pbbIX
Office Property Market Germany
2021 | Q3

DEUTSCHE PFANDBRIEFBANK

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Overview

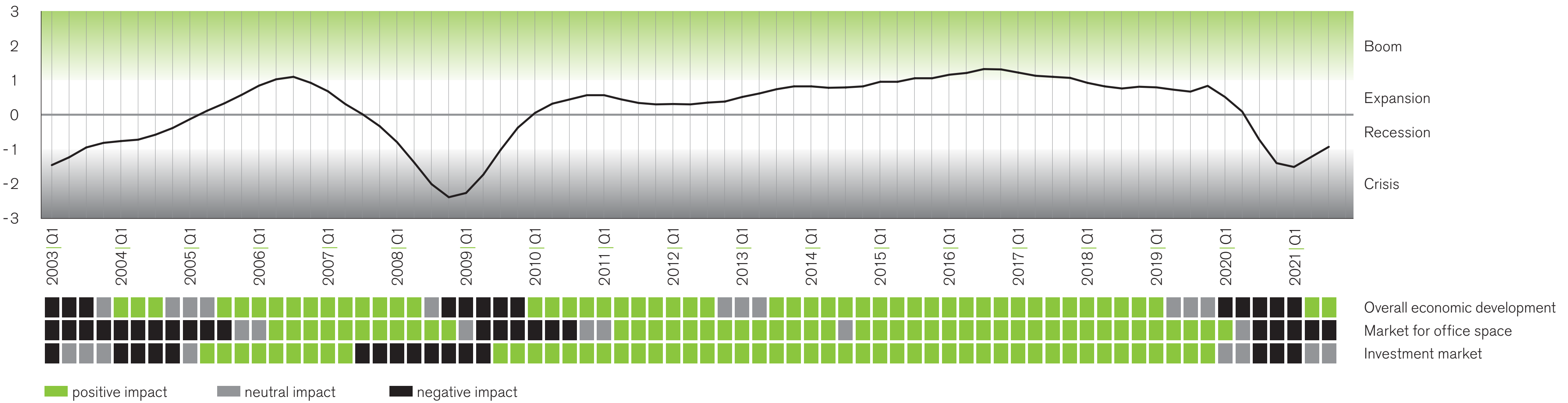
The pbbIX real estate index for the seven most important German office markets continued along its path of recovery in the third quarter of 2021, **rising from -1.23 points in the second quarter to -0.91 index points**. Whilst the recessionary trend on the office markets has not been overcome, it its increasingly losing momentum. One reason is the gradual recovery of the German economy; another is the fact that the investment market and the market for office space are emerging from the coronavirus-induced trough.

After seasonal and calendar adjustment, real GDP was up quarter-on-quarter as well as year-on-year (+1.8% and +2.5%, respectively). Catch-up effects and a relaxation of containment measures provided a significant **boost to private consumption, which was once again the main driver**.

Demand for office property on the **investment market is solid**, with €4.3 billion spent across the big 7 markets in Germany over the course of the third quarter 2021. High volumes and ongoing yield compression evidence the attractiveness of this property type. In light of the anticipated continued recovery of the German economy and an increasing revival of demand for space, offices promises stable cash flows.

However, **risks and uncertainty remain**, and we will have to wait and see if the strongly rising rates of infection and supply chain issues will exert downward pressure upon the economy. The ifo business climate index – according to which the short-term outlook for the manufacturing, services, and trade sectors has weakened – indicates such a development.

pbbIX BIG 7 | Index



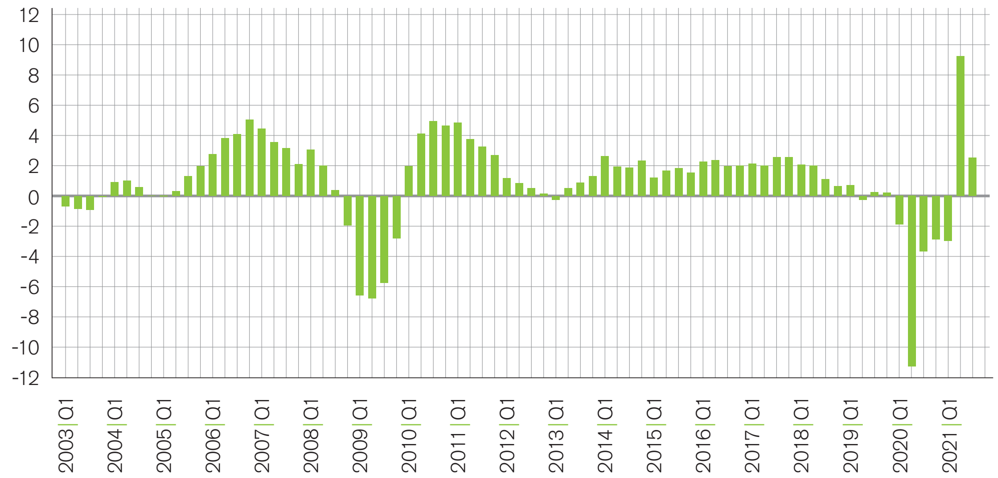
Overall economic outlook

The **recovery of the German economy continued** through the summer. Pre-liminary figures from the German Federal Statistical Office for the third quarter suggest that real gross domestic product rose by 1.8 % compared to the previous quarter, following an increase of 1.9 % in the second quarter. Overall economic production in Germany is therefore now only slightly below the levels seen prior to the pandemic.

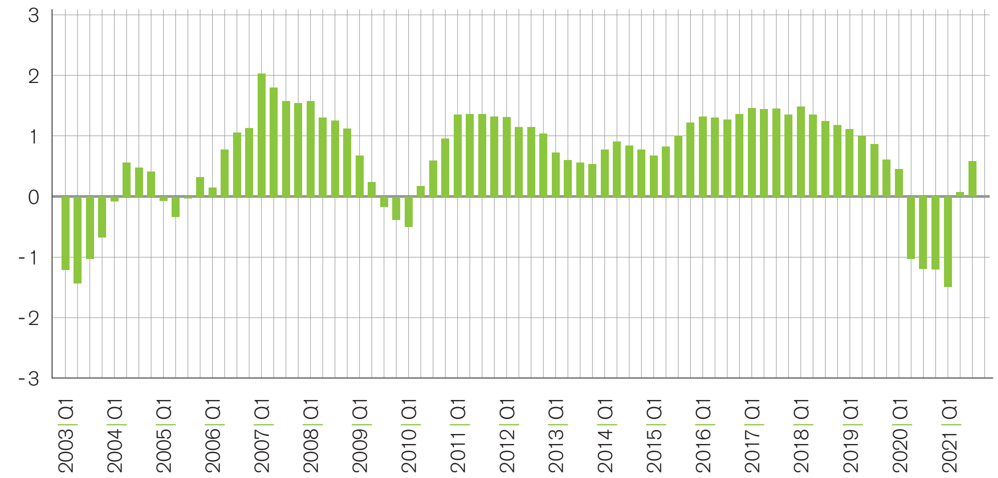
Growth in the third quarter was mainly attributable to **demand for consumer-related services and the provision of such services**. For example, the hospitality industry, which was hit particularly hard by the pandemic, and the retail sector benefited from falling infection figures leading to eased lockdown measures – which in turn led to increased mobility and a substantial surge in demand from private households. Manufacturing, on the other hand, provided no impetus for growth; supply constraints regarding materials and equipment once again dampened production and investment activity. This particularly affected the automotive industry, due to a shortage of semiconductors.

The economic development is expected to **maintain its current upwards trend**. A very stable labour market as well as accumulated savings are indications of a continued high private consumer demand. There is considerable backlog in the construction sector and the manufacturing sector, whilst surging energy costs, infection figures on the rise again, and significant issues in international supply chains will place a damper on the upward trend in the next quarter, too.

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



Working population | year-on-year change in %



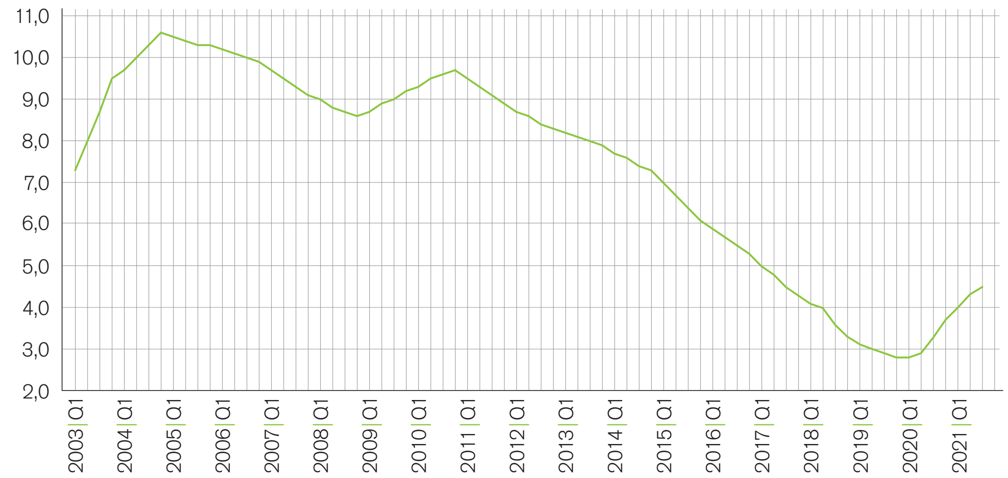
Market for office space

The market for office space has **continued to stabilise** following the macroeconomic recovery and a gradual return of employees to their offices. Approximately 850,000 sqm of office space was newly let in the big 7 markets in the third quarter, yielding the best result since the fourth quarter of 2019. Take-up during the first nine months of 2021 amounted to 2.15 million sqm. This equalled an upturn of around 14% compared to the same period of the previous year, but a 25% downturn compared to the average of the boom years 2016 to 2019.

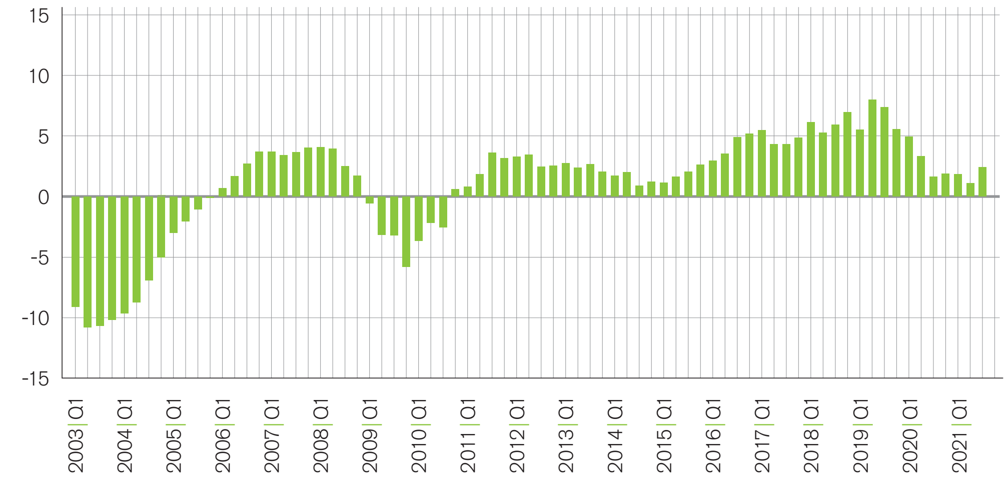
Despite the increased demand for space, the **vacancy rate for office space continued to rise as expected**. The average vacancy rate across all markets rose from 4.3 % in the second quarter to 4.5 % in the third quarter – albeit with significant regional differences. This development reflects the increasing amount of new or fully refurbished space – a development expected to continue, slightly abated, over the next quarters. Although large part of the scheduled newbuild space has been pre-let, it has by no means been fully let; as a result, the vacancy rate is trending upwards, as is typical for the current stage of the cycle.

Both top rents as well as average rents have shown to be very resilient vis-à-vis this development. What is more, **top rents are increasing**, with all sources indicating a muted rental increase for high-quality buildings in central locations with excellent transport infrastructure, when compared to the previous quarter.

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



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



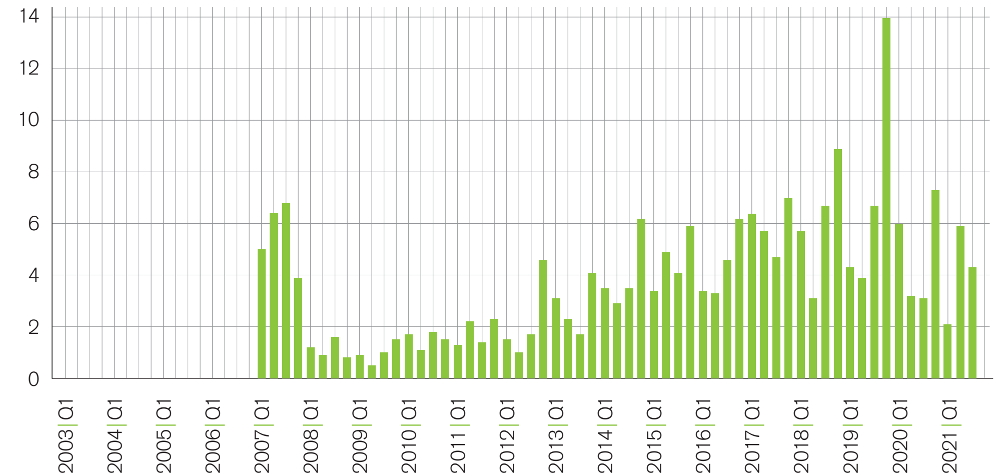
Investment market

Fund inflows on the office investment market fell in the third quarter, compared to the relatively high levels seen in the second quarter. Following €5.9 billion in the previous quarter, €4.3 billion was spent on office property acquisitions in the third quarter of 2021, resulting in a total of €12.3 billion for the big 7 markets in the first three quarters of 2021. Therefore, **investment volume year-to-date reached the previous year's level** and fell only 15 % short of the average 9-month turnover in the 2015-2019 period. The share of domestic and international investors also remains constant: at approximately 40 %, the percentage of fund inflows coming from abroad is on the same level as before the pandemic. This means that office properties on the German big 7 markets have retained their attractiveness for numerous domestic and international investors.

The **increase in prices does not seem to have peaked yet.** On a weighted average across all markets, initial yields for first-class properties once again showed a decline. At the current level of net rental income, prices paid were thus higher than in the previous quarters. This development is driven by investors expecting the office market to show a very stable development over the next few years; another factor is the prevailing low interest rate environment. Capital market yields – measured in terms of the current yield for public-sector bonds with a residual maturity of up to ten years – plummeted in the third quarter, thus widening the spread between capital market yields and net initial yields for real estate. However, capital market yields have since risen.

Net initial yield (BIG 7) | in %

Investment volume (BIG 7) | in € billion

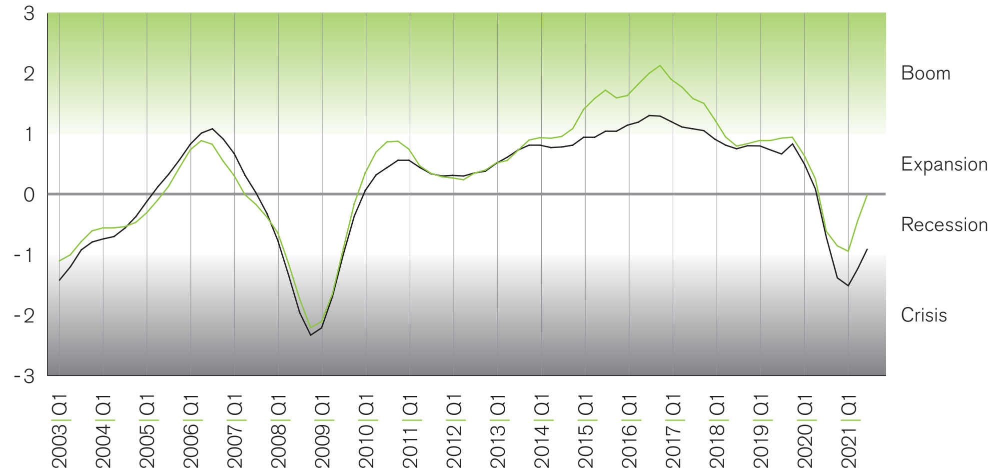


BIG 7

BERLIN

In Berlin, approximately 182,000 sqm of office space was newly taken up, compared to 148,000 sqm in the second quarter of 2021 and 157,000 sqm in the third quarter of 2020. This development was due to a high level of new construction, growing economic output and a rising number of employees returning to offices. Demand was attributable to public administration and to the banking, retail, and other services sectors. The higher vacancy rate of 4.1% did not impact nominal rental development. Average rents remained unchanged, top rents edged upwards. Fund inflows, which fluctuate strongly throughout the year, were at quite a low level in the third quarter. According to RCA data, investment volume amounted to approx. €540 million, following €1.5 billion in the previous quarter. Initial yields remained unchanged, at 2.5 %.

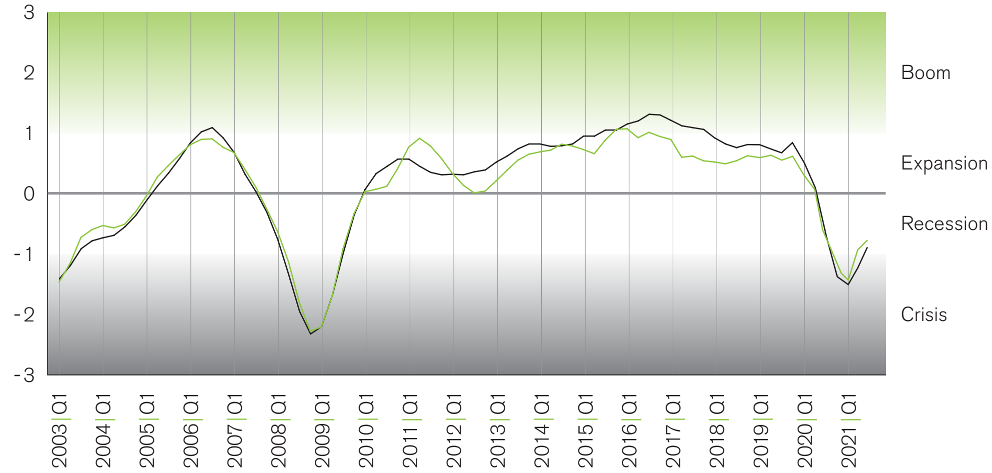
pbbIX Berlin | Index



HAMBURG

Letting performance in Hamburg skyrocketed – following 100,000 sqm in the second quarter, 135,000 sqm was taken up in the third quarter. In total, the previous year's figure was more than doubled in the first nine months. Nevertheless, the vacancy rate rose to 3.6 %, albeit without rents for newly-let space changing: both top and average nominal rents for newly-let space remained stable. The investment market saw significant improvements in the third quarter, and office properties worth around €640 million changed hands. Total investment volume in the first nine months was just under €1.3 billion, of which 81 % was spent by domestic investors. Initial yields for first-class properties in prime locations remained unchanged from the previous quarter.

pbbIX Hamburg | Index

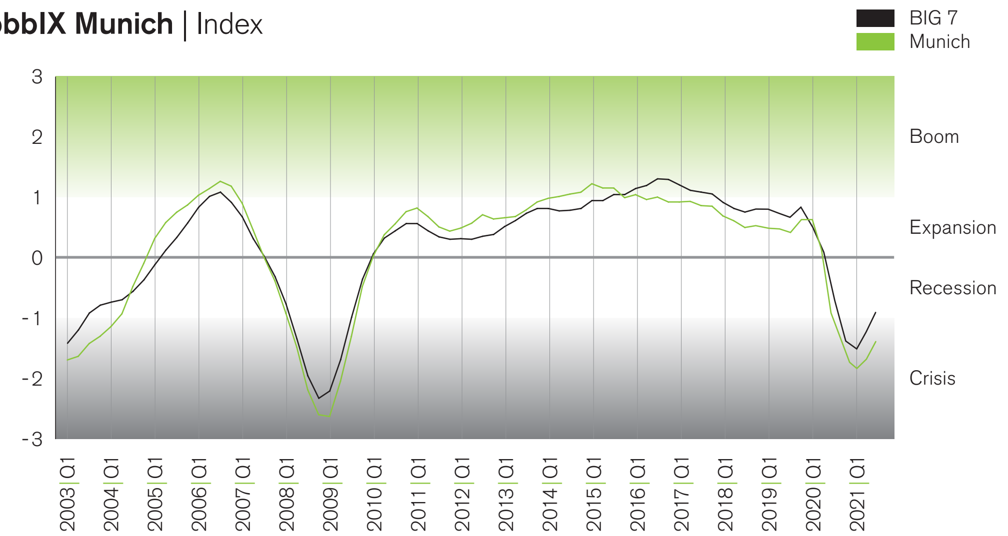


BIG 7

MUNICH

The market in Munich recorded a high letting performance in the third quarter of 2021, with approximately 210,000 sqm being taken up. The last time turnover was higher was in the second quarter of 2019. Stable demand for smaller areas of space and a large-scale letting by the public sector drove this result. The vacancy rate rose only slightly, ending the quarter at 4.3 %. Rents for newly-let space trended upwards – both for top and for average rents alike. The transaction volume of €440 million on the Munich office investment market fell well short of the €2.5 billion achieved in the previous quarter. Net initial yields for first-class properties remained unchanged at 2.7 %.

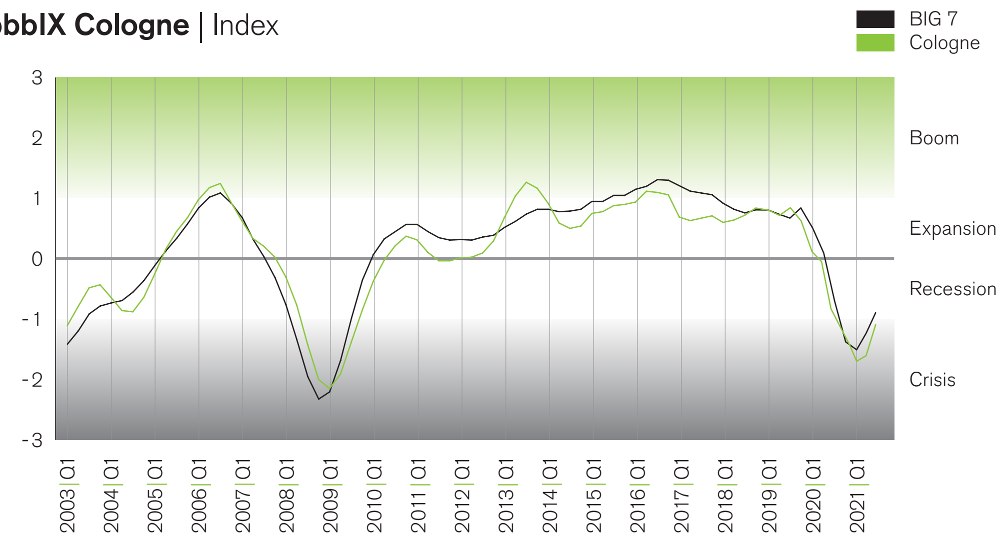
pbbIX Munich | Index



COLOGNE

The market for office space in Cologne has stabilised. Depending on the source consulted, office space of between 215,000 and 230,000 sqm was newly taken up in the first nine months, i.e. 50 % more than in the previous year and 6 % more than in the first nine months of 2019. This positive situation is corroborated by an only marginally increased vacancy rate and nominal rents for newly-let space remaining on the same level. Cologne's office investment market is also showing a stable development, albeit with quarterly fluctuations. According to RCA data, just under €700 million was invested in the first nine months, roughly 40 % more than in the same period of the previous year. Net initial yields for first-class properties were down once more – by 10 basis points quarter-on-quarter, to 2.8 %.

pbbIX Cologne | Index

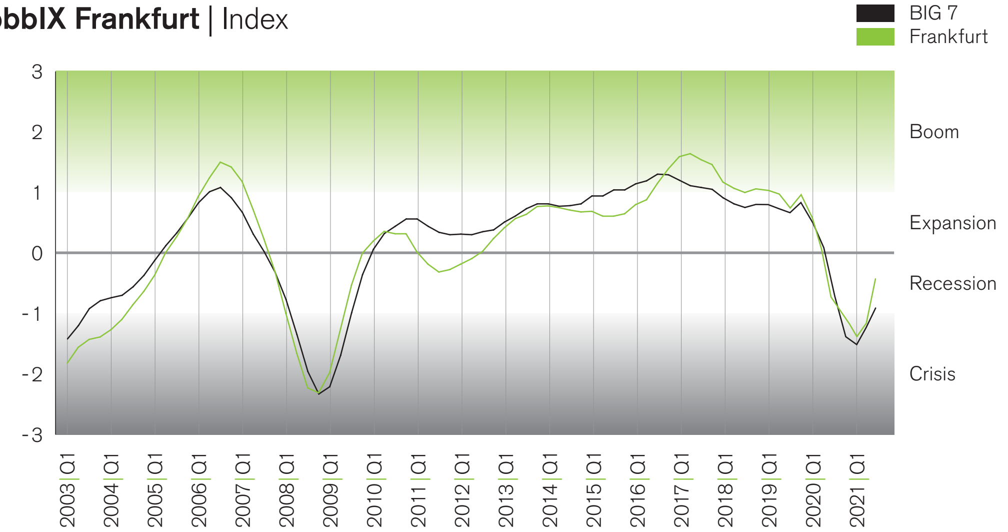


BIG 7

FRANKFURT

Demand for space soared in the summer months, albeit failing to reach the high turnover generated in the 2016-2019 period. This was also down to the fact that the banking industry, traditionally strong in Frankfurt, was again reluctant to take up space in the context of alternative workplace concepts. The vacancy rate for office space increased from 6.6 % to 7 % during the quarter. Nominal top rents were unaffected, rising to €42.50 per sqm. Fund inflows on the investment market were very high in the quarter under review – mainly as a result of individual large-volume deals such as the T1 skyscraper and Skyper acquisitions. The total investment volume amounted to €2.4 billion, following €1.3 billion in the first half of the year. Net initial yields for first-class office properties remained unchanged at 2.8 %.

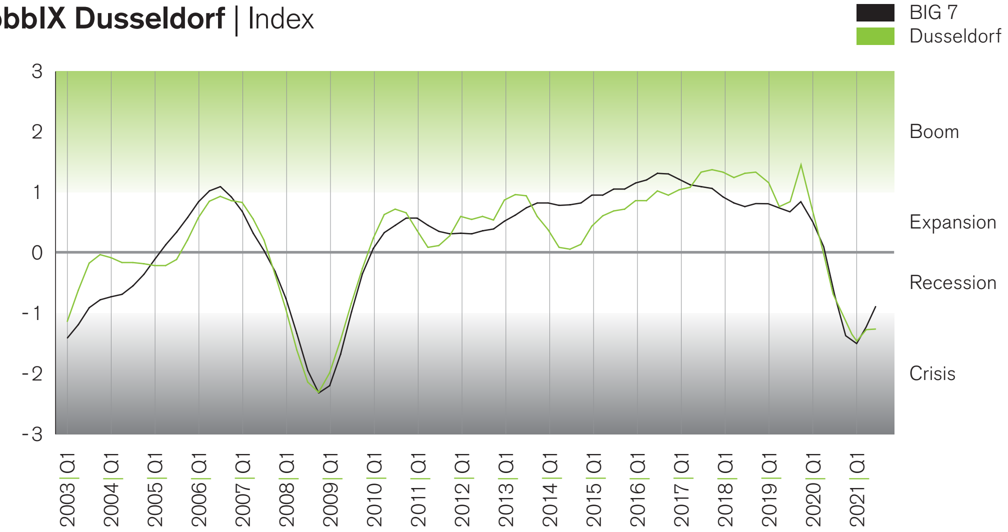
pbbIX Frankfurt | Index



DUSSELDORF

Effective demand for offices picked up significantly in the third quarter of 2021. Approximately 100,000 sqm (roughly the same amount as in the previous six months) was newly let in the three summer months. Supported by moderate new construction activity, the strong increase in vacancies seen in the past quarters slowed, with 7.7 % of office space vacant in the third quarter, following 7.6 % in the second quarter. Nominal top and average rents remained stable. According to RCA data, only €103 million was invested during the third quarter, yielding an investment volume of only €500 million for the first nine months of 2021, after the figures for the first half-year had been revised. All the same, net initial yields for first-class properties continued their downward trend in the third quarter, from 2.8 % to 2.7 %.

pbbIX Dusseldorf | Index

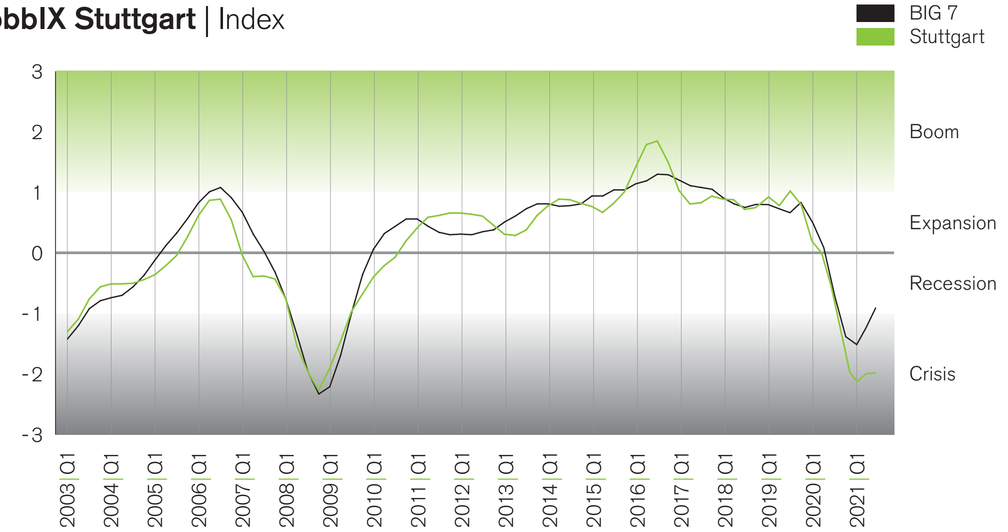


BIG 7

STUTTGART

Turnover in Stuttgart remained sluggish during the third quarter of 2021. A mere 33,000 sqm of office space was newly taken up. Total take-up during the first nine months of 2021 therefore amounted to 83,000 sqm, or less than 1 % of office space; in the other big 7 markets, take-up was at least 2 % in the same period. Subdued demand for space and the supply side (very low vacancy rate and lack of new building space) were the reasons for this weak development. Rents for newly-let space remained unchanged from the previous quarter. Fund inflows have also decreased since the beginning of the year, both in comparison to the previous years and vis-à-vis the other big 7 markets. However, initial yields for first-class properties have declined even further, pointing to surplus demand for this type of real estate.

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)