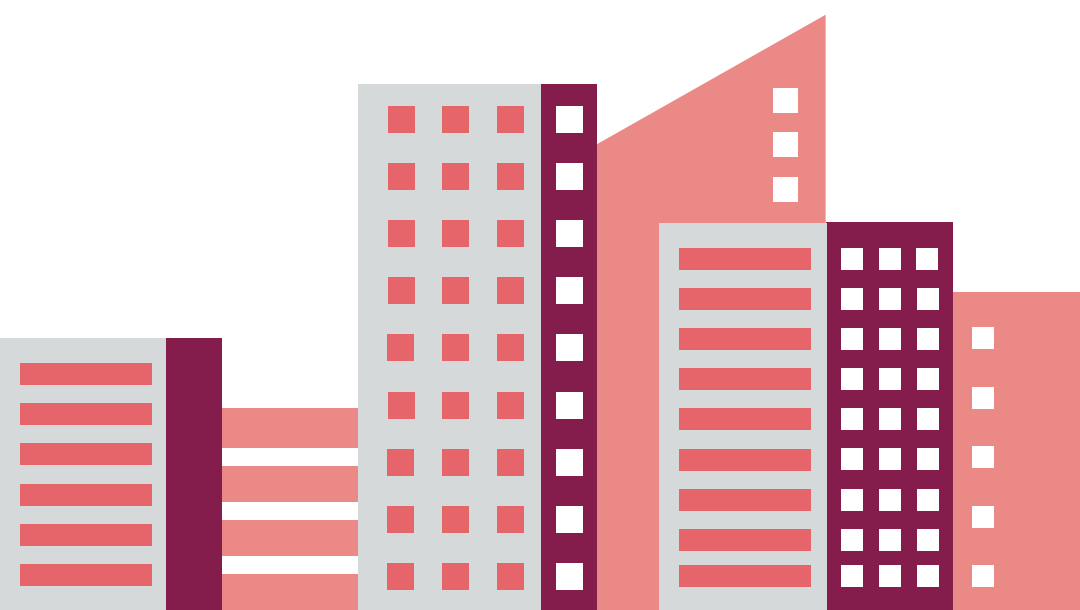
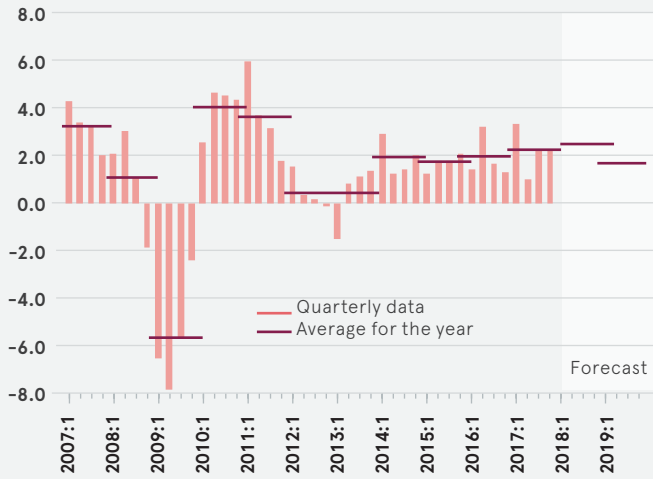


Figure 1: Indicators of macroeconomic developments

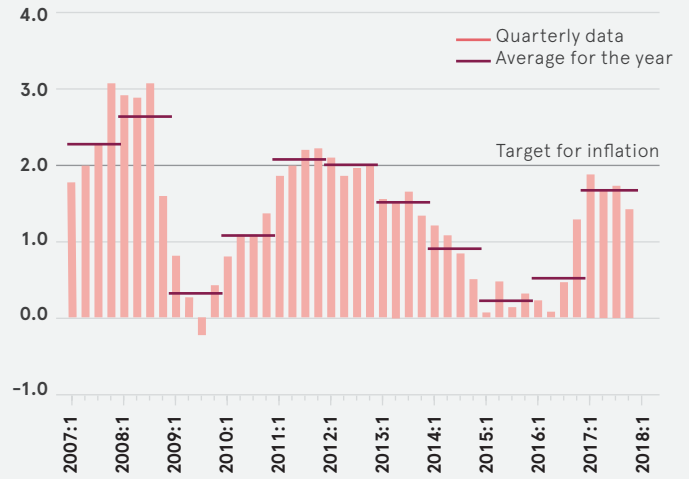
Real gross domestic product

Percentage change compared with corresponding period one year earlier



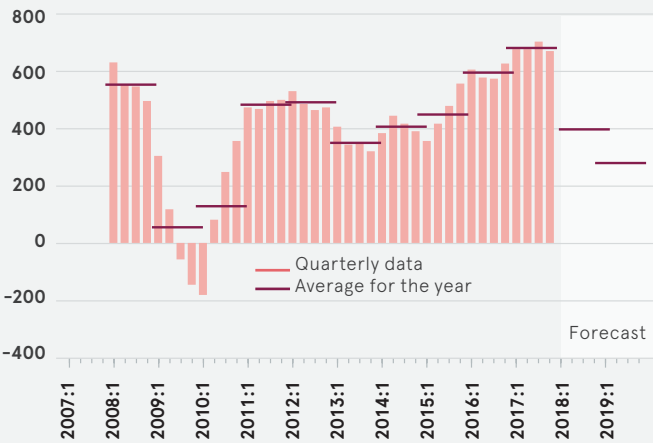
Consumer prices

Percentage change compared with corresponding period one year earlier



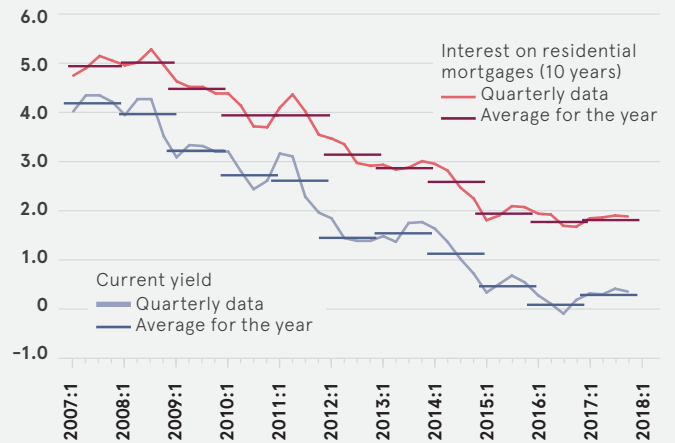
Employees

Percentage change compared with corresponding period one year earlier



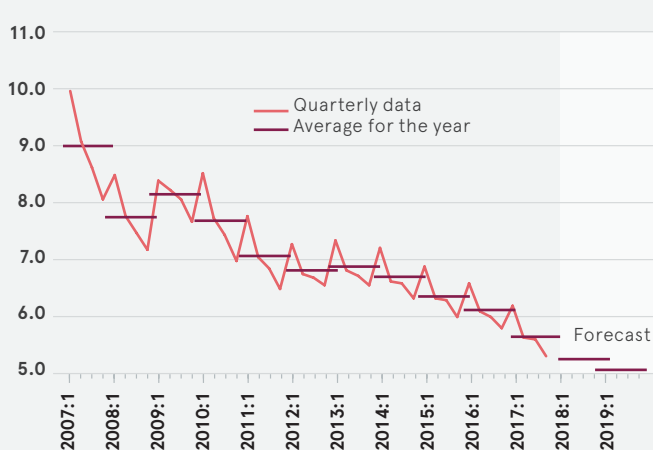
Current yield on sovereign bonds

As a percentage



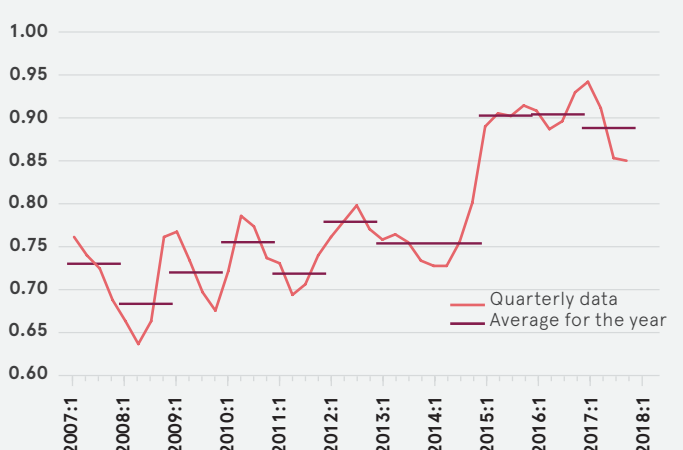
Unemployment rate

As a percentage



Exchange rates

Euro per dollar



For explanations and sources, see annex, pages 10 and 11.

Housing market

Residential properties located in Germany went up sharply in price in 2017. The vdp property price index for single- and two-family houses rose by 5.5% and for condominiums by 6.8% on average for the year. In addition, the capital values for rental multi-family houses increased by 7.9%. Yet even more striking than the nationwide figures are the index values for Germany's top 7 cities (Berlin, Hamburg, Munich, Cologne, Frankfurt, Düsseldorf and Stuttgart). Prices for condominiums in these locations surged by 12.1% and capital values for multi-family houses by 14.2% compared with the previous year.

Like the movement in prices, the upward trend in residential construction, too, has intensified since 2010. In 2017, over 300,000 homes were built in one year for the first time since 2001. This growth was accompanied by structural shifts between single- and two-family houses and multi-family houses. Last year, more than 60% of newly constructed dwellings were accounted for by multi-story buildings. The last time

a similar distribution was recorded was in the mid-1990s.

The figure of 300,000 dwellings will be exceeded in the current year, too. Although building permits were down slightly of late, a substantial number of dwellings not yet started or already under construction means that a similarly high number of completed dwellings can be expected in 2018. Once again, the new construction of multi-family houses will outstrip that of single-family houses. This is mainly attributable to the acute demand for housing in the economically vibrant conurbations and the larger towns and cities, where multi-family houses typically predominate. Particularly in the prosperous urban concentrations, where home-seeking is a time-con-

suming and nerve-racking activity, even more new dwellings are needed in the short term. However, this potential is limited by the high level of capacity utilization that the construction sector is already experiencing (as reflected in the growing number of dwellings not yet started or already under construction) and by a shortage of building plots.

In contrast to the new construction of residential properties, sales figures for existing residential real estate have stagnated for many years. All in all, 683,000 residential building plots, single- and two-family houses, multi-family houses and condominiums changed owners in 2016. According to our preliminary estimates, this number dipped slightly last year.



“The vdp property price index for condominiums rose by 6.8% on average for the year.”

Sales of residential real estate in Germany

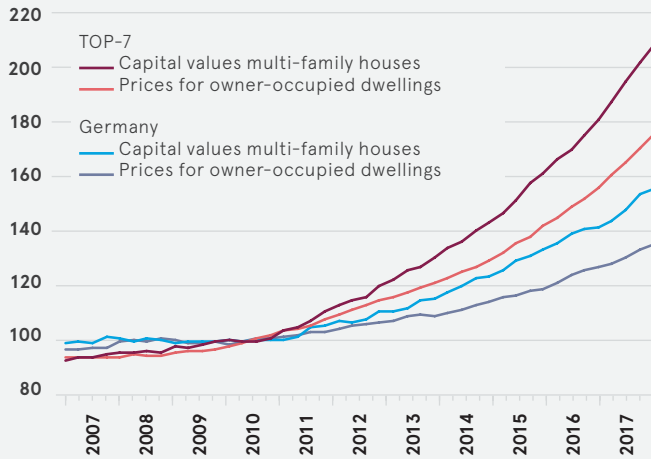
	2016		2017 (estimate)	
	Number in thousands	Sales volume in € bn	Number in thousands	Sales volume in € bn
Residential building plots	101	15.2	98	15.8
Single- and two-family houses	251	59.5	252	63.1
Multi-family houses	32	22.8	30	23.0
Condominiums	299	58.5	284	59.3
Total	683	156.0	664	161.2

Source: vdpResearch. (The results are based on data provided by expert committees for property values and on vdpResearch projections.)

Figure 2: Housing market indicators

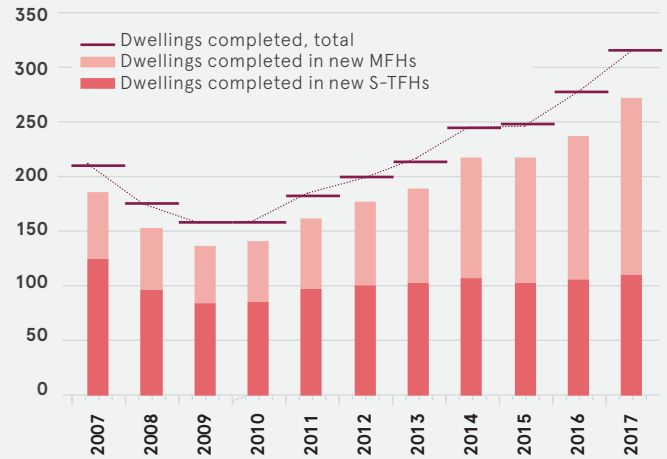
Prices and capital values residential properties

Index, 2010 = 100



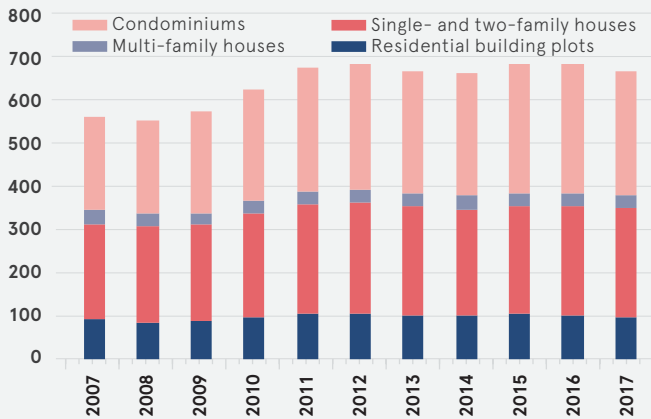
Dwellings completed

In thousands



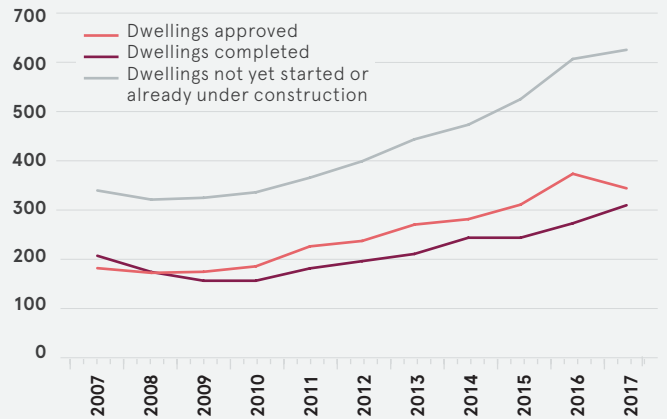
Sales in the market for existing properties

In thousands



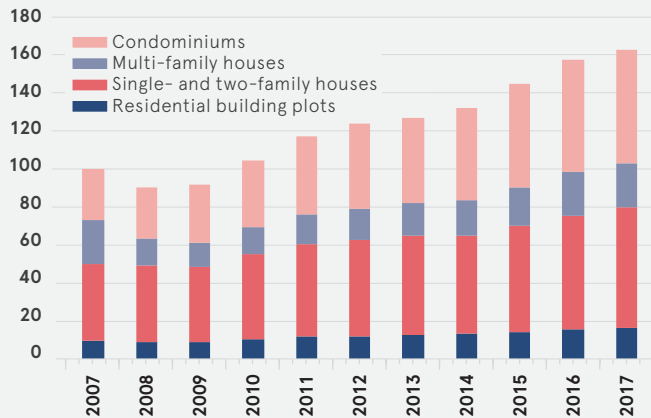
Dwellings not yet started or already under construction, approved and completed

In thousands



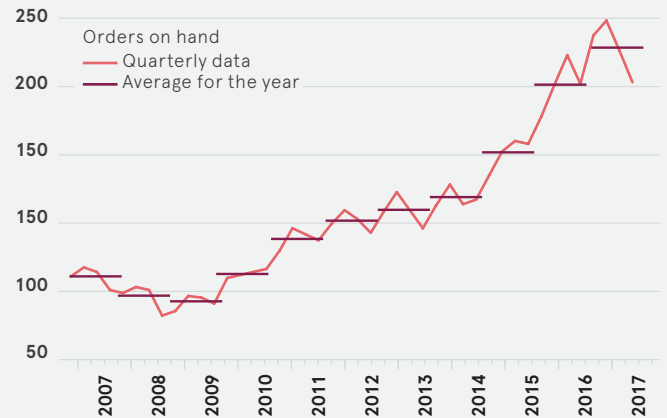
Sales volume in the market for existing properties

In € bn



Orders on hand residential construction

Volume index, 2010 = 100



For explanations and sources, see annex, pages 10 and 11.

By contrast, the sales volume associated with these transactions rose once again. This was due to the aforementioned strong increase in prices, as a result of which purchase amounts rose accordingly.

It is worth noting that the number of sales is not rising despite the continuous increase in prices. Real estate owners are wealthier today than they were some years ago, at least on paper. However, they are not generating any income from the higher residential property prices because they are not selling their properties. Clearly, owners lack the propensity to sell. Perhaps they are expecting prices to continue rising, or there is a scarcity of alternative investment opportunities. In both cases, sellers' restraint exerts upward pressure on prices. This brings us to the question that is currently

the subject of intense debate, namely whether we might soon be seeing a price correction. Indeed, assumptions and expectations differ greatly on this question.

As was pointed out above, most residential property owners appear to be optimistic, otherwise more dwellings would be placed on the market and sold. Nor are the professional property investors who are regularly surveyed by bulwiengesa for the real estate economy index of Deutsche Hypothekbank pessimistic on balance. Following the last survey, the barometer of the housing market declined slightly but remains very high at 151.8 points.

Others take the view that individual markets have decoupled themselves from key fundamentals. Seen in terms

of local rent levels, expected interest rates, local demographics, available reserves of building land and incomes, they believe prices to be too high. However, very few who hold this opinion expect a severe correction to come any time soon.

After years of considerable price increases, prudence is undoubtedly called for. Residential property prices will not keep on rising unabated, and certainly not at the pace we have observed in recent years. Because this would mean that the average price per square meter of currently around € 7,700 for condominiums in a good Munich location would stand at around € 14,300 per square meter in five years' time. As things stand today, this scenario is inconceivable.

= Conclusion

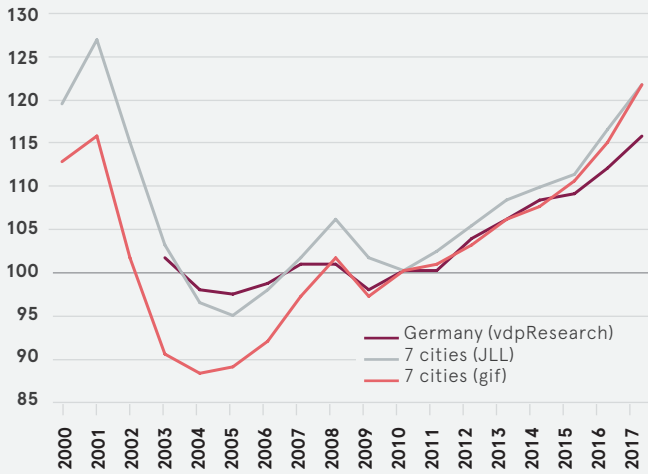
We expect that the price increases experienced both nationwide and in the cities where prices have surged of late will slow down markedly. However, we are not expecting prices to slump. Although new construction activity is picking up and population numbers are flattening in many parts of the country, housing market conditions in Germany's top 7 cities, for example, remain strained and are characterized by a stable socio-economic situation. At present there is no sign of housing vacancy levels like those that built up after the construction boom of the 1990s, and nor – for the time being – are they to

be expected. At present, new construction is not strong enough to turn into a fully-fledged boom given the high capacity utilization levels in the construction sector and the shortage of building plots. This is why housing supply and demand will not drift apart. The ratio of rental dwellings to owner-occupied homes here may perhaps shift slightly, depending on how interest rates develop going forward. Rising nominal interest rates will slow down demand for home ownership. However, this braking effect will merely cause the upward movement in prices for condominiums and self-owned houses to flatten.

Figure 3: Office property market indicators

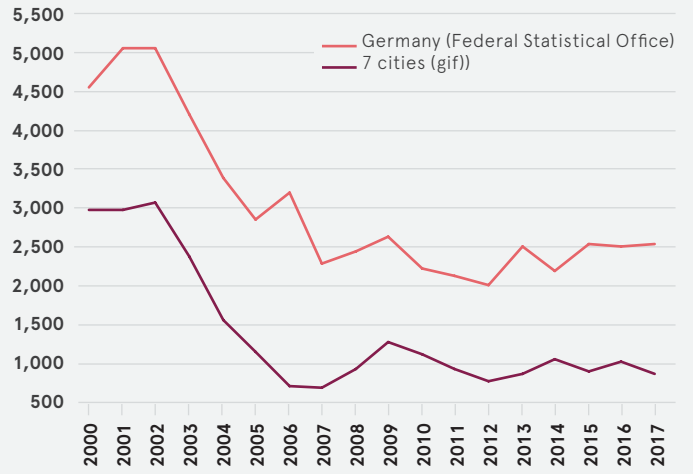
Office rents

Index, 2010 = 100



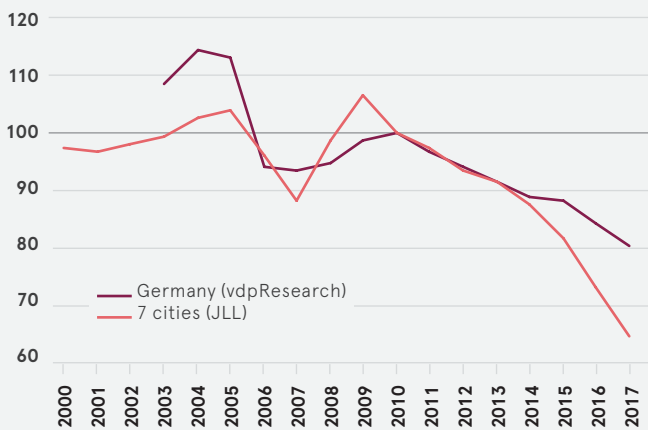
New construction

In 1,000 m²



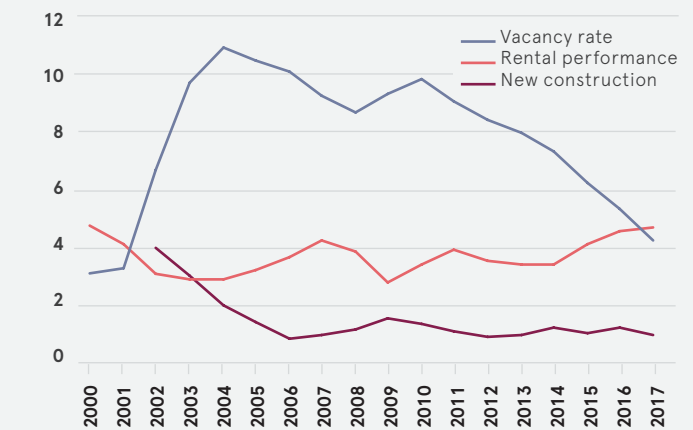
Cap rates

2010 = 100



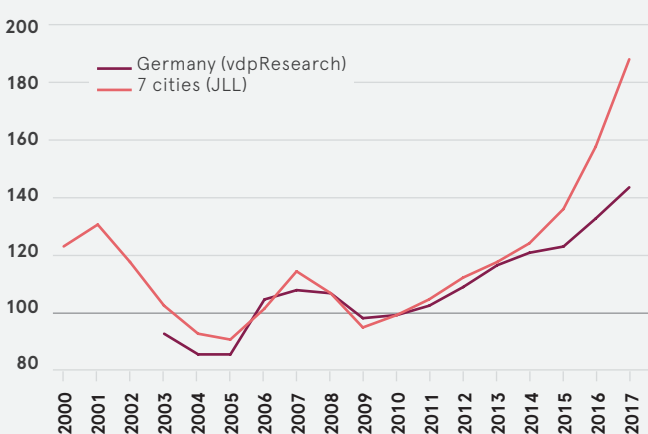
New construction, rental performance and vacancy rate

As % of existing properties



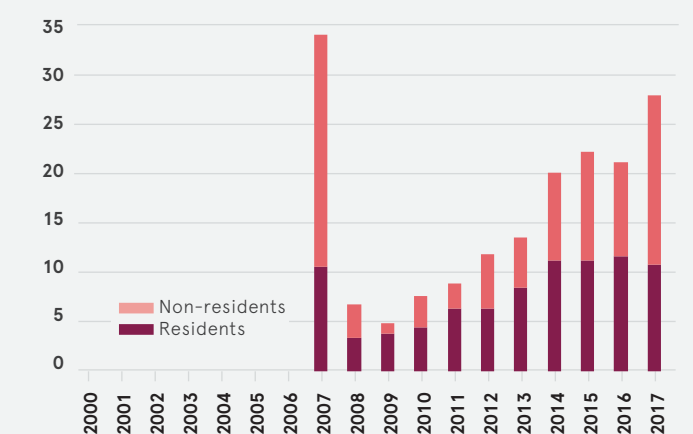
Capital value

2010 = 100



Investment volume

In € bn



For explanations and sources, see annex, pages 10 and 11.

Office property market

The office property market is very closely intertwined with the actual and expected macroeconomic developments. Economic growth and higher employment have invigorated the renting of office premises in the last few years. Thus, although there has been little new construction, overcapacities that resulted from the new construction boom back at the turn of the millennium have been reduced. In the meantime, the demand is greater than the supply in some markets. According to our calculations, the weighted vacancy rate in Germany's seven largest office locations was around only 4.3% as an average for 2017. Such a low office vacancy rate was last recorded in 2001-2002.

This trend has increasingly been accompanied by rising office rents. There is considerable consensus on

this between the prime rent indices of Gesellschaft für Immobilienwirtschaftliche Forschung (gif) and of JLL and the much broader-based index compiled by vdpResearch. Office rents are expected to remain on the upward trajectory of the last few years. This is indicated, on the supply side, by the high utilization of floor space capacity and the still fairly moderate new construction activity. In some cities the vacancy rate has even fallen below the level considered desirable for a functioning market. On the demand side, economic growth continues to create new jobs. Although growth in office jobs will be somewhat less pronounced this and next year than in previous years, the upward trend will persist.

For some time now, capital values for office premises located in Germany

have been rising much more strongly than rents. The logical consequence of this are falling initial yields (cap rates, net initial yields). Two factors led to the sharp drop in initial yields: first, the plunging long-term capital market rates, which put downward pressure on the desired minimum return on capital invested; second, the strong demand by institutional investors for real estate investments in Germany. The nominal transaction volume in the office investment market has advanced almost continuously over the last few years and reached a new post-crisis high in 2017. This was mainly the result of cross-border capital flows: more than 60% of investments in 2017 were made by investors from outside Germany.

= Conclusion

The disproportionately strong growth in capital values relative to rent developments is unsustainable without a further decline in initial yields, which might seem plausible at the current juncture but is highly improbable looking further ahead. For one thing, various indications suggest that the abovementioned decline in long-term capital market rates has run its course; second, initial yields are at extremely low levels – also by historical standards. Capital values have re-

moved themselves significantly from rents, which have likewise gone up. This gap could only be reduced if rents or the cash flows were to rise faster than capital values. This is unlikely.

Thus, the results in the investment market will, in all probability, prove to be not quite as "owner-friendly" in the years ahead as they have been of late, even though declining vacancy rates and rising rents will generate a steady cash flow.

Indicators

Sources

Figure 1

Real gross domestic product (year-on-year change in %)

- Historical development
- Forecast for 2018 and 2019

Federal Statistical Office
Deutsche Bundesbank

Employees (year-on-year change in thousands)

- Historical development
- Forecast for 2018 and 2019

Federal Statistical Office
Deutsche Bundesbank and
vdpResearch calculations

Unemployment rate (unemployed persons as % of civilian labor force)

- Historical development
- Forecast for 2018 and 2019

Federal Employment Agency
Deutsche Bundesbank

Consumer prices (year-on-year change in %)

Federal Statistical Office

Interest rates

- Current yield on public-sector bonds (residual life 10 years or more)
- Interest on residential mortgages (initial rate fixation of over 10 years)

OECD
Deutsche Bundesbank.

Devisenkurs (Euro je Dollar)

OECD

Figure 2

Prices and capital values for residential properties

- Top 7, capital values multi-family houses (2010 = 100)
- Top 7, prices owner-occupied dwellings (2010 = 100)
- Germany, purchase values multi-family houses (2010 = 100)
- Germany, prices owner-occupied dwellings (2010 = 100)

vdpResearch
vdpResearch
vdpResearch
vdpResearch

The top 7 markets are Berlin, Hamburg, Munich, Cologne, Frankfurt am Main, Düsseldorf and Stuttgart.

Number of sales in the market for existing properties (in thousands)

vdpResearch

Number of sales in at arm's length transactions which were calculated on the basis of data provided by local expert committees for property values and on vdpResearch projections. The data for 2017 were estimated based on data on individual administrative districts and urban municipalities.

Sales volume in the market for existing properties (in € bn)

vdpResearch

Sales volume in at arm's length transactions which were calculated on the basis of data provided by local expert committees for property values and on vdpResearch projections. The data for 2017 were estimated based on data on individual administrative districts and urban municipalities.

Dwellings completed (in thousands)

- Total
- In new multi-family houses (MFH)
- In new single- and two-family houses (S-TFH)

Federal Statistical Office
Federal Statistical Office
Federal Statistical Office

The data for 2017 were estimated by vdpResearch, using a realization function, on the basis of building permits and dwellings not yet started or already under construction. The realization function establishes the relationship between building permits and dwellings not yet started or already under construction on the one hand and dwellings completed on the other.

Dwellings not yet started or already under construction, dwellings permitted and dwellings completed (in thousands)

- Dwellings not yet started or already under construction
- Dwellings permitted
- Dwellings completed

Federal Statistical Office
Federal Statistical Office
Federal Statistical Office

The data for 2017 were estimated by vdpResearch.

Indicators

Orders on hand residential construction, volume index, 2010 = 100

- Orders on hand, quarter
- Orders on hand, year

Sources

Federal Statistical Office
Federal Statistical Office

Figure 3

Office rents (index, 2010 = 100)

- Germany
Index for new lease rentals in a good location for office properties in Germany as a whole (average for the year)
- 7 cities
Stock-weighted index for prime rents in the cities Berlin, Hamburg, Munich, Cologne, Frankfurt am Main, Düsseldorf and Stuttgart
- 7 cities
Stock-weighted index for prime rents in the cities Berlin, Hamburg, Munich, Cologne, Frankfurt am Main, Düsseldorf and Stuttgart

vdpResearch

JonesLangLasalle

gif

Initial yields (index, 2010 = 100)

- Germany
Cap rate index for office properties in Germany in a good location (average for the year)
- 7 cities
Aggregate index of net initial yields for office properties in prime locations (prime rents) in the cities Berlin, Hamburg, Munich, Cologne, Frankfurt am Main, Düsseldorf and Stuttgart

vdpResearch

JonesLangLasalle

Capital values (index, 2010 = 100)

- Germany
Ratio of rent index (Germany) to cap rate index (Germany)
- 7 cities
Ratio of rent index (7 cities) to index of net initial yields (7 cities)

vdpResearch

JonesLangLasalle,
vdpResearch calculations

New construction

- Deutschland
Completed office and administrative buildings in Germany (total) in 1,000m² floor space. The data for 2017 were estimated by vdpResearch on the basis of building permits using a realization function. The realization function establishes the relationship between building permits and dwellings completed.
- 7 cities
Completions of office space in 1,000m² rental space in the cities Berlin, Hamburg, Munich, Cologne, Frankfurt am Main, Düsseldorf and Stuttgart

Federal Statistical Office

gif

New construction, rental performance and vacancy rate (in %)

- New construction, rental performance and vacancy rate as % of existing office space in the cities Berlin, Hamburg, Munich, Cologne, Frankfurt am Main, Düsseldorf and Stuttgart

gif, vdpResearch
calculations

Investment volume in € bn

- Purchases of office properties and of office property portfolios located in Germany of €10 million or more

RCA

Association of German Pfandbrief Banks

The member institutions which together make up the Association of German Pfandbrief Banks (vdp) have for years now led the market in commercial property financing in Germany and also hold considerable market shares in the financing of residential properties. As their representative, the vdp looks after the Pfandbrief banks' interests in dealings with national and European decision-making bodies as well as with a broad professional public.

The vdp's expertise is geared to the specific requirements of Pfandbrief issuers in terms of the Pfandbrief itself and loans which are eligible as cover assets. Moreover, the vdp promotes the concerns of its members in regulatory matters and represents them vis-à-vis national and European supervisory authorities. Member banks' Pfandbrief-related information and experiences are exchanged within the vdp's respective bodies with a view to developing market standards. Additionally, the vdp provides its members with business solutions to support the Pfandbrief banks in their specific lending and issuing activities.

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vdpResearch GmbH

vdpResearch GmbH, a subsidiary of the Association of German Pfandbrief Banks (vdp), works intensively on compiling, analyzing and forecasting property prices in the context of real estate financing. To this end, vdpResearch examines not only individual properties but also entire property markets. Thus, its remit covers providing comparative prices, comparative rents and other valuation criteria for property markets as well as recording and forecasting market prices by key property types at the regional and national level. In its activities, vdpResearch makes use of specially developed analysis tools and comprehensive models designed to study aggregate market trends.

The figures compiled by vdpResearch are today a vital component for many credit institutions in evaluating and assessing property and market risk. The nationwide property price indices that vdpResearch prepares for the vdp are geared to an interested public and offer an overview of general price trends in Germany's real estate markets.

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