pbbIX
Office Property Market Germany
2021 | Q4

DEUTSCHE
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Overview

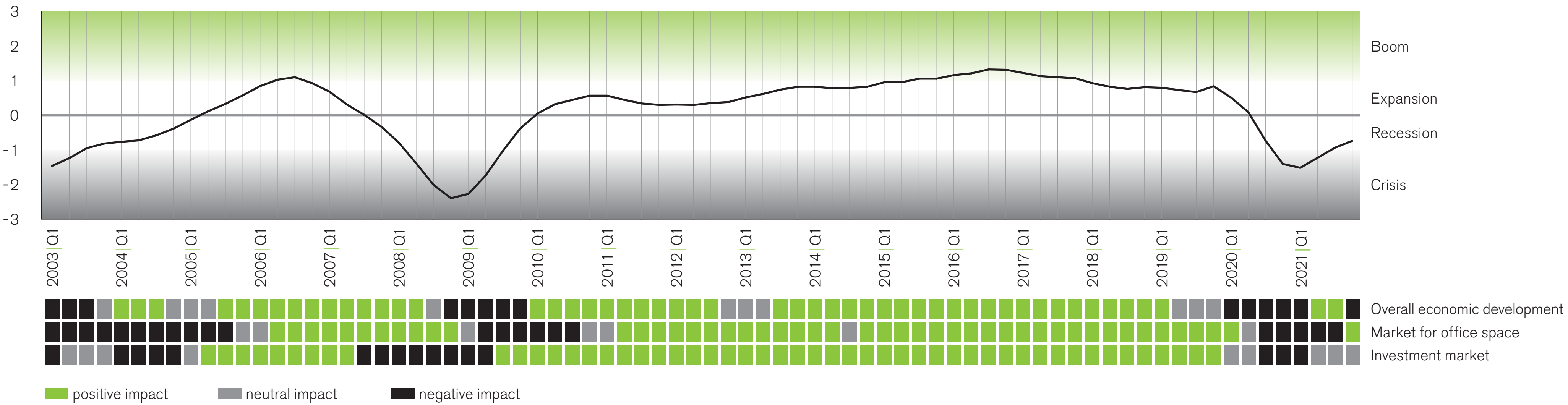
The pbbIX real estate index remained negative in the fourth quarter of 2021, albeit getting closer to the zero line for the third time in a row and recovering by 0.17 points, from -0.91 to -0.74. This means that the **downturn in the seven most important German office markets has continued to decelerate**, but has not yet been completely overcome. Of the sub-markets, only Berlin is expanding again, with an index level of 0.24 points.

Macroeconomic development suffered in the final quarter of 2021 and was thus the **main reason impeding** a strong improvement. In the wake of the fourth pandemic wave associated with weaker private demand, real gross domestic product fell by 0.7 % compared to the third quarter – far more than expected.

Letting performance, on the other hand, soared again in the fourth quarter, whilst rents for newly-let first-class properties continued to trend slightly upwards and vacancy rates remained unchanged. Capital inflows, mainly from domestic investors, increased, thus contributing to a stabilising investment market. At slightly lower initial yields, investors favoured core properties.

COVID-19 infection rates are still causing **significant risks and uncertainty**, which, however, should wane over the next few months. Supply chain issues are also expected to ease. However, a new negative factor has developed, which is the potential impact of higher inflation on the macroeconomic development and the office market.

pbbIX BIG 7 | Index



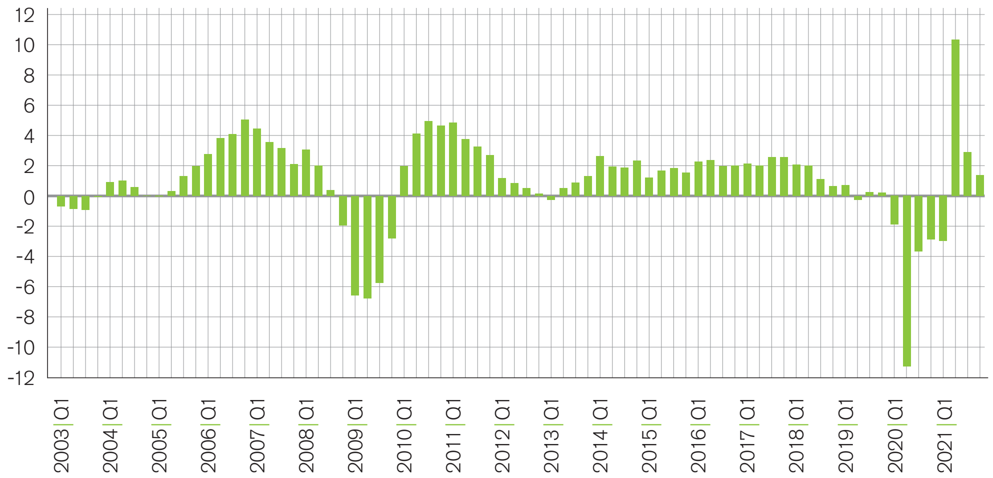
Overall economic outlook

Recovery for the German economy was interrupted by the fourth pandemic wave in the final quarter of 2021. Adjusted for seasonal effects, **real gross domestic product fell by 0.7 % compared to the previous quarter**. This worse-than-expected downturn was mainly driven by slow private consumer demand which in turn was burdened by containment measures and by consumers adjusting their consumption patterns due to the pandemic. At the same time, supply bottlenecks, raw material shortages, and soaring prices for primary products burdened construction investments, which were also lower quarter-on-quarter.

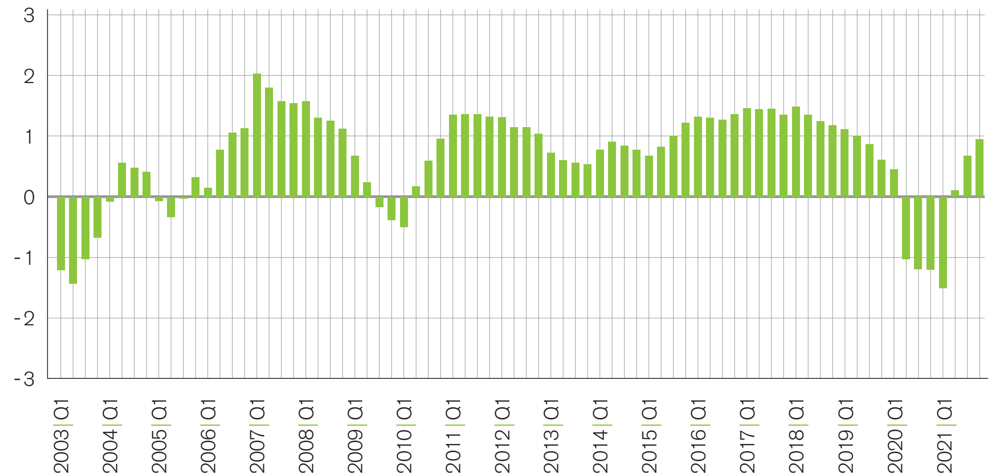
All in all, **2021 was a choppy year** for the German economy – marked by the ups and downs in infection figures (which rose, were contained, and subsequently rebounded again). An average annual economic growth of 2.7 % was insufficient to fully offset the sharp drop seen in 2020. On a positive note, labour market trends have been steadily improving since the first quarter of 2021, and sentiment among companies is brightening again. Whilst companies assessed the situation somewhat more pessimistically in January 2022 than in the previous months, expectations are clearly trending upwards. Even in the services and trade sectors pessimism is dwindling.

Various factors indicate that the pandemic will loosen its grip on the economy in the upcoming months. Therefore, the high employment rate and consumer savings provide a sound foundation for strong growth in private consumption. **The general pricing development is uncertain**. Should inflationary pressure persist, monetary policy could become more restrictive.

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



Working population | year-on-year change in %



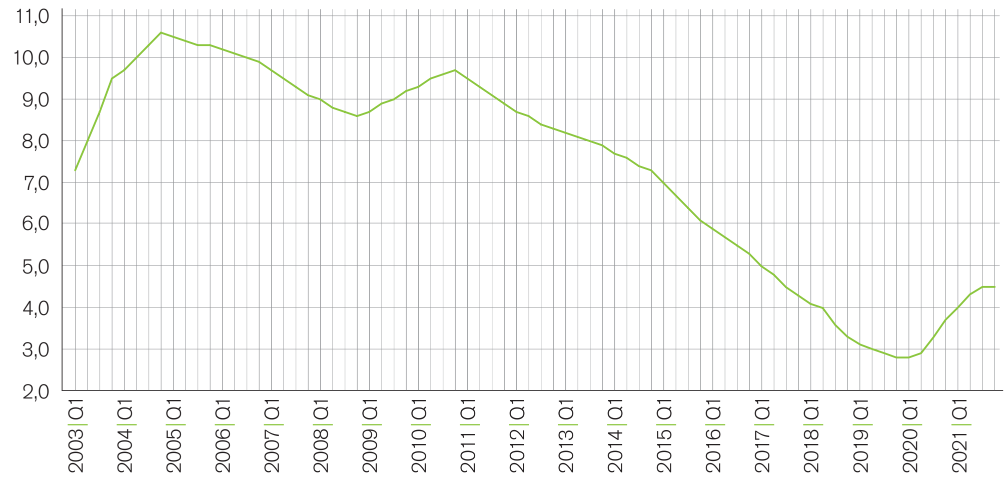
Market for office space

Activity on the market for office space continued to increase in the fourth quarter of 2021, significantly more than in the previous reporting period. Supported by favourable labour market developments and high pre-letting levels, 1.14 million sqm of office space was taken up in the last quarter. **3.3 million sqm was let** over the entire year, i.e. 23% more than in 2020 and only 15% less than in the high-turnover years between 2015 and 2019.

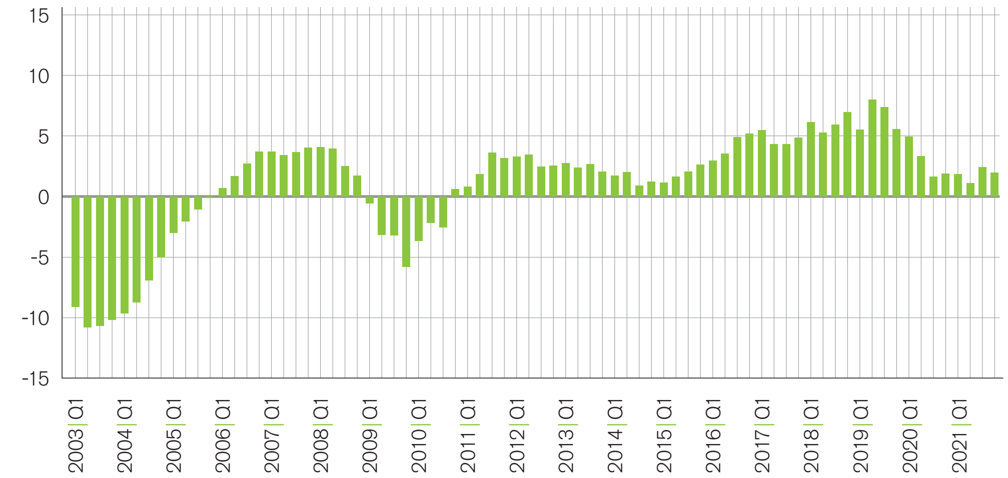
In contrast to previous quarters, rising vacancies were no major issue in the fourth quarter. **At 4.5%, the average vacancy rate as at year-end 2021 remained unchanged** for all big 7 markets – albeit with significant regional differences. Whilst Frankfurt and Dusseldorf showed relatively high and increasing vacancy rates, office space elsewhere remained a scarce commodity – especially in Stuttgart. Looking ahead, vacancies should creep upwards despite high pre-letting rates and a projected decline in new construction activity. This will mainly affect older space in the periphery as well as buildings not meeting the increasing demand from tenants for sustainable buildings.

Office space vacancy rates may be higher today than they were before the pandemic, but the balance of power between tenants and landlords has not changed so much that the upward trend in rents has flipped a switch. As seen in previous quarters, **rents for newly-let first-class properties continued to rise**, lying 2% above the previous year's figure as at year-end, whilst average rents hardly changed. The varying development particularly mirrors the very solid rental demand for core properties in central locations.

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



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



Investment market

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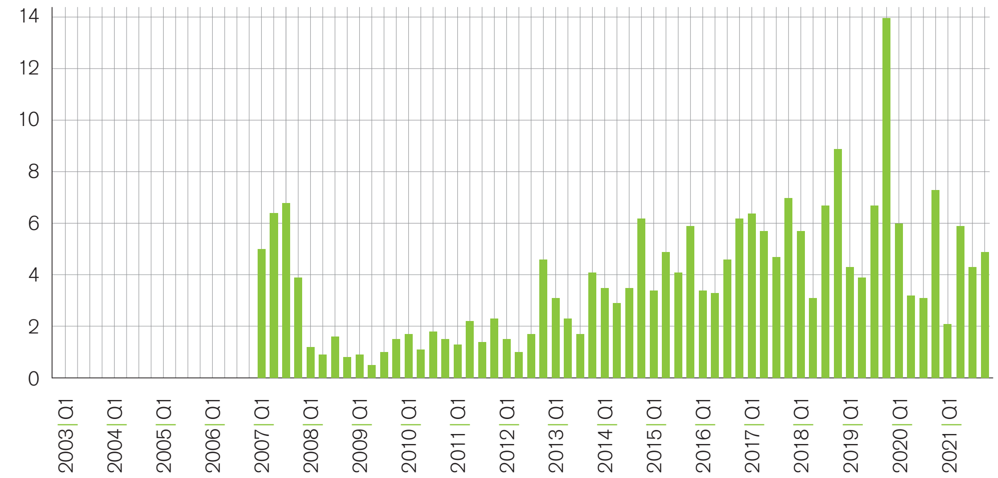
According to figures provided by Real Capital Analytics (RCA), the **investment volume for office properties on the big 7 markets amounted to €17.5 billion** in 2021, a decrease of just under 12% year-on-year which mainly resulted from a weak first quarter. Capital inflows have since been stabilising, mainly coming from domestic demand for first-class office properties. In the pre-pandemic years 2017 to 2019, 2021, which had been characterised by strong growth, foreign investors accounted for 54% of capital inflows; since the pandemic hit, domestic investors are dominating the scene, with two-thirds of investments coming from Germany in the past year.

Increasing demand for first-class properties is the main reason for the continuous price increase and is directly reflected in **lower initial yields**. Against a historically low level, during the course of the year the decline in yields amounted to between 0.45 and 0.05 percentage points, depending on the regional market. On a weighted average across all the big 7 markets, initial yields for first-class properties fell by 0.17 points in 2021 – to a year-end level of 2.56%.

Interest rates have recently been trending slightly upwards in terms of the current yield for public-sector bonds with long maturities, a factor which also puts pressure on the yield pick-up of property investments. Nevertheless, **demand for first-class office properties has remained on a high level**. Investment pressure exerted on institutional investors is still a major driver, in combination with the solid rental demand for office space in prime locations. Thanks to this demand, investors are confident that office properties will generate stable cash flows even in a more fragile environment.

Net initial yield (BIG 7) | in %

Investment volume (BIG 7) | in € billion

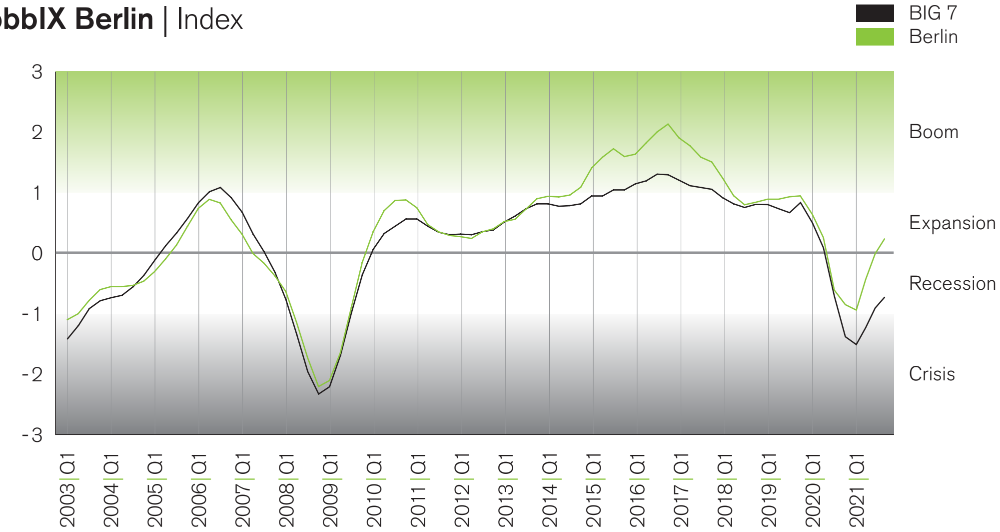


BIG 7

BERLIN

In Berlin, 323,000 sqm of office space was taken up in the fourth quarter, following 182,000 sqm in the third quarter. Space take-up over the year added up to a very high 870,000 sqm, missing the annual turnover of the boom years 2015 to 2019 by a mere 4 %. The vacancy rate was unchanged in recent months, at 4.1 %. At the same time, top rents crept up to €39 per sqm as at year-end, versus €38 at the beginning of 2021. Following a moderate third quarter, capital inflows recovered towards year-end. Acquisition volumes for office properties amounted to just under €900 million in the reporting period, yielding an investment volume of €3.9 billion for the entire year and thus failing to reach the extremely high average turnover of €5 billion p.a. generated in the previous years. Initial yields remained at 2.5 %.

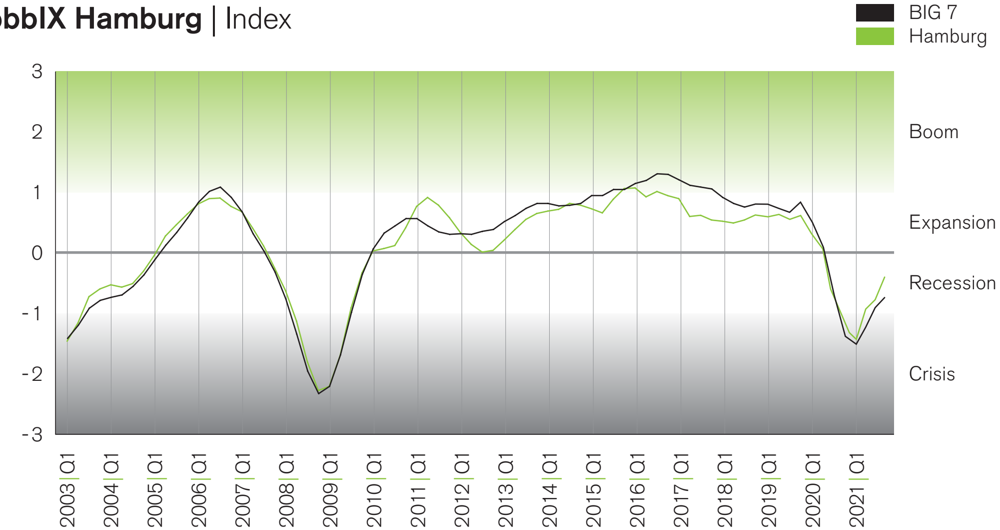
pbbIX Berlin | Index



HAMBURG

Despite the letting performance waning quarter-on-quarter in the reporting period, the result for the entire year significantly exceeded the 2020 figure: a total of just under 490,000 sqm was taken up (2020: 360,000 sqm; average 2015–2019: 567,000 sqm). The vacancy rate stood at a moderate 3.8 % and top rents rose slightly as at year-end, following a longer period of stagnation. Volumes on the investment market decreased significantly in 2021. Whilst around €2.8 billion was invested annually on average between 2018 and 2020, 2021 only saw investment volumes of €1.7 billion as a result of lower capital inflows from abroad. Net initial yields for first-class properties remained unchanged.

pbbIX Hamburg | Index



BIG 7

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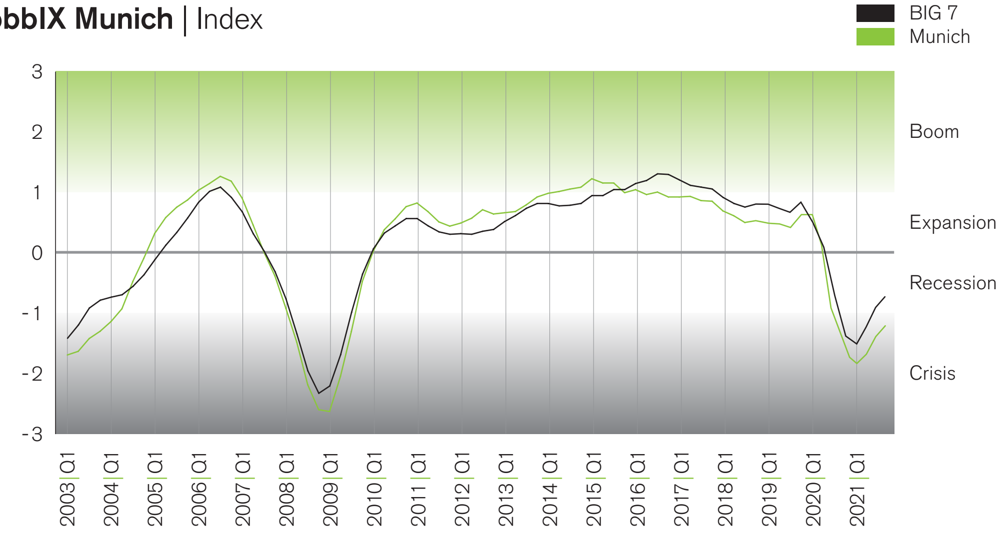
MUNICH

During 2021 the Munich office space market showed continuous recovery from the coronavirus crisis. A remarkable 221,000 sqm was let in the fourth quarter, and 660,000 sqm over the entire year – 16 % more than in 2020. The vacancy rate as at year-end stood at a moderate 3.9 %, coming down from 4.3% in summer. Top rents, which stagnated at a high level during the course of the year, also indicate a very sound market environment. The investment market painted a comparable picture: a total of €4.9 billion was invested in office properties in 2021; barring the year 2019, this was the highest cash inflow since 2010. Net initial yields for first-class properties receded slightly, to 2.65 % as at the end of 2021.

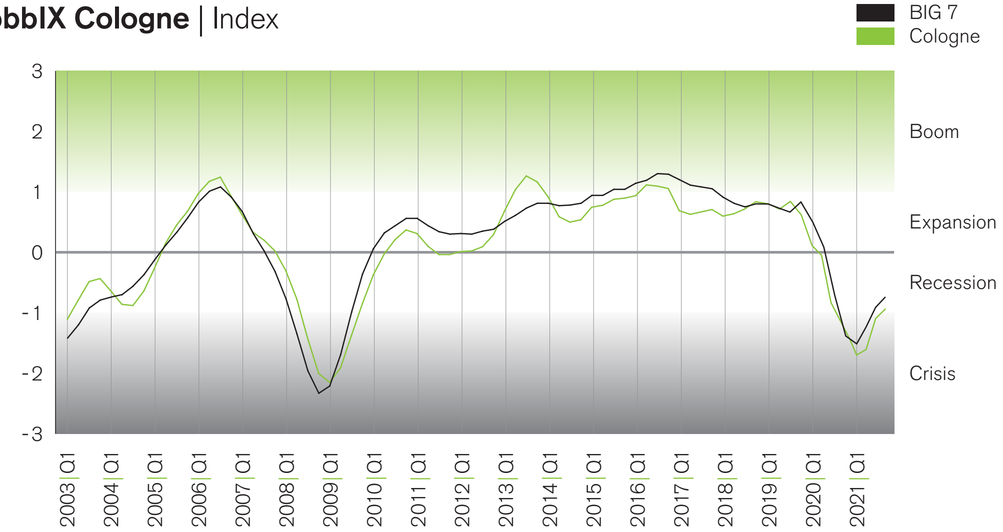
pbbIX Munich | Index



COLOGNE

The rental market ended the year 2021 with markedly increased turnover. Take-up in the fourth quarter amounted to approximately 112,000 sqm, or 330,000 sqm for the entire year, which was the highest annual turnover since 2016. Public administration accounted for almost 40 % of turnover. The vacancy rate crept upwards in the reporting period, ending the year at 3.4 %. Nonetheless, top rents improved slightly and the investment market also showed a pronounced recovery in the fourth quarter. According to RCA data, €540 million was spent on office properties in the last quarter of the year, resulting in an acquisition volume of more than €1.2 billion for the year as a whole. High investor appetite coincided with significantly lower net initial yields for first-class properties, which ended the year at 2.6 %.

pbbIX Cologne | Index

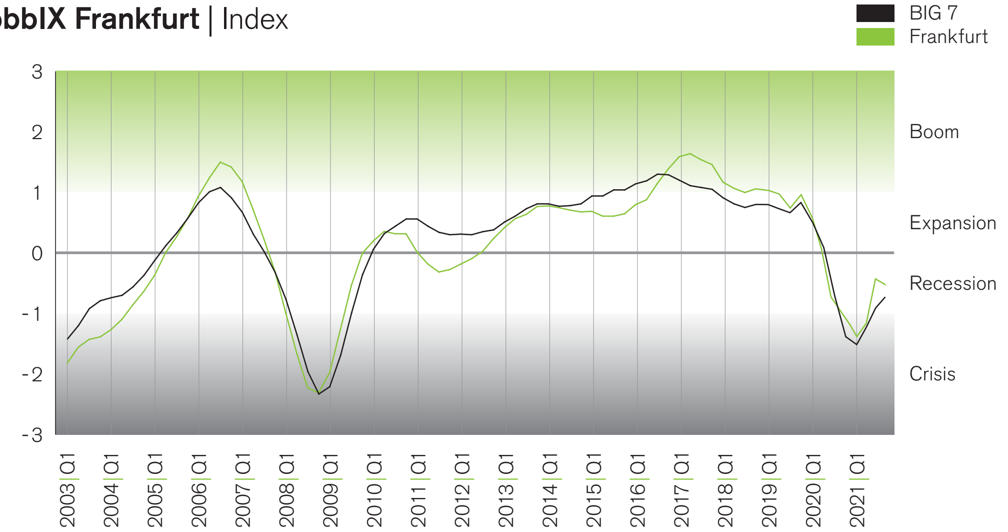


BIG 7

FRANKFURT

Turnover in Frankfurt increased further towards the end of the year. With 200,000 sqm taken up in the fourth quarter, annual turnover amounted to approximately 470,000 sqm, exceeding the previous year's figure by nearly 40%. Despite the very strong demand development, the vacancy rate increased from 7% to 7.7% in the last quarter of the year. Nominal top rents remained at the high level of €42.50 per sqm. Capital inflows on Frankfurt's office investment market amounted to €4.4 billion in 2021, falling only slightly year-on-year. Domestic investors were clearly more active than in 2020, whilst foreign investors were once again reluctant to invest. Investment demand, which was concentrated on first-class properties, led to a further decline in net initial yields in prime locations.

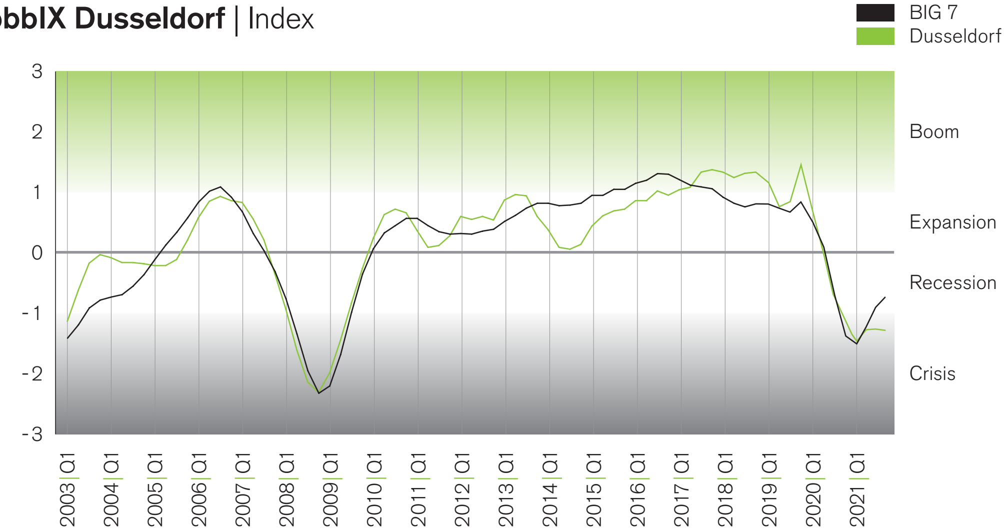
pbbIX Frankfurt | Index



DUSSELDORF

Following a weak first half of the year, letting performance for office properties in Dusseldorf improved significantly in the second half. 325,000 sqm was newly taken up in the year as a whole, around 8% more than in 2020. With turnover picking up, the increase in vacancy rates slowed considerably in the second half of the year. However, 7.8% of office space sat vacant as at the end of 2021 (year-end 2020: 6.8%). Top rents remained unchanged throughout this period, at €28.50. According to data provided by RCA, the investment market concluded the year with capital inflows totalling €900 million, thus clearly falling below the results of the last eight years which averaged €2.1 billion per annum. Net initial yields remained unchanged in the fourth quarter compared to the previous quarter, at 2.7%.

pbbIX Dusseldorf | Index

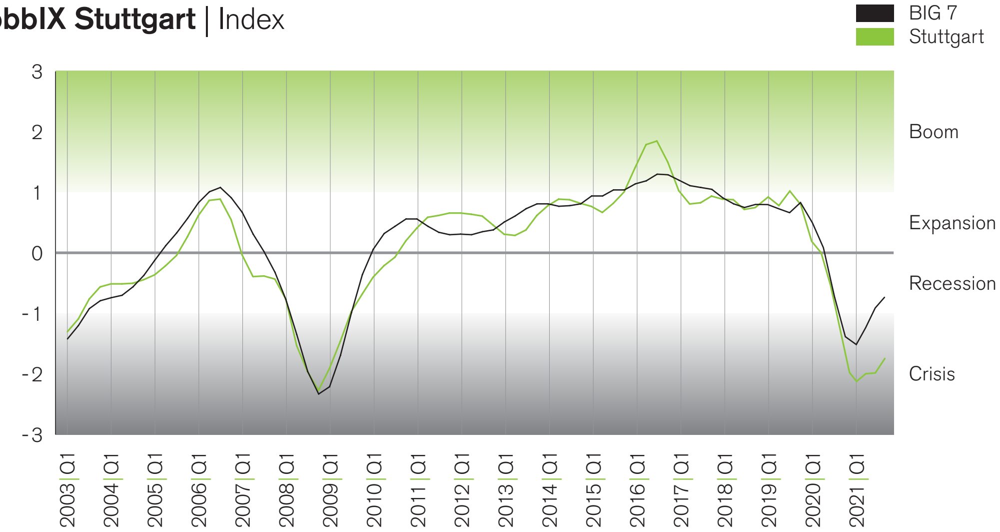


BIG 7

STUTTGART

Following a few weak quarters, office space take-up in Stuttgart turned upwards again in the fourth quarter of 2021. 61,000 sqm was newly taken up in the final quarter, but only 144,000 sqm over the entire year. Uncertainty surrounding the future need for office space could have been a reason for the overall low take-up of space, as was the availability of free space. The vacancy rate in Stuttgart was very low at the end of the year (1.7%). Rents for newly-let first-class properties remained unchanged at €25.50 in the final quarter. Similar to the market for office space, capital inflows increased on the investment market. According to RCA data, almost the same amount was invested in the fourth quarter as in the previous three quarters combined. Domestic investors continued to dominate the market. Net initial yields for first-class properties remained at a constant level.

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)