pbbIX
Office Property Market Germany
2020 | Q 1

DEUTSCHE
PFANDBRIEFBANK

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Overview

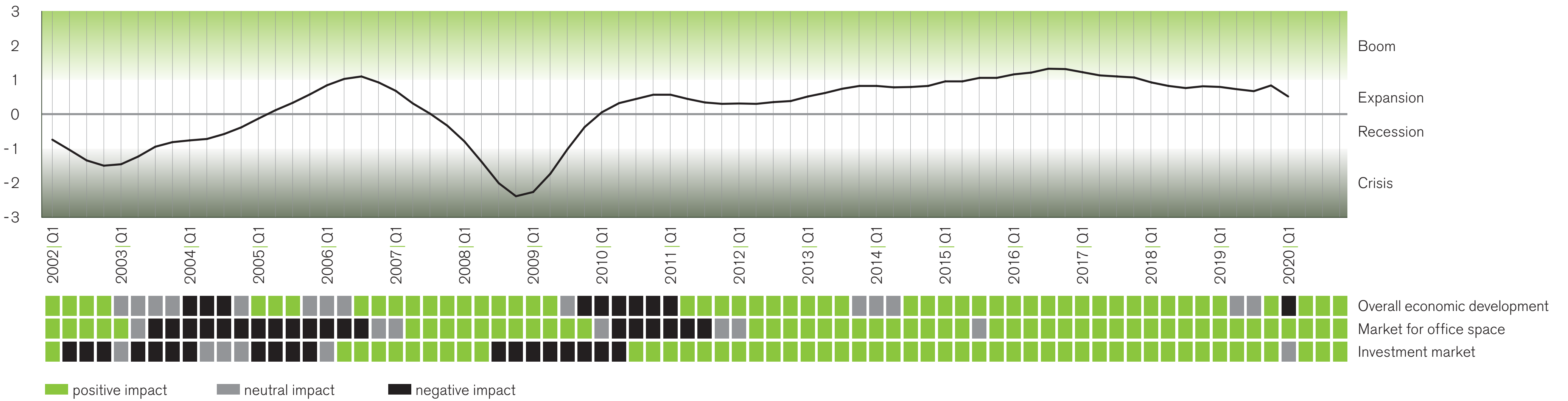
The pbbIX real estate index fell in the first quarter of 2020 to 0.50 index points, the **lowest level since the fourth quarter 2012.** However, the pbbIX is still above the zero line which forms the threshold between growth and contraction.

The decline is a result of the **macro-economic** development. The COVID-19 pandemic and the measures taken to combat it pose an exceptionally difficult and barely predictable situation for the economy. In the first quarter, the macro-economic performance contracted by 2.2 % compared to the previous quarter.

Looking at the bare figures, as at the end of March the office property markets do not seem to have been much affected by this. In total, both the **rental and investment markets posted solid starts into the year.** Whilst letting performance in the rental markets was weaker than last year, the percentage of unlet office properties was still low. For the investment markets cash inflows during the period under review were above (and initial yields below) the figures for the same quarter of the previous year.

All this is set to change in the next quarter. Due to the usual delays inherent in the real estate sector, the office property markets are lagging economic development. Given the pace of the recession, this delay is set to be rather short. We expect the traditional office market indicators of vacancies and rents to soon reflect the changed situation. As the economic downturn is the result the COVID-19 pandemic (instead of originating from the economy itself), **a swift recovery could be possible** once the pandemic has been overcome.

pbbIX BIG 7 | Index



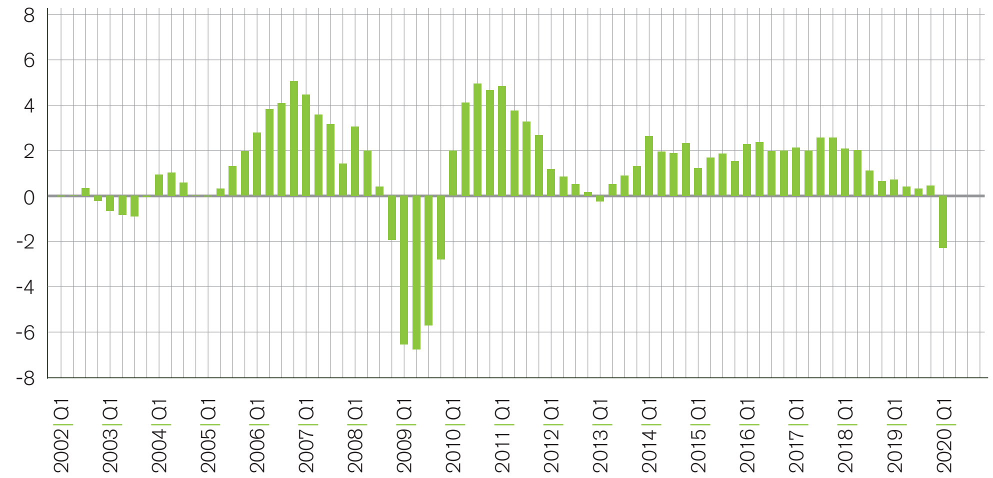
Overall economic outlook

The macro-economic development is being overshadowed by the COVID-19 pandemic. The pandemic and – above all – the measures taken to contain it, have led to a recession during the first quarter. Depth and duration of the recession are still uncertain – different short-term indicators as well as recent surveys conducted by the ifo Institute and KfW (Kreditanstalt für Wiederaufbau) lead us to **expect a significant decline in macro-economic performance.** Travel agencies, tour operators and the aviation, hospitality and automotive industries, for example, are all reporting massive sales and production losses. In the first quarter, Germany's real gross domestic product declined by 2.2% compared to the previous quarter.

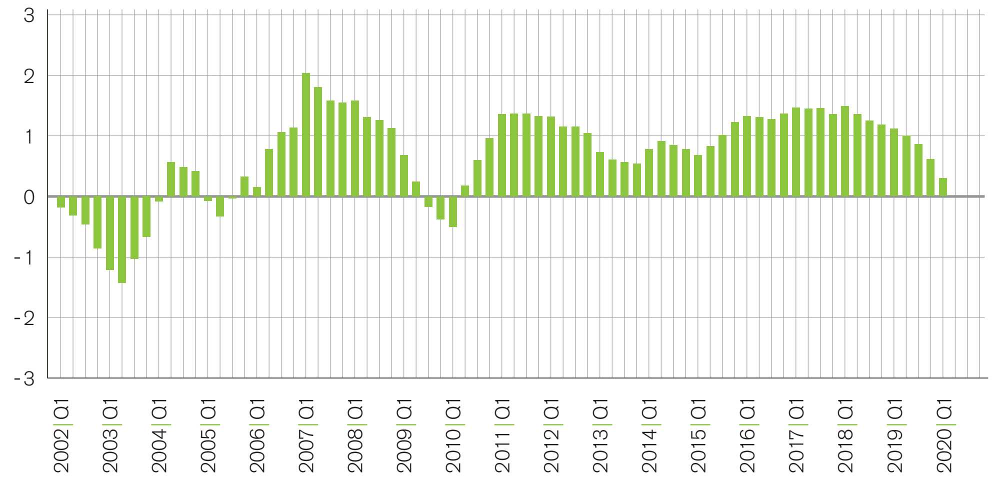
The pandemic **affects the economy through numerous transmission channels.** Quarantine measures and a higher sickness level reduce the labour supply. The shutdown of businesses causes a decline in the sale of goods and services. Uncertainty about the future development of jobs, income and earnings lead to restrained consumption and more cautious investment behaviour. In contrast to previous recessions, numerous service sectors are also severely affected this time, as the provision of many services is currently prohibited by the authorities – or consumer demand has slumped, due to reasons of caution.

The strength and speed of the **decline of overall economic activity will increase in the second quarter.** At the same time, a first easing of the containment measures has to be taken into account. The economy as a whole should recover in the second half of the year; the extent of this recovery, however, cannot be forecast with certainty.

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



Working population | year-on-year change in %



Market for office space

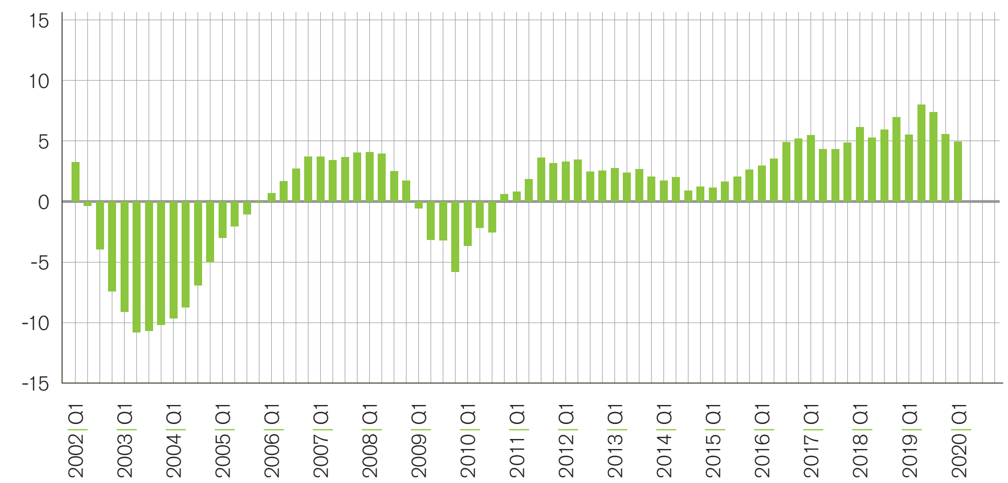
Looking only at the first ten weeks of the current year, the rental market shows good development with slightly declining momentum. The first quarter as a whole did not show any extraordinary impact of the COVID-19 pandemic. While there have been signs of a slowdown, these already started to materialise at the end of the previous quarter. Overall, the **crisis is not yet fully reflected in real estate market statistics.**

The **letting performance has tapered off;** during the first quarter it was already lagging the previous quarter and the respective quarter of the previous year. Due to restrained new construction activity, this had no impact on the development of the vacancy rates, which remained almost unchanged at the low level of the previous year. Thus, top rates were flat during the quarter, yet increased by around 5% year-on-year due to basis effects. However, smaller companies in particular are conducting initial renegotiations with their landlords on the amount of the effective rent.

It remains to be seen what this generally good market data is worth, in view of the economic slowdown. We will surely see deterioration in results from the rental markets during the second quarter. First client surveys of major realestate agents indicate **reluctance to take on new leases, and also to extend existing leases.** Cost-cutting programmes will gain importance and, as experience shows, not all planned new construction projects may be realised. It also remains to be seen to what extent the need for floorspace will decrease structurally, since new forms of work (home office) are unlikely to simply recede and vanish after the pandemic.

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

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



Investment market

On the investment market, too, the pure figures for the beginning of the year paint a surprisingly positive picture at first. For example, the **funds used for the acquisition of office properties were relatively high.** According to Real Capital Analytics (RCA), slightly more than € 5 billion was spent on the acquisition of office properties in the big 7 markets. Although this was well below the record results of the previous quarter, the amount was 11 % above the average value of the first quarters of the last five years.

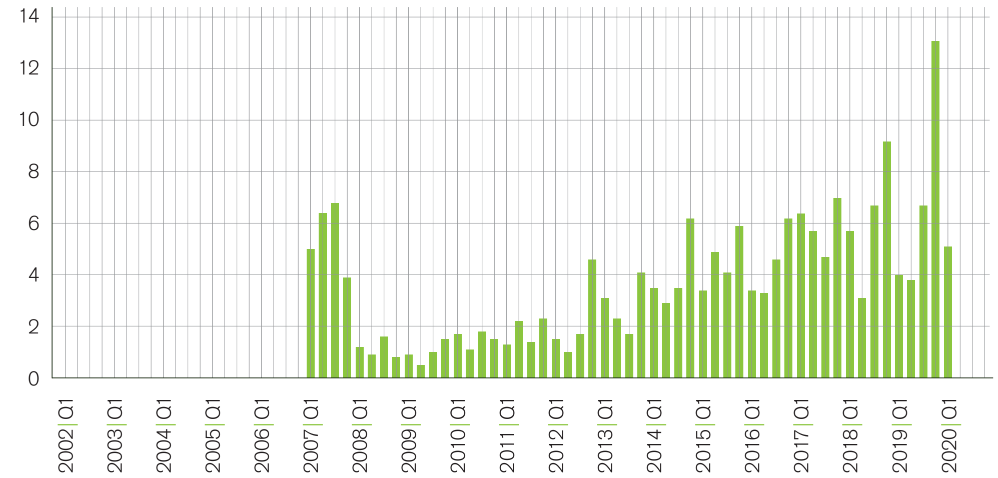
The high transaction volume suggests that market participants have **not yet (or only barely) paid attention to the shocks caused by the COVID-19 pandemic,** which did not materialise until March. Normally, a more cautious approach should have been adopted in such an environment.

This assessment is confirmed by the development of **net initial yields, which continued to move sideways.** Thus, neither the low rental growth to be expected as a result of the pandemic nor an increase in the risk premium seem to be priced in.

Accordingly, it can be expected that net initial yields have bottomed out and will rise again in the quarters ahead. Associated with this, the **investment volume in the second quarter is likely to be significantly lower** than in the first three months of the current year.

Net initial yield (BIG 7) | in %

Investment volume (BIG 7) | in € billion

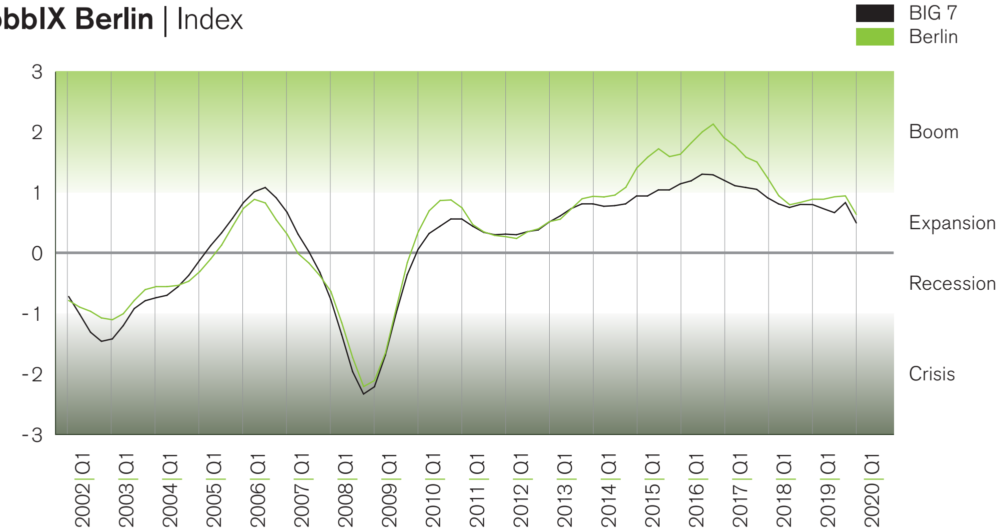


BIG 7

BERLIN

In Berlin, the letting performance in the first quarter amounted to approximately 170,000 sqm, with consultancy firms, other service providers and public administration being the main tenants. Even though the amount of available office space taken up was materially lower (compared to the previous quarters), demand remained intact. The vacancy rate was slightly up, but at around 1 % it is still clearly below the fluctuation reserve. Rental development was not yet influenced by the COVID-19 crisis, as most of the contracts were negotiated some time ago. Top rents remained at the 2019 year-end level, with the average rents continuing to increase. According to RCA figures, € 1.5 billion was spent during the first quarter on the acquisition of properties. The turnover thus matched the average of the last four quarters. Initial yields.

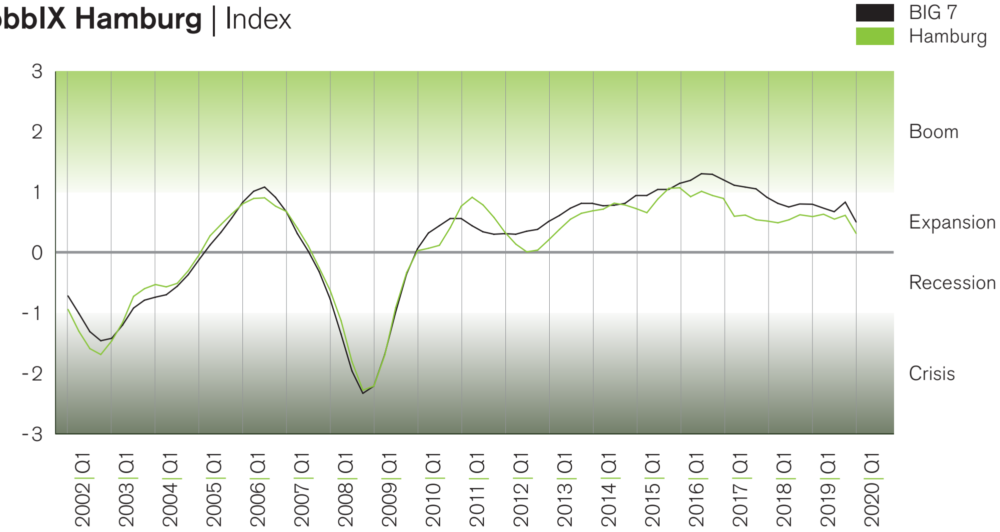
pbbIX Berlin | Index



HAMBURG

In Hamburg, the take-up of available office space was almost 100,000 sqm. While this result slightly exceeded the previous quarter, it was significantly lower than the average for all quarters of the previous year. However, vacancy rates declined to 2.5 %. Rents for newly let space were not yet affected by the COVID-19 pandemic and remained flat during the period under review. On the investment market, between € 300 billion and € 424 billion was spent on the acquisition of office properties, depending on the source. Cash inflows thus remained well below the average of the past four quarters, however, they significantly exceeded the results of the first quarter 2019. Activity was largely dominated by domestic investors, and initial yields remained stable.

pbbIX Hamburg | Index

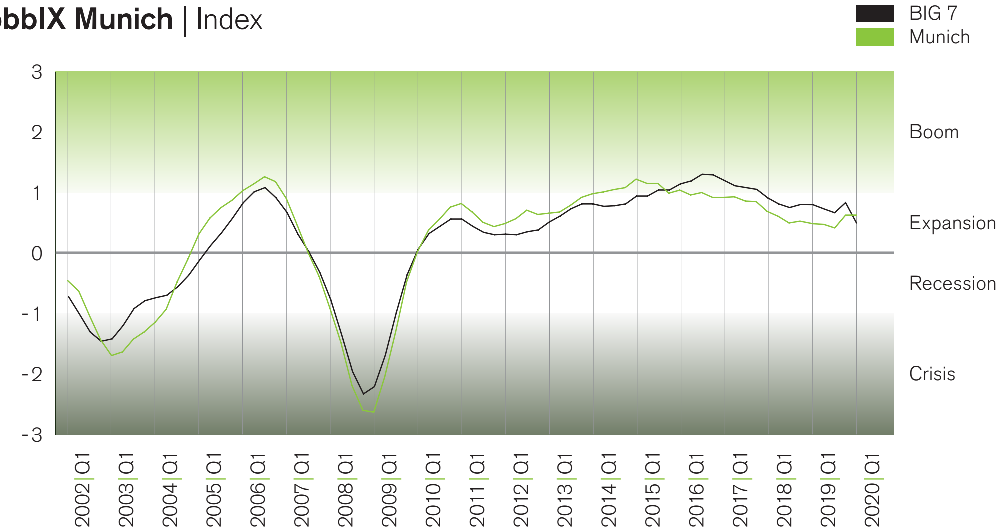


BIG 7

MUNICH

The Munich office space market again achieved very strong results. In the first three months, the take-up of available office space totalled approximately 185,000 sqm, thus outperforming all other big 7 markets. Consultancy firms accounted for around one third of this take-up, followed by companies in the information and communication technology sector with more than 20 %. Free space is still limited, and the vacancy rate is below 2 %, especially in the urban area. Top rents remained unchanged at a high level in recent months. According to RCA, the Munich investment market recorded cash inflows of around € 1 billion in the first quarter of 2020, thus exceeding the previous year's result. However, investment levels were significantly down compared to the previous two quarters. Net initial yields for first-class properties remained unchanged at around 2.8 %.

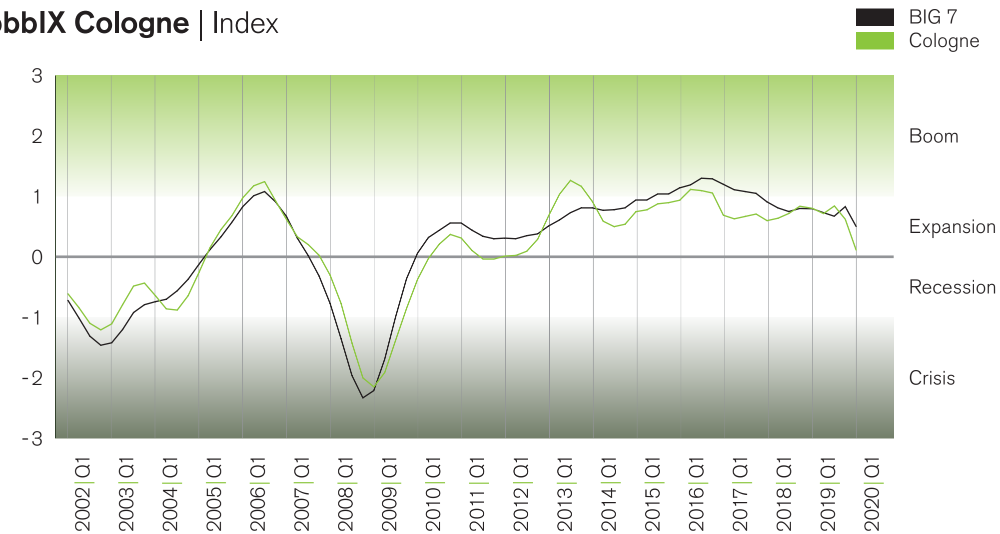
pbbIX Munich | Index



COLOGNE

The office rental market started the current year with subdued take-up of available space. The letting performance amounted to only 40,000 sqm. By comparison, in both 2019 and 2018 an average of 73,000 sqm and 76,000 sqm respectively was achieved in each quarter. Office space remains scarce in view of a vacancy rate of around 2 %, while rents continued to move sideways. Investment volume lagged the result of the fourth quarter of 2019, by a wide margin – following the exceptionally high amount of €1.1 billion in the previous quarter, investment volume in the first quarter 2020 amounted to around €220 million. A further decline due to the COVID-19 pandemic can be expected. The initial yield for first-class properties remained at the low level of the previous quarter.

pbbIX Cologne | Index

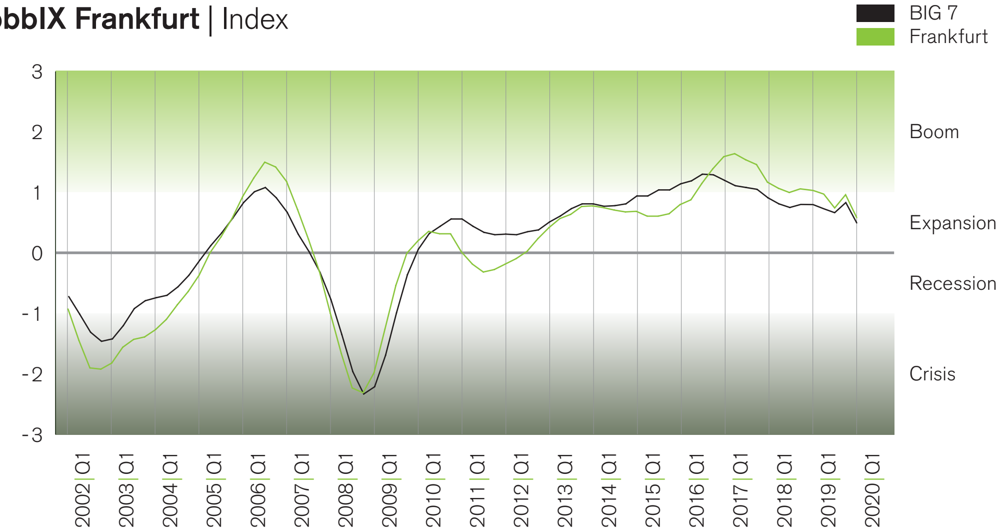


BIG 7

FRANKFURT

In the first quarter, the take-up of office space amounted to approximately 70,000 sqm. Using the average values of the last years as a benchmark, this is not a particularly good result. The take-up was primarily driven by consultancy firms, accounting for almost 50 % of the amount. The vacancy rate in the wider Frankfurt area stands at around 6 %, in the CBD at less than 4 %. On the whole, rents in the period under review were pointing slightly upwards. By contrast, the Frankfurt investment market got off to a good start in the new year. Around € 1.2 billion was spent on the acquisition of office properties. Domestic investors accounted for 80 % of this sum, with the remainder divided almost equally between continental European and other international investors. Initial yields have not changed markedly compared with the previous quarter.

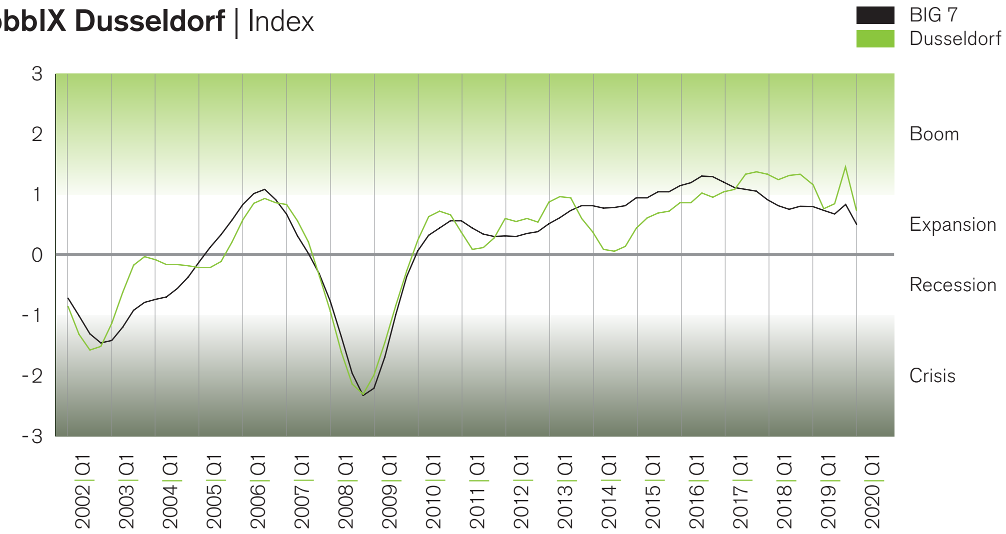
pbbIX Frankfurt | Index



DUSSELDORF

The Dusseldorf office market achieved very strong results in the first quarter. With about 110,000 sqm, the take-up of available office space reached the level of the previous year's quarter and exceeded the medium-term average. The vacancy rate, which compared to the other big 7 cities is rather high, increased slightly. Both, top and average rents remained stable. Dusseldorf's investment market also achieved very strong results in the first quarter. According to RCA, € 550 million was spent on the acquisition of office properties during the period under review – the highest amount invested in a first quarter in a long time. Compared with the development of the initial yields, price development was stable. Net initial yields for first class properties remain at around 3.1 %.

pbbIX Dusseldorf | Index

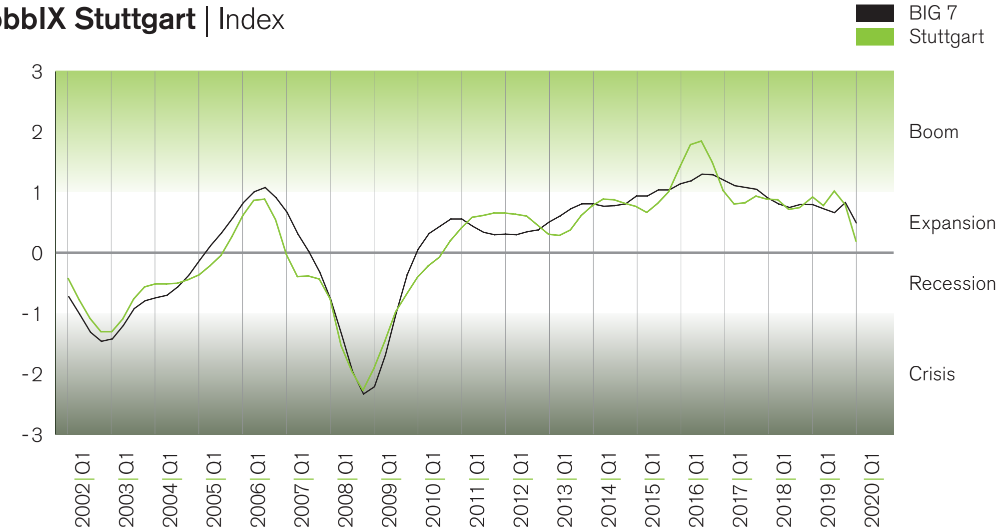


BIG 7

STUTTGART

The letting performance was down sharply in the first quarter. At around 33,000 sqm, the take-up of available office space decreased by approximately 60 % compared to the previous year, whilst falling short of the previous quarter's result by around 50 %. Since new construction activity remained subdued, vacancy rates remained at a low level compared with the previous quarter, while rents also held steady in the period under review. The investment market also showed a moderate to weak development: according to various sources, the investment volume was significantly lower than in the previous quarter, partly due to a lack of foreign investor interest. Yields for first-class properties remained unchanged at around 3 %. As hardly any new contracts have been concluded since the beginning of March, this reflects the pre-COVID-19 result.

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 (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)