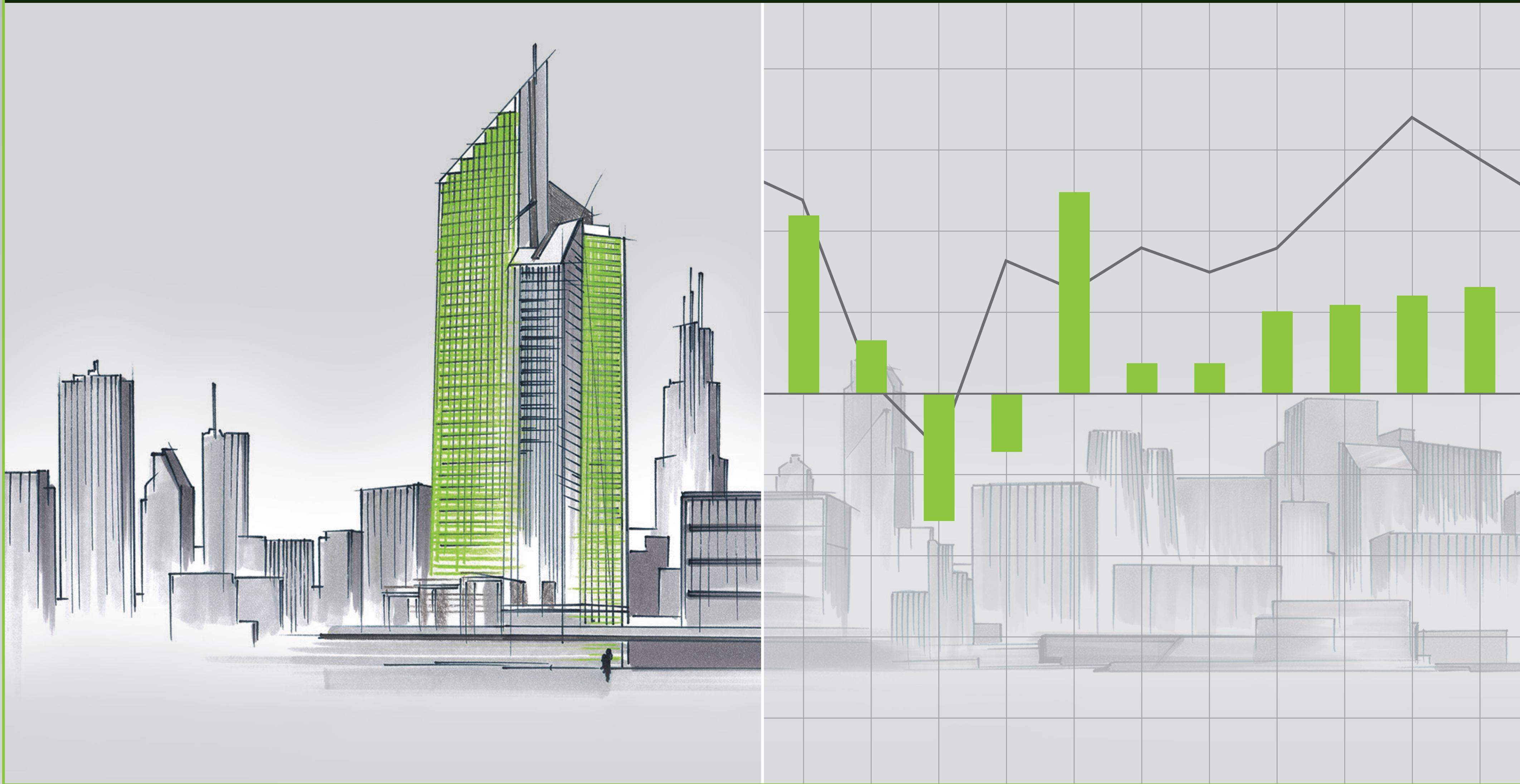
pbbIX
Office Property Market Germany
2019 | Q1

DEUTSCHE PFANDBRIEFBANK



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Overview

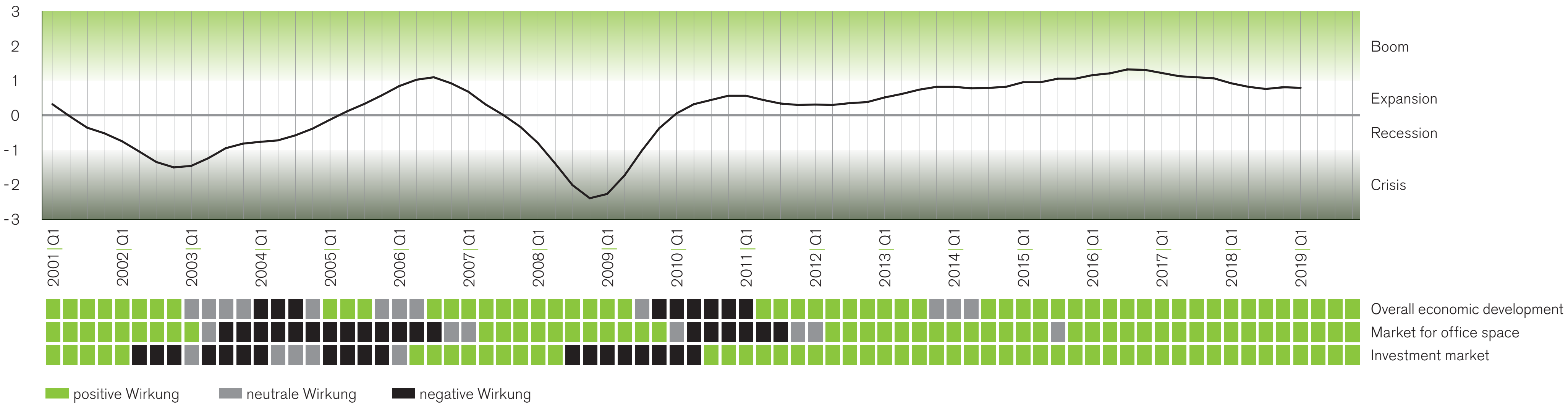
The BIG7 office markets remained on an **upward trend** in the 1st quarter and thus again defied the challenges of the weaker economic development. The pbbIX office property market index fell only slightly compared to the previous quarter and, with a value of 0.79, remains at a level which suggests an upward office market trend.

The lynchpin of this development is the **situation on the markets for office space and the rental market**. Vacant office space at the major office locations in Germany is currently very limited. Overall, the demand for office space remains higher than the number of new buildings being completed. This shortage, which is in some cases extreme, has once again intensified and continues to result in rising rents for newly let space.

The pbbIX office property index was supported by developments on the **investment market**. Inflow in the first quarter of 2019 was notably lower than in the record-breaking fourth quarter of the previous year. Nevertheless, the initial yields, albeit with a slight decline, clearly show that investors continue to regard office properties as attractive. The majority of investments came from international investors.

The **same risks and uncertainties** which were observed in the previous quarter also apply to the further market development. The economic downturn calls for caution. In addition, the scope for further strong increases in capital values is likely to be largely exhausted due to the very low initial yields. In the long run. the capital values can only rise with the development of the rental prices.

pbbIX BIG 7 | Index

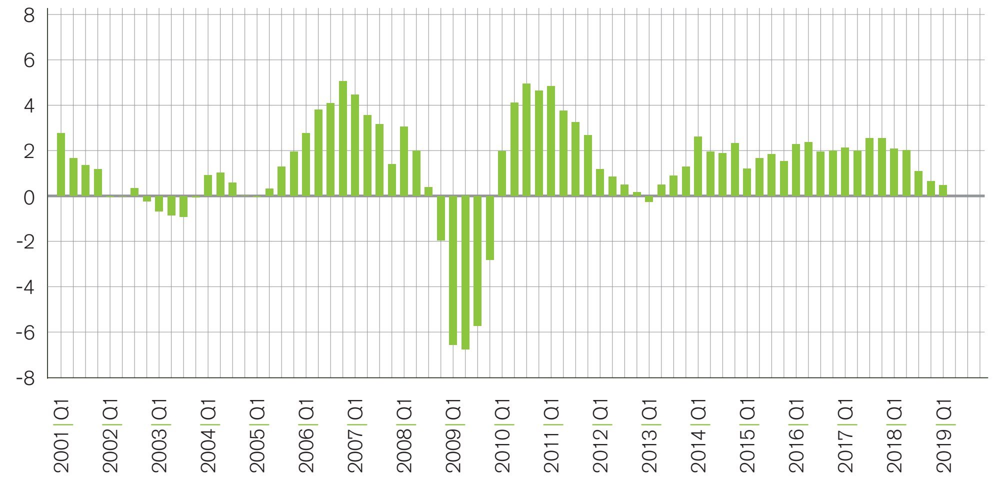


Overall economic outlook

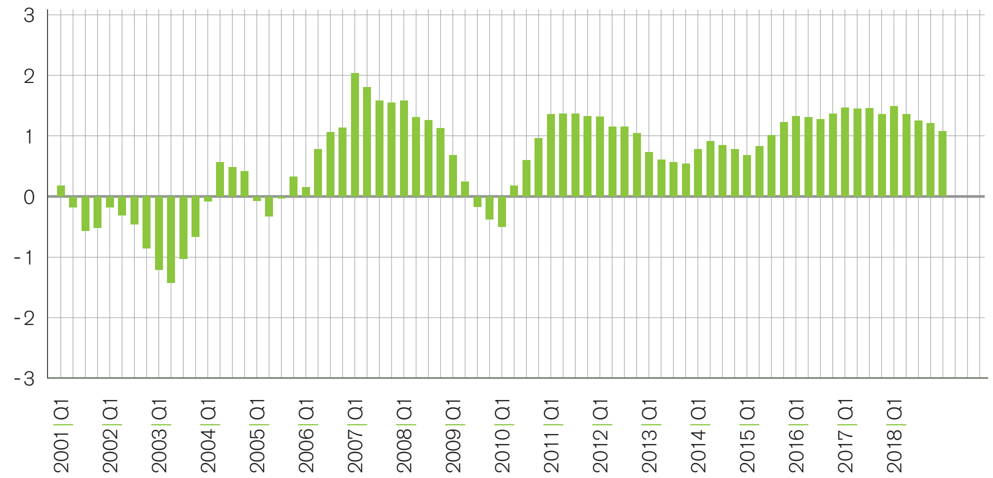
The **weaker growth** of the German economy continued in the 1st quarter of 2019. The reasons lie both in the overall international economic environment and in industry-specific events in Germany. These include the trade conflicts originating in the US, the unclear consequences of Great Britain's withdrawal from the EU, various challenges in the automotive industry and capacity bottlenecks in the construction industry slowing growth. Accordingly, the weakening is reflected both in net exports and in domestic demand, above all in investments. In the first quarter of 2019, the combined economic output, measured in terms of real gross domestic product, hardly increased – continuing the trend of the previous quarter. Economic development is expected to be sluggish over 2019 as a whole. In their joint diagnosis, Germany's leading economic research institutes have come to the conclusion that real gross domestic product will grow at an average annual rate of only 0.8 %.

As a result of the economic weakness, **companies are more reluctant to increase employment**. This is shown by the ifo Employment Barometer, which looks at employment plans for the next three months. This „barometer" has fallen continuously since the beginning of the year. Particularly in the manufacturing sector, more companies want to reduce than increase the number of employees. Overall, however, the number of employees has continued to rise because new jobs have been created, particularly in the service sector and in the construction industry. All in all, the negative effects of the current economic weakness on the demand for office space are likely to be limited.

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



Working population | year-on-year change in %



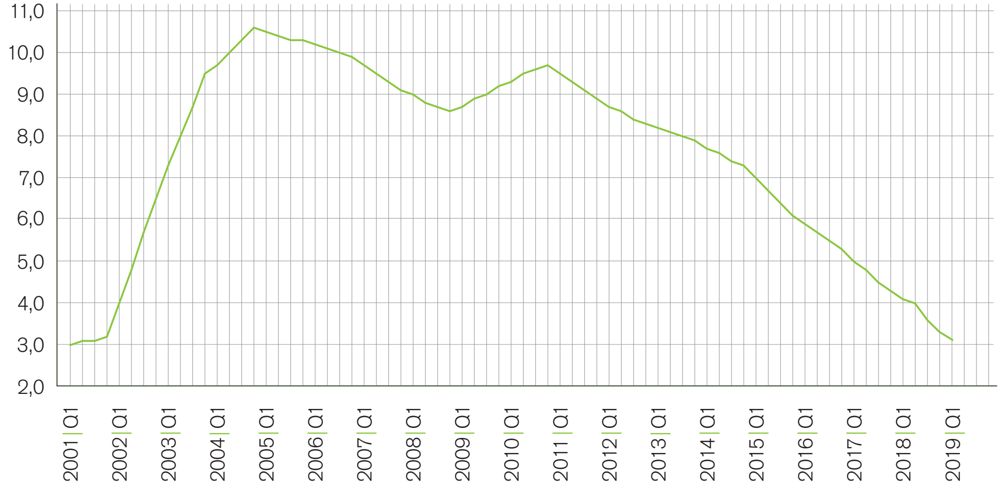
Market for office space

The economic slowdown and the related uncertainties and risks have **not yet had a significant impact on the market for office space**. Despite the general economic weakness, they are still in very good shape. In the first quarter of 2019, the combined vacancy rate in the BIG7 markets fell once again and is now at a level last reached around 19 years ago. In recent months, tenants have been easily found for newly constructed space. Although turnover in office space recently declined slightly, this was mainly due to supply-side bottlenecks and not to insufficient demand.

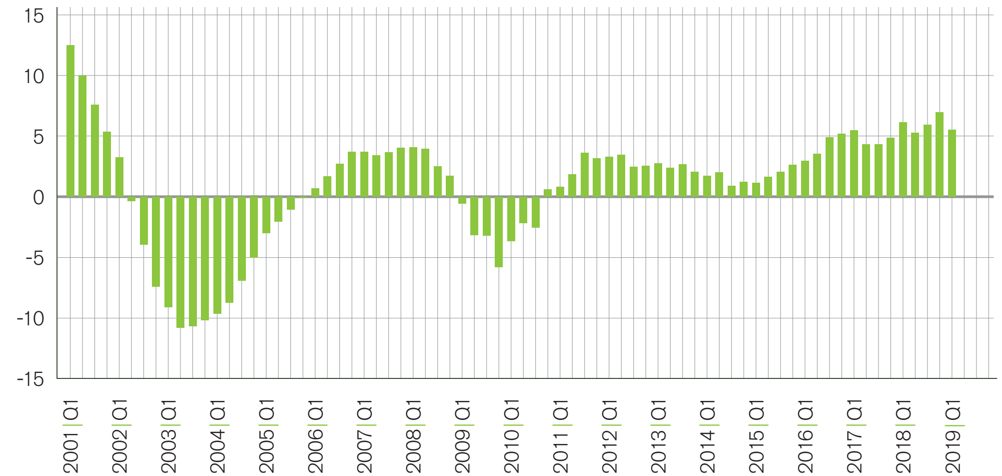
This will change little in the foreseeable future. There is no threat of a supply shortage. Although significantly more new office space will come onto the market this year than last year, **vacant office space remains a rare commodity**. Firstly, a large proportion of the new space has already been prelet. Secondly, it is not the number of office jobs that is declining, but rather the number of new office jobs being created is decreasing.

The market situation therefore remains excellent from the landlord's point of view – tenants obviously accepted this once again in the first quarter. In all markets, the **increase in rents** continued due to competition for the scarce space available. In the BIG7 markets as a whole, prime rents in the 1st quarter of 2019 were 1.6% higher than in the previous quarter and 5.5% higher than in the corresponding period of the previous year. The course of rental development is therefore still set for expansion.

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



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



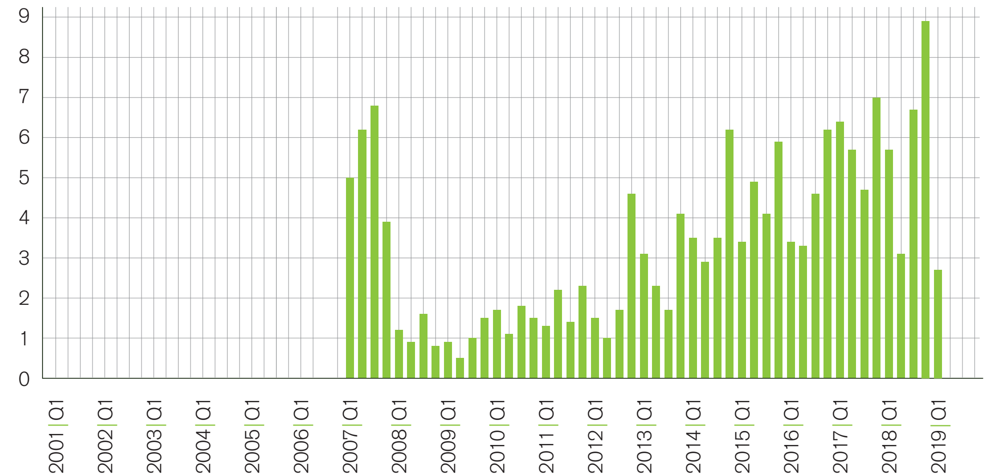
Investment market

In the first three months of 2019, **capital inflows to the investment market declined noticeably.** This decline is mainly due to the exceptionally high inflows in the previous quarter (just under € 9 billion). It is therefore more of a statistical phenomenon than a decline in investor interest in investments on the office market. According to Real Capital Analytics, office properties with a total value of € 2.7 billion changed hands. Almost 60% of the inflows came from abroad, mainly to Berlin and Munich. These two cities accounted for 54% of all capital inflows and 75% of all capital inflows from abroad.

The development of the net initial yields shows that office properties in the BIG7 markets are highly attractive to investors and therefore continue to be in high demand. Despite record-low starting levels, **yields again fell slightly in the first three months of the current year**. The decline is fundamentally justified as debt and capital market interest rates are very low. In addition, there was a favourable development on the property market. Despite the gloomy economic development, the prevailing demand will ensure stable and simultaneously rising rental income. This at least partially compensates for the rising risk of losses, which is inherent in the low yields. In principle, however, it is important to bear the following in mind: The further initial yields fall and the further rents increase, the more the downside risk of new real estate investment increases.

Initial net yield (BIG 7) | in %

Investment volume (BIG 7) | in € billion

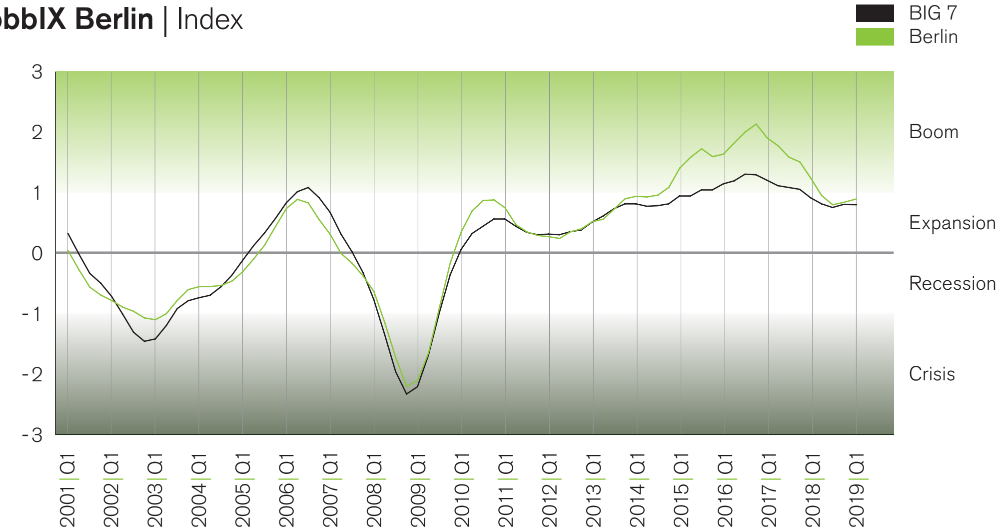


BIG 7

BERLIN

The high demand for office space in Berlin continued in the first quarter of 2019, both on the investment market and on the market for office space. The investment market again generated substantial turnover (€ 880 million). Several large-volume purchases, such as the Oberbaumcity office district and the completely revitalised Pressehaus am Alexanderplatz, made a major contribution to the result. The sideways movement in yields, already observed last year, has continued to consolidate in the first three months. On the other hand, there has been a further increase in prime and average office rents because user demand remains high. Compared to the same quarter of the previous year, take-up again rose slightly. Despite a noticeably higher volume of completions, vacancy fell again against the backdrop of the high pre-letting rate.

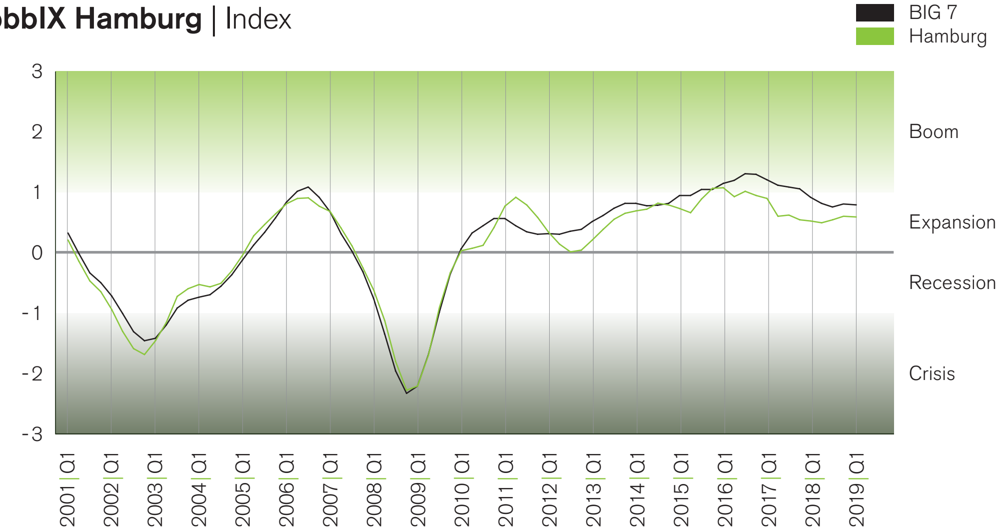
pbbIX Berlin | Index



HAMBURG

After a record result in the previous year, the investment market in Hamburg got off to a weaker start in the first quarter of 2019. Office properties with a total value of around € 230 million were traded. At € 100 million, the largest deal was the Burstah Ensemble in Hamburg central business district, where various other uses could emerge in the next few years in addition to office space. Initial prime yields remained unchanged at the low level of the previous quarter. On the market for office space, on the other hand, there was a noticeable increase in turnover, which was due in particular to several major deals, such as Xing (Unilever-Haus) and Vattenfall (Elbbrückenquartier). Accordingly, vacancies continued to decline. As in the previous quarter, office rents continued to peak at around € 28 per m².

pbbIX Hamburg | Index

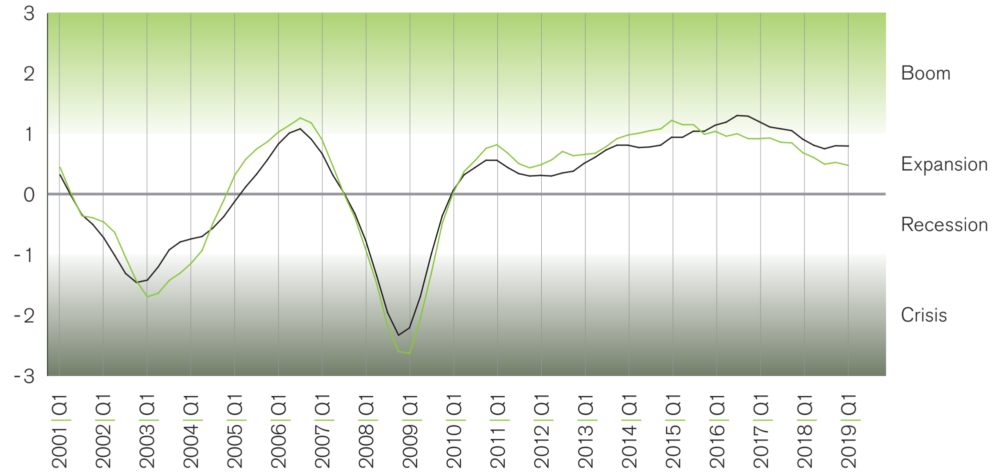


BIG 7

MUNICH

In Munich, too, the investment market started 2019 with a lower inflow of funds (€ 590 million). Domestic investors, in particular, showed lower volumes, although the sum of foreign investments was still comparatively high. The reasons for this decline were both a tight supply and the absence of large-volume deals. Only the acquisition of Westend Yards with a purchase price of € 135 million was in the three-digit million range. The net initial yield again declined slightly. In Munich, the vacancy rate is below 2 %. There is a lack of vacant space, which is increasingly slowing down take-up. At a good 190,000 m², more than 15 % less space was taken up in the 1st quarter of 2019 than in the corresponding quarter of the previous year. The shortage of space led to a renewed rise in prime rents.

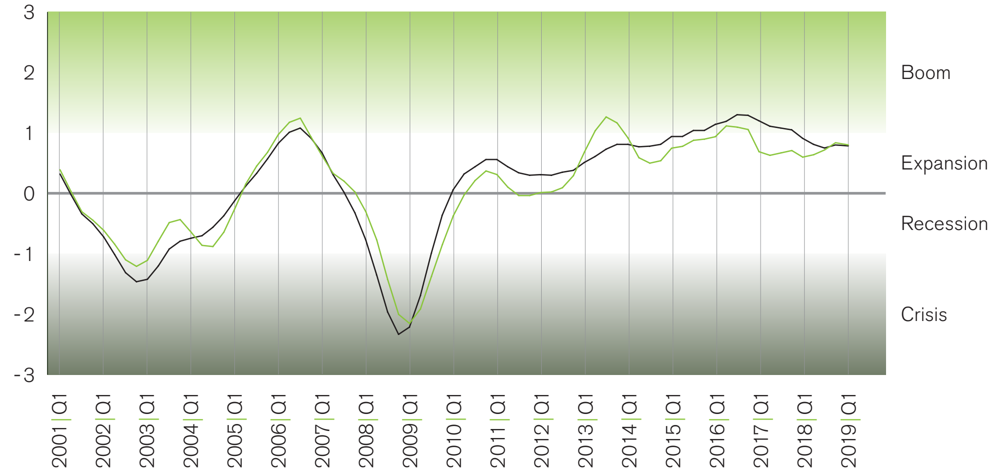
pbbIX Munich | Index



COLOGNE

In the first three months of 2019, office properties with a value of € 260 million were acquired, with domestic investors accounting for almost 90 % of the total. The largest transaction was the planned Wallarkaden, which changed hands for € 140 million. With regard to the initial yields, there was no change either on average or at the peak. Compared to the same quarter of the previous year, take-up of space showed a significant increase due to a higher number of large-scale leases. The largest leases include Sparkasse KölnBonn (16,000 m²) and WeWork (7,000 m² and 5,200 m² respectively). The vacancy rate for office space fell again and is now below the 3 % mark, so that office rents continued to rise.

pbbIX Cologne | Index

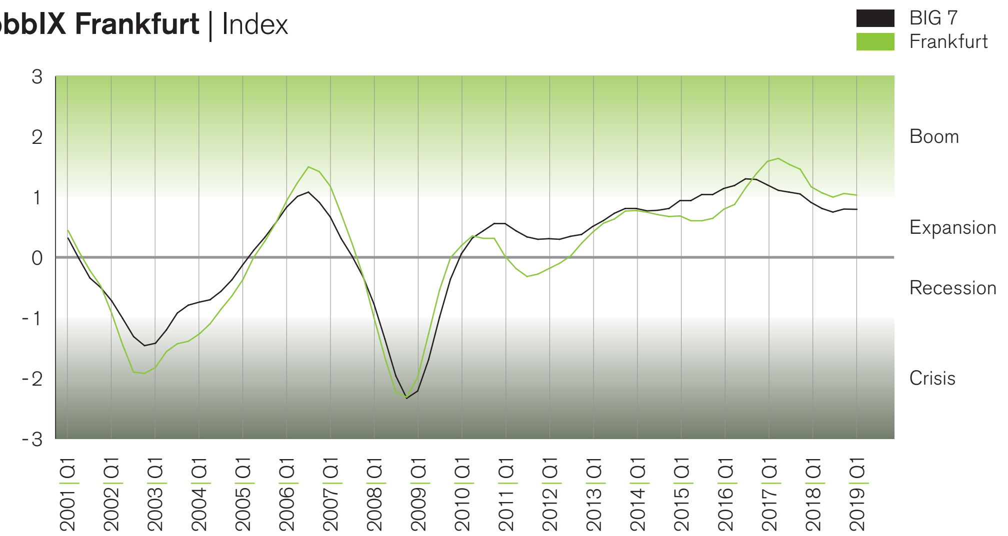


BIG 7

FRANKFURT

After an enormous year-end spurt, the Frankfurt investment market got off to a weak start. In total, office properties worth almost € 500 million changed hands, with domestic and foreign investors being almost equally active. One reason for the low turnover is the lack of large-volume deals starting at € 100 million. Yields and prime rents were largely stable. The market for office space also ended the first quarter with a lower turnover than in the previous year. KPMG completed the largest contract by far with a rental area of around 45,000 m^2 and extended its existing lease in The Squaire by 10 years. At over 6 %, the recent stagnation in office vacancy in Frankfurt is significantly higher than the average for the other BIG7 markets.

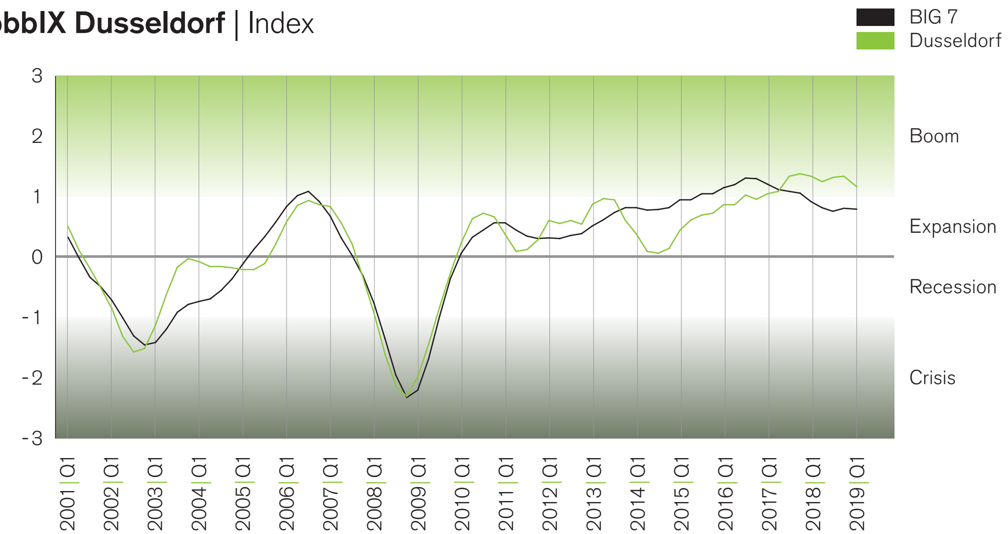
pbbIX Frankfurt | Index



DUSSELDORF

In the first quarter of 2019, activity on the investment market in Düsseldorf was subdued and – in contrast to the previous quarter – foreign investments in particular failed to materialise. According to the figures available to date, office properties with a total value of more than € 210 million were traded. Of this amount, more than half (€ 140 million) was attributable to a single transaction – the purchase of the Herzog Terraces in Düsseldorf's city centre. While prime yields again fell slightly, prime rents moved sideways compared to the previous quarter. The letting market was brisk thanks to several large-scale leases, such as Barmer (13,600 m^2) and Agentur für Arbeit (11,800 m^2), so that the letting performance was significantly higher than in the same quarter of the previous year. As a result, the still comparatively high vacancy rate fell to 6 %, its lowest level since the end of 2001.

pbbIX Dusseldorf | Index

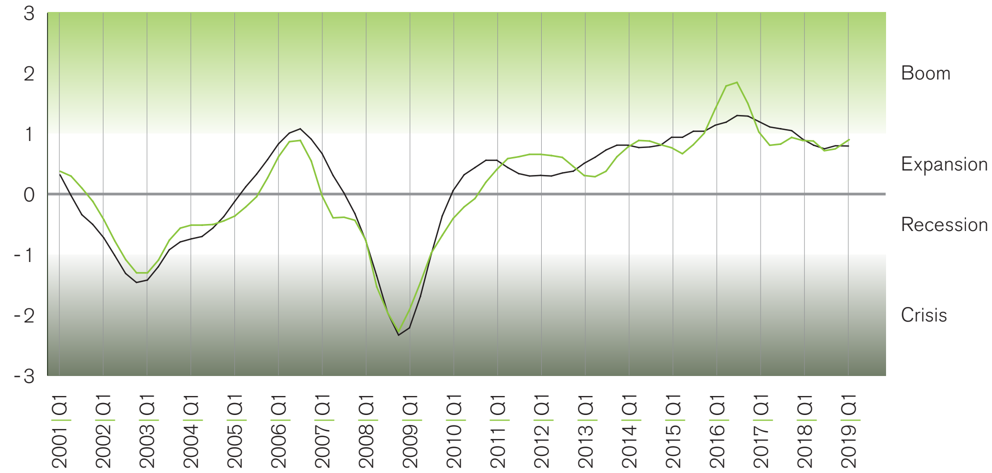


BIG 7

STUTTGART

The investment market in Stuttgart is still on a growth path, although in the first quarter of 2019 the transaction volume of office real estate, at around € 190 million, was lower than that of retail properties. The largest office transaction was the purchase of Albplatz Forum for € 90 million. Against the backdrop of high demand, yields again fell slightly. At the same time, rents for office space again rose slightly. This was due to extremely brisk demand for large units, such as Siemens (20,000 m²) and Vector Informatik (25,000 m²), which led to an above-average letting result. At the same time, the vacancy rate fell to an all-time low, as only a few properties under construction are still available on the market.

pbbIX Stuttgart | Index



About the pbbIX real estate index

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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 (m^2 of floor space in the BIG 7 markets)
- Marketing volume (m^2 of floor space, in the BIG 7 markets)
- Vacancies (% of gross available area, in the BIG 7 markets)
- Top rent (€ per m^2, for the BIG 7 markets
- Average rent (€ per m^2, for the BIG 7markets.

Investment market

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