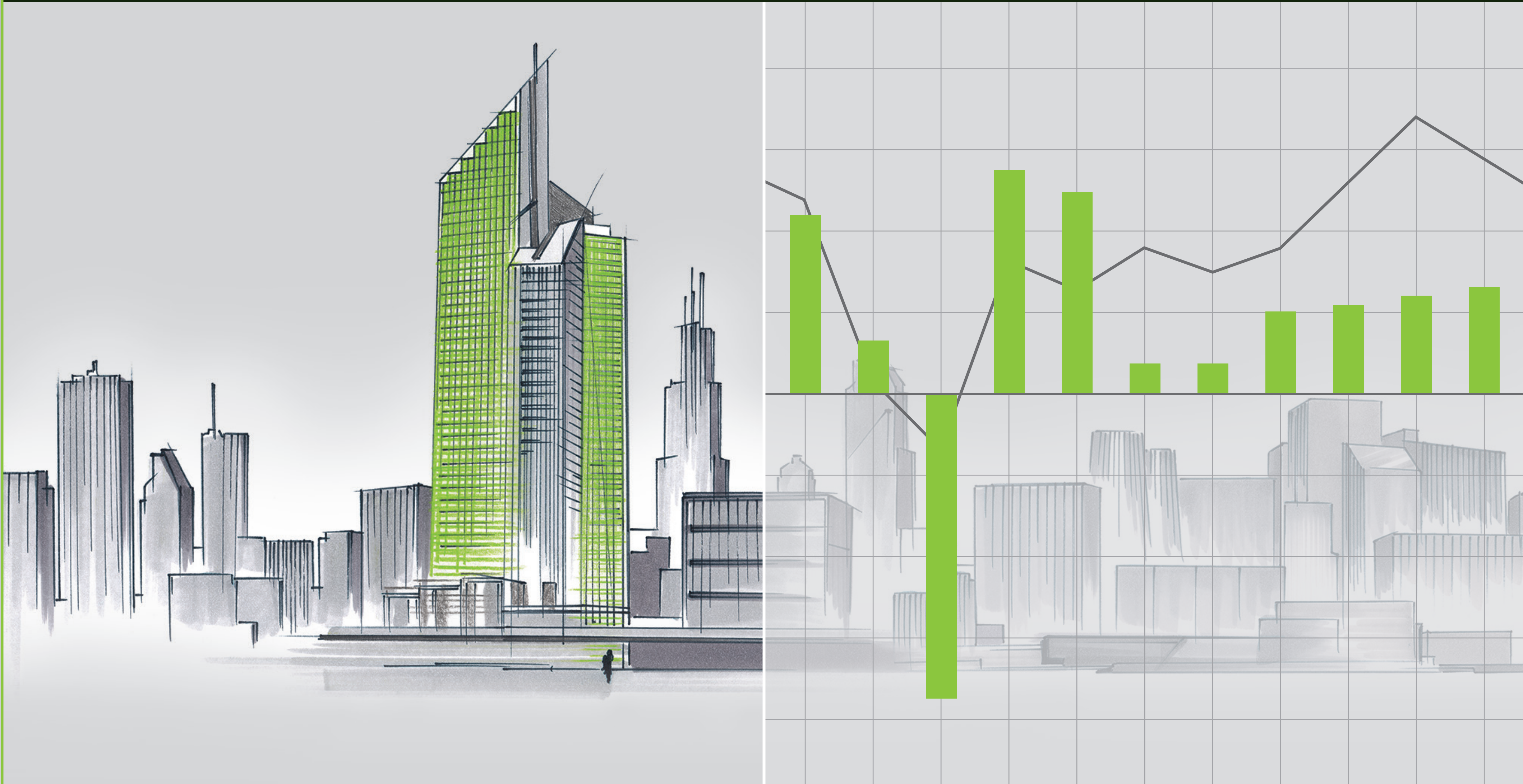
pbbIX
Office Property Market Germany
2018 | Q3



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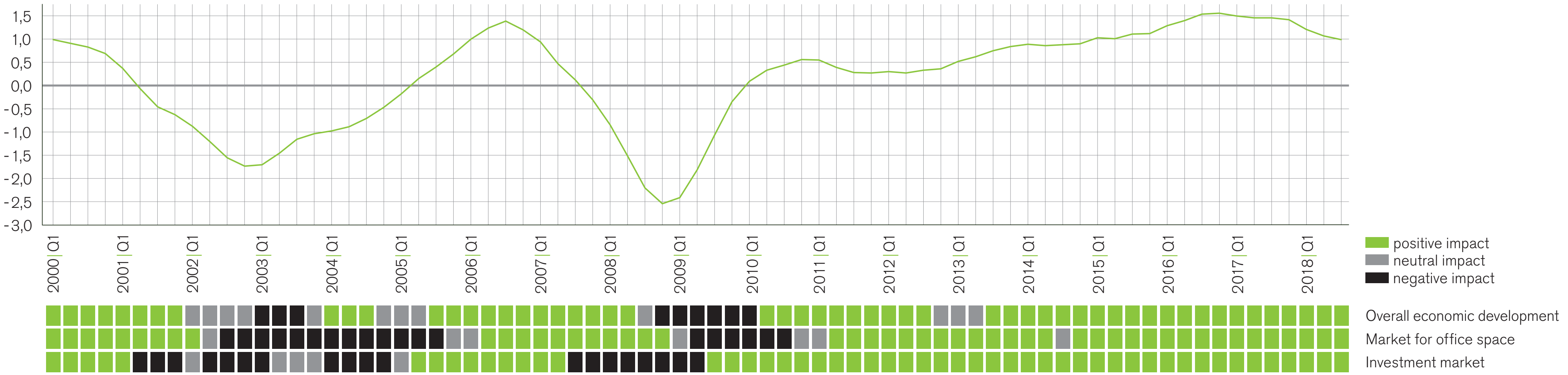
Overview

The pbbIX index family tracks the cyclical development of the seven biggest German office property markets, both individually and on an aggregated basis. Based on up-to-date macroeconomic data as well as on current developments in the office space and office facility markets, the indices reflect the situation on the office property market – which, according to the results, is apparently positive at the moment. Although the composite index has decreased slightly in the third quarter, it remains at a high level. This means that the seven biggest German office property markets, both individually and in total, continue to **outperform the long-term average**.

There are several **reasons** for this: firstly, sustained economic growth – combined with moderate inflation and low interest rates – is leading to an increase in employment. With regard to their cyclical development, office property markets traditionally are strongly influenced by macroeconomic ups and downs. This applies in particular to the current office market trend: the economic upswing of recent years has increased the number of workplaces to a much stronger extent than seen for a long time. Accordingly, there are hardly any vacant offices for rental or sale on the market today.

This leads to the second reason why indicators for the office property market situation remain in the positive range. Office space in Germany is scarce and expensive; considering relatively moderate new construction activity, there is little chance that this situation will change for the foreseeable future. Finally, it is worth noting the growth in the investment markets. However, this has pushed initial yields to a very low level. Purchase prices for office properties are high relative to the rents. Whilst this is not an immediate cause for concern, caution is required.

ppbIX BIG 7 | Index



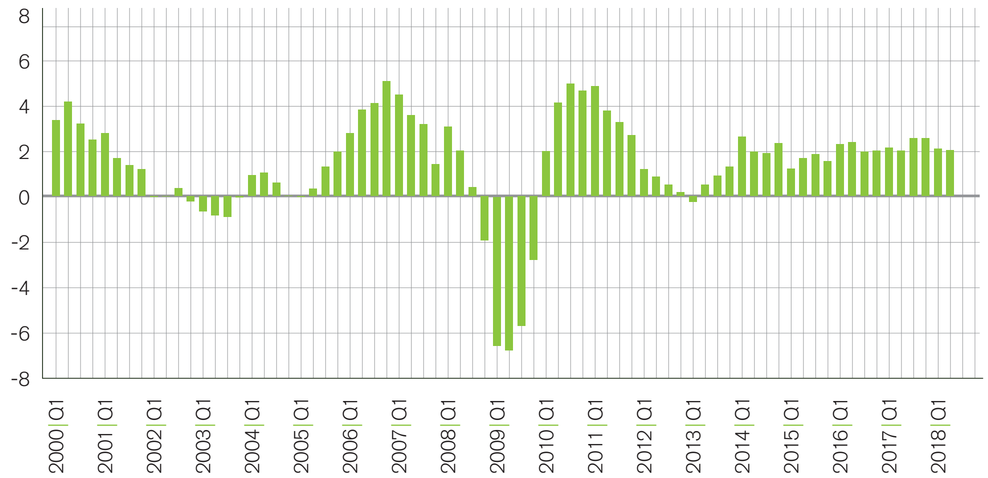
Overall economic outlook

The growth of the German economy, measured in terms of the real gross domestic product, will be **somewhat weaker for 2018 than in the previous year**. The following 3 factors in particular are dampening the momentum of macroeconomic performance: production adjustments in the automotive industry, due to the transition to the new exhaust-gas cycle test WLTP since September; a flattening increase in construction output, which is increasingly reaching its capacity limits; and weaker impulses from the global economy.

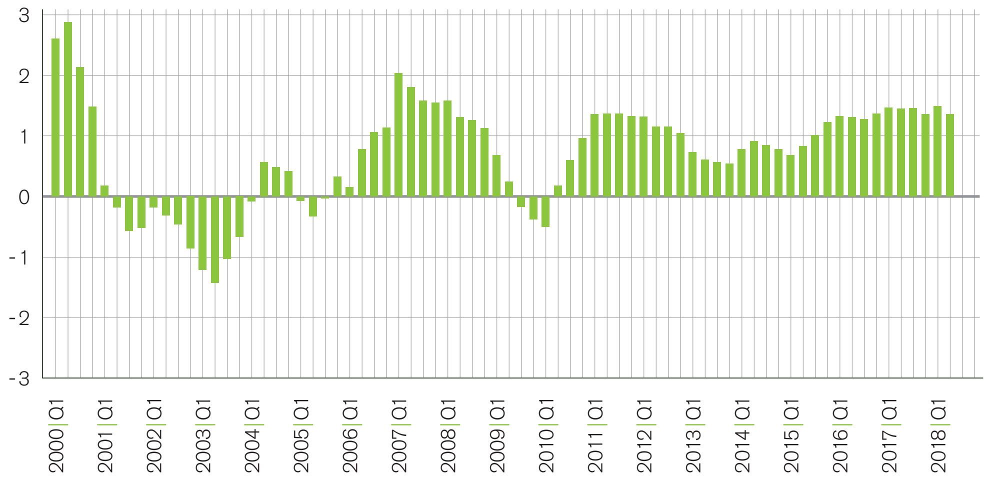
Nevertheless, the German economy is sound and **set to remain on its expansion path**, as the German Central Bank (Deutsche Bundesbank) states in its most recent economic forecast. Income and consumer demand of private households will continue to grow. Manufacturing industry order books are well-stocked, and the construction industry is booming. As employment continues to rise, unemployment figures are falling.

The **ifo Business Climate Index**, which is regarded as one of Germany's most important leading indicators, confirms the assessment that the German economy is in good shape overall. The index fell slightly in June and July, followed by a considerable rise in August, which in turn was followed by a very slight fall in September. Overall, the ifo index indicates a stable German economy, although some uncertainty about future developments is apparent. The situation in the main construction sector is considered to be particularly favourable. Managers surveyed by the Ifo Institute are also satisfied with the current situation in the service sector, which is directly relevant to the office market.

Real gross domestic product | year-on-year change in %



Working population | year-on-year change in %

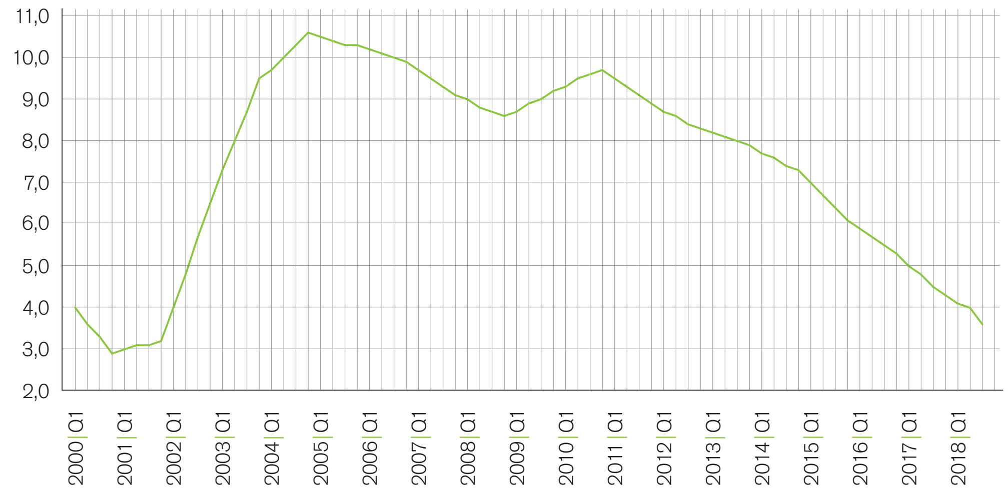


Market for office space

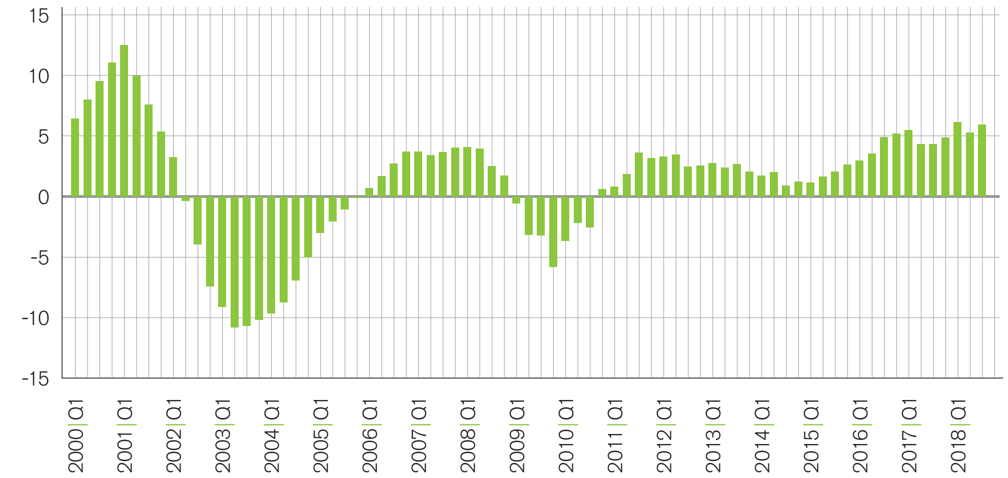
Strong economic development in the aftermath of the financial markets crisis has produced a very satisfactory growth path for office space demand. Over the course of many years, it was possible to **gradually reduce vacancy rates** without causing an excessive or accelerated rent increase. However, more recently this has only been true to a limited extent. Driven by growing market tightness – in the third quarter of 2018, only slightly less than 4 % of aggregate office space in the BIG 7 markets was vacant – new contract rents are increasingly rising faster. In all seven markets, rents recently rose at an annual rate of around 6 %.

Although rents are rising sharply and vacant space can be easily marketed, there are still no signs of any **substantial stimulation in terms of new construction activity**. The current scope of project planning for new office space – or, more importantly, project completion – is insufficient to take pressure off the market. Right now, there is a greater danger that supply will continue to dry up than any risk of excessive new construction. Landlords will therefore maintain (or even expand) their excellent negotiating position for the time being, and will most likely use it to further exploit the scope for higher rents. Furthermore, the more pronounced general price increase also tends to drive up rent levels. As a result, the nominal cash flow from office property is likely to be noticeably higher than in recent years. In other words, the market for office space remains tense, generates high cash flows, and is hardly susceptible to negative demand shocks.

Office space vacancies (BIG 7) | in % of the portfolio



Top rents (BIG 7) | year-on-year change in %



Investment market

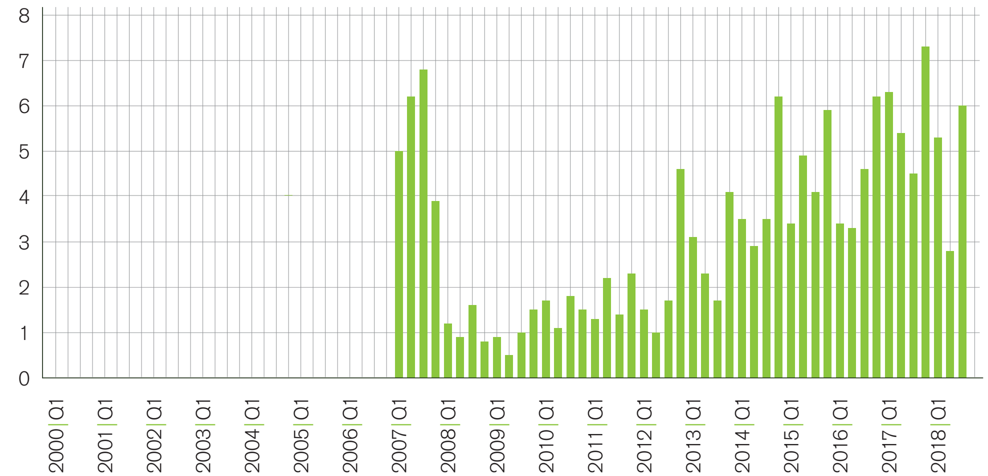
Notwithstanding the valuations and very low initial yields, the BIG 7 office markets continue to see substantial **inflows of funds**. According to preliminary figures from RCA, a total of around €14.2 billion was spent during the first three quarters of 2018 on the acquisition of existing office properties, with foreign investors accounting for some 45 %. This was the second-highest level after the end of the financial markets crisis, based on the first three quarters of each year; funds spent for the acquisition of office property were only higher in 2017.

On the one hand, the **attractiveness of office property**, which is reflected in the high inflow of funds, is due to the limited investment alternatives available; the fact that cash flows are expected to remain both high and stable add to this. As described above, from a landlord‘s point of view, the rental markets are in a very comfortable situation, and this is unlikely to change in the near future.

Though initial yields have continued to fall until recently, property valuations have once again risen more strongly than rents. Up until now, investors are therefore still **not expecting the bull market coming to an end**. What does this mean? The end of falling capital market interest rates has not yet significantly curbed buyers‘ risk appetite. Despite the yield compression real estate investments remain attractive, since in today’s environment there are hardly any investments providing returns at all. As paradoxical as it may sound, this lack of return elsewhere has evolved into a force that supports and enhances the classic office market cycle. However, the very low initial yields should offer a cautionary note. In the interest of market stability, it would be desirable if property values did not continue to diverge from rent developments.

Initial net yield (BIG 7) | in %

Investment volume (BIG 7) | in € billion

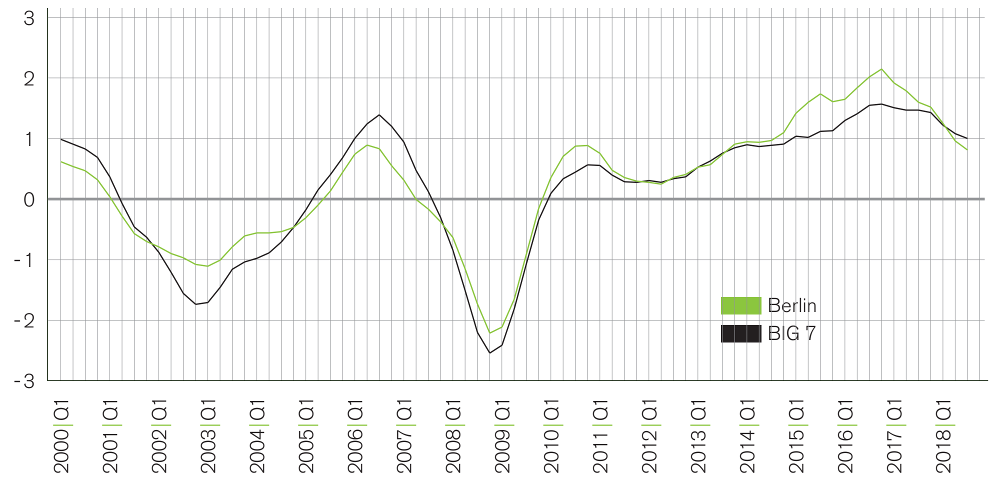


BIG 7

BERLIN

While vacancy rates used to be relatively high in Berlin, **office space has now developed into a very scarce commodity** there. Given high demand for space and – so far – very restrained new construction activity, the vacancy rate has fallen to currently around 2 %. Accordingly, rent development is clearly pointing upwards, with top rents around € 32 to € 33 recorded in the third quarter. Net initial yields remain at a low level without sustainably pointing in any direction, whilst demand for investment property remains brisk. Although inflows in the first three quarters of 2018 were lower than in the same period of the previous year, **overall transaction volumes are at a very high level**.

pbbIX Berlin | Index



HAMBURG

The **boom on the office space market** continued in Hamburg. As in most other markets, the current market development is characterised by persistently high demand for space and new construction activity that is lagging behind space absorption. The reduction in vacancy rates associated with this development preserves the upward pressure on rents. New contract rents accordingly continued to rise both at their peak and on average during the third quarter of 2018. The financial resources invested for the acquisition of office properties located in Hamburg up to the end of the third quarter remain at a very high level, and have hardly changed compared with the two previous years. **Yields** for first-class properties in the prime locations, which have been trending sideways for several quarters, have barely changed.

pbbIX Hamburg | Index

BIG 7

MUNICH

The Munich market for office space is currently going through a phase that can be described as extraordinary in terms of employment growth, demand for and turnover of space, and vacancy levels. According to various broker firms, during the first three quarters of this year Munich has seen the highest office space turnover since 2001. Likewise, vacancies have reached the lowest level since 2001: less than **1 % of the portfolio remains unlet** in the particularly attractive sub-markets. In line with the office space market, the **demand for property** on the investment market remains high. In the first three quarters of the current year, a similarly good result was achieved as in the first three quarters of 2017, whilst the prime yield once again declined slightly.

pbbIX Munich | Index

COLOGNE

The current cyclical development on the Cologne office market hardly differs from that on the other markets. High demand for offices – which could only be met to a limited extent recently, due to a lack of space available at short notice – is causing vacancy rates to fall further on the one hand, and is leading to rising rents on the other. Only a very small portion of the newbuilt space due to come onto the market between now and the end of the year has not been contracted yet, hence **a further reduction of vacancies is expected**. In the third quarter of 2018, the vacancy ratio was around 3.5 % and thus already at a very low level. During the first three quarters of 2018, **total investments for the acquisition of office properties** in Cologne were **lower** than in the same period of the previous year, whilst top yields still moved sideways.

pbbIX Cologne | Index

DEUTSCHE PFANDBRIEFBANK

BIG 7

FRANKFURT

For many years, the Frankfurt office space market had to face considerable vacancy levels. Restrained new construction activity and a relatively high demand for space have meanwhile solved this problem to a large extent: at present, only around 7 % of office space remains vacant. It is generally fair to expect a further positive development of the office space market. However, the city has recently seen a **significant increase in new construction space**, of which around half has not yet been prelet. It remains to be seen to what extent these spaces will be let to financial services providers choosing Frankfurt as their new location post-Brexit. During the third quarter of 2018, the Frankfurt office market **regained investor attention**: no other German market achieved such high inflows of funds as Frankfurt.

pbbIX Frankfurt | Index

DUSSELDORF

During the first three quarters of 2018, office lettings reached a similar level as in the previous year. Vacancy rates thus continued to decline slightly and stood at around 7 % within the city limits. In line with the scarcity of space in the preferred locations, prime rents rose slightly during the third quarter. Considering the high preletting rate of over 60 %, the major broker firms agree that the **supply situation on the Dusseldorf office market is unlikely to change in the short term**. The demand for office property for investment in Dusseldorf was exceptionally dynamic over the first nine months. Consequently, a **record figure** may be expected for the year as a whole.

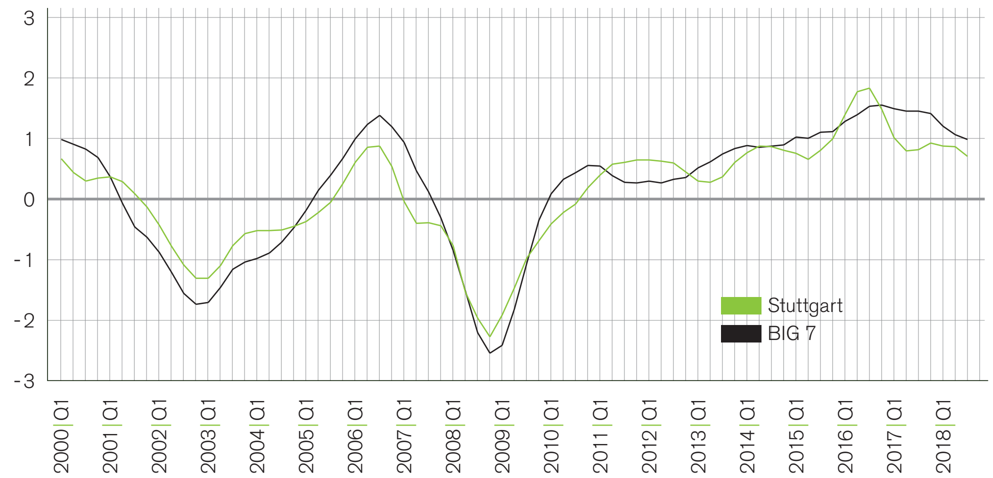
pbbIX Dusseldorf | Index

BIG 7

STUTTGART

The market for office space, which is strongly dominated by owner-occupiers – more than 40 % of the space changing hands during the first nine months can be attributed to this demand group – recorded a decline of new rentals due to a lack of supply in the first three quarters of the current year. Since new construction activity is low, with a high portion of prerentals, vacancies have fallen again and are already at a critically low level of around 2.5 %. In accordance with this **scarcity**, average rents showed an upward trend, albeit marking only a slight increase. The Stuttgart office property market, which is regarded as extremely stable, is attracting increasing interest from investors. This is reflected in an increasing **transaction volume** with slightly declining prime yields.

pbbIX Stuttgart | Index



About the pbbIX real estate index

SCOPE AND METHODOLOGY

As the last two decades have shown very clearly, the development of real estate markets is not a continuous trend that is free of disruption – instead, they are characterised by significant cyclical fluctuations. The pbbIX index family tracks these fluctuations on Germany's key office property markets. The index family comprises a total of eight indices: seven individual indices for the office property markets in Berlin, Cologne, Dusseldorf, Frankfurt, Hamburg, Munich and Stuttgart, plus a composite index which tracks overall economic development of the ‚BIG 7' markets.

The indices are based on the results of a dynamic factor model, which brings together eleven variables, using time series to extract the key driving forces for economic trends of office property markets. Specifically, these variables relate to macroeconomic developments, the rental market, and the investment market across the seven office property markets covered. As a preparatory step for the factor analysis, the various market-related indicators are aggregated to form a market indicator measuring a development overall (for example, vacancies or new construction activity). The data list shown below sets out the indicators which were used for the dynamic factor analysis.

In addition to the office property market indices, the presentation contains assessments regarding the components of ‚macroeconomic developments', ‚market for office space', and ‚market for office investments'. The directional impact of these components on the composite indicator is colour-coded: GREEN indicates a positive, BLACK a negative and GREY a neutral impact.

DATA LIST OF THE DYNAMIC FACTOR MODEL

Macro-economic developments
- Real gross domestic product, (YOY change, in %)
- Workforce in the BIG 7 markets (YOY change, in %)
- Consumer prices, (YOY change, in %)
- Current yield (Umlaufrendite) for public-sector bonds with a minimum remaining term of 10 years (in %)

Rental market
- Completed office and administrative buildings (m² of floor space in the BIG 7 markets)
- Marketing volume (m² of floor space, in the BIG 7 markets)
- Vacancies (% of gross available area, in the BIG 7 markets)
- Top rent (€ per m², for the BIG 7 markets
- Average rent (€ per m², for the BIG 7markets.

Investment market
- Net initial yield (in %, for the BIG 7 markets)
- Inflow of funds (€ mn)