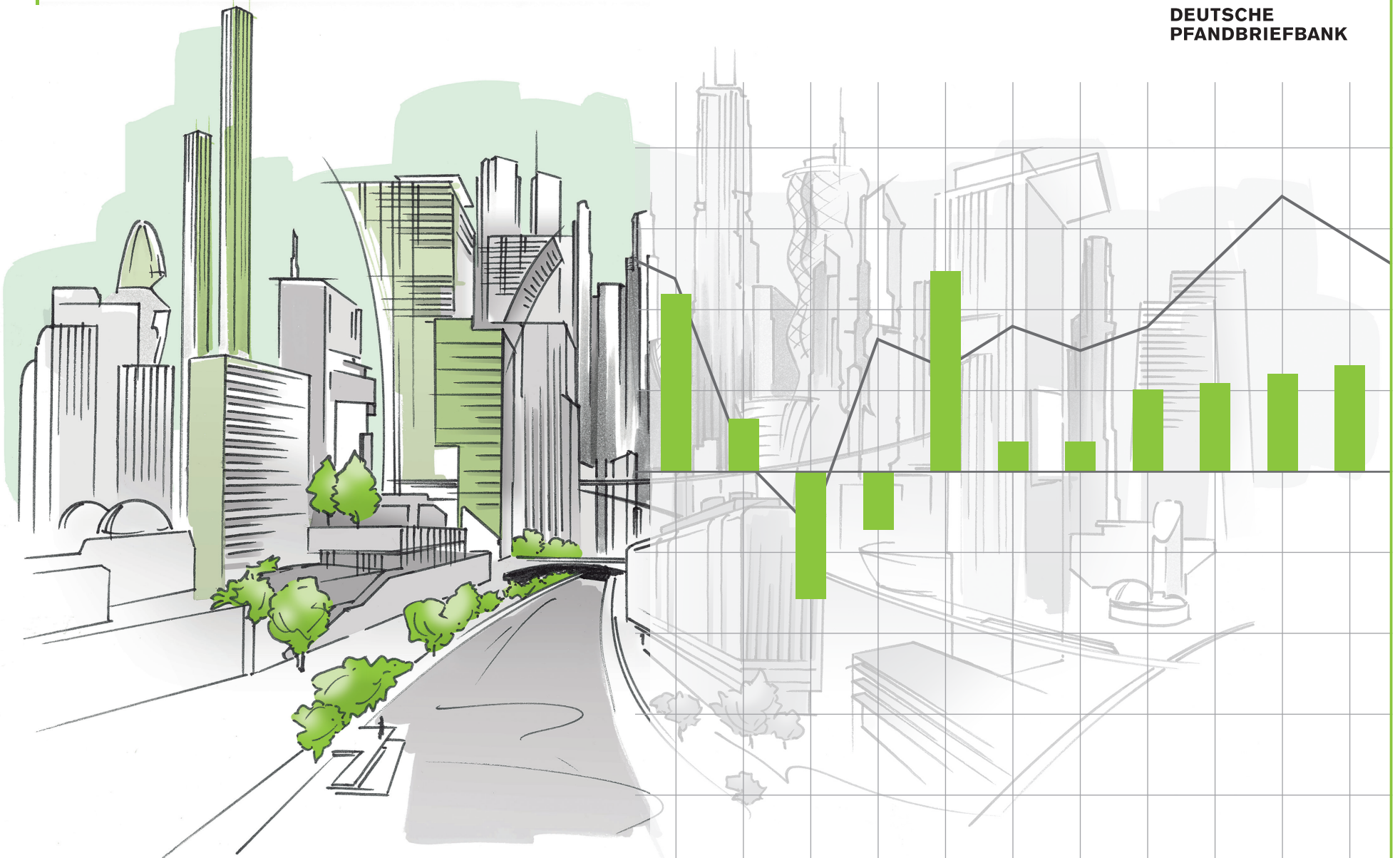


pbbIX
Office Property Market Germany
2023 | Q4

pbb

DEUTSCHE
PFANDBRIEFBANK



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Overview

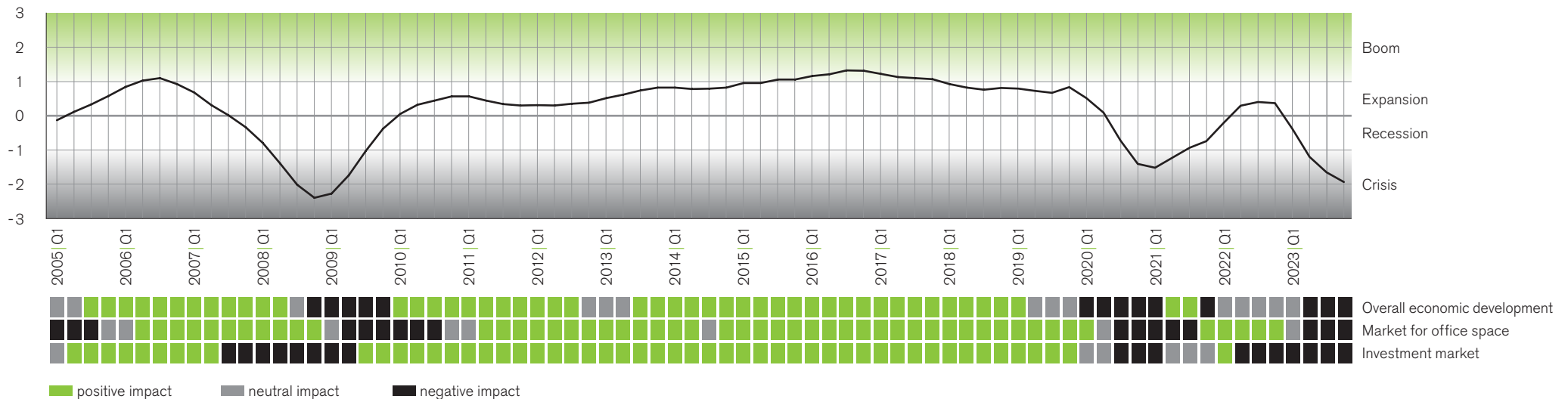
The pbbIX real estate index continued to decline in the fourth quarter of 2023. At -1.96, it **hit the lowest level since the first quarter of 2009**. For Germany, 2023 was defined by a contracting economy, a consequent slowdown in demand for office space and plummeting investment market revenues. Despite all of this, the pause in interest rate movements gave rise to the first signs of stabilisation, albeit at a low level. In the fourth quarter, office space take-up and cash inflows saw slight quarter-on-quarter growth.

The **economy as a whole had contracted** by the end of the year, after stagnating in the first nine months and shrinking by 0.3% in the fourth quarter. GDP ended the year with a similar decline. Unsurprisingly, latent uncertainty gripped the market in 2023, and demand for office space fell far below the levels seen in

recent years. Currently, the amount of vacant office space is therefore significantly higher than a year ago. Despite the interest rate pause, investment markets remained under immense pressure in the fourth quarter – reflected in an ongoing and marked **reluctance amongst buyers**. Following the trend seen in previous quarters, inflows on the investment market were very low, pushing up initial yields and leading to falling capital values.

While surveys conducted at the beginning of 2024 painted a gloomy picture and demonstrated widespread pessimism among entrepreneurs, **a slow economic recovery** in the further course of the year is expected **to lead to stabilisation in the office markets**.

pbbIX BIG 7 | Index



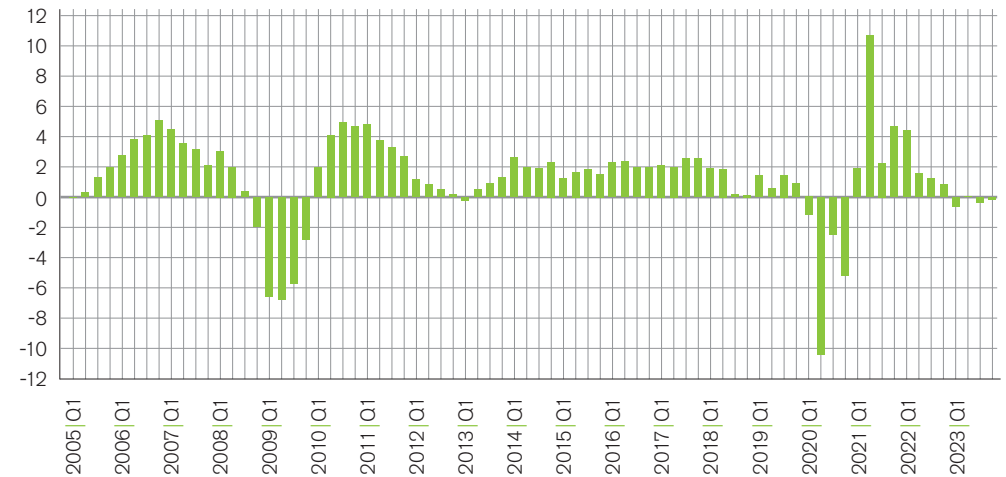
Overall economic outlook

Germany's economy is stagnating. In the fourth quarter of 2023, real economic output decreased slightly by 0.3% compared with the previous quarter. Inflation-induced losses in purchasing power weighed on consumer spending, with contractions seen in construction investments and trade balances. Real economic output also declined over the year (-0.3%). Against a backdrop of persistently high prices and interest rate levels, a weak global economy and growing geopolitical risks, overall economic activity declined.

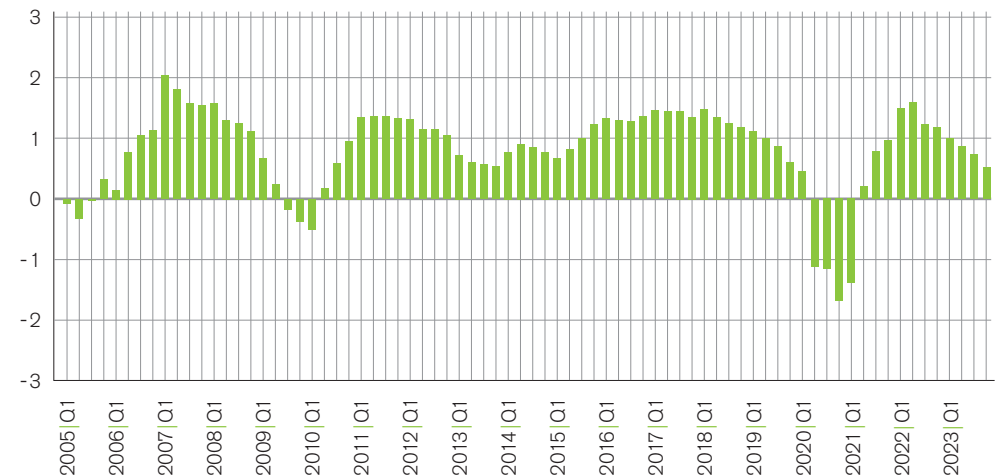
As inflation eases, together with an expected – albeit slow – economic recovery over the next twelve months and a still-resilient labour market, there are hopes for a slight improvement during the course of the year. Preliminary estimates saw **inflation pull back to 2.9%** in January 2024. It is set to slow further throughout the year, to the benefit of private households and their purchasing power. Compared with the previous year, the number of people in employment rose by around 220,000 persons, and unemployment remains at a modest 5.7%.

The latest confidence surveys suggest a further slowdown of Germany's economy in the near future. According to the ifo business climate index, businesses assessed their situation in January to be worse than in the twelve previous months. **Expectations have deteriorated since last autumn.**

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



Working population | year-on-year change in %



Market for office space

Mirroring Germany's economy as a whole, the country's big 7 markets for office space have also been **suffering from weak demand since the end of 2022**, which is evident in rental development. Take-up remained low at 740,000 sqm, despite rising slightly in the fourth quarter compared with the rather weak previous quarters. Only 2.5 million sqm found new tenants in 2023, compared with 3.5 million sqm in the previous year, marking the lowest take-up volume since the crisis year 2009 and a year-on-year decline of 28%. As the economy recovers, office space take-up is expected to increase over the course of 2024.

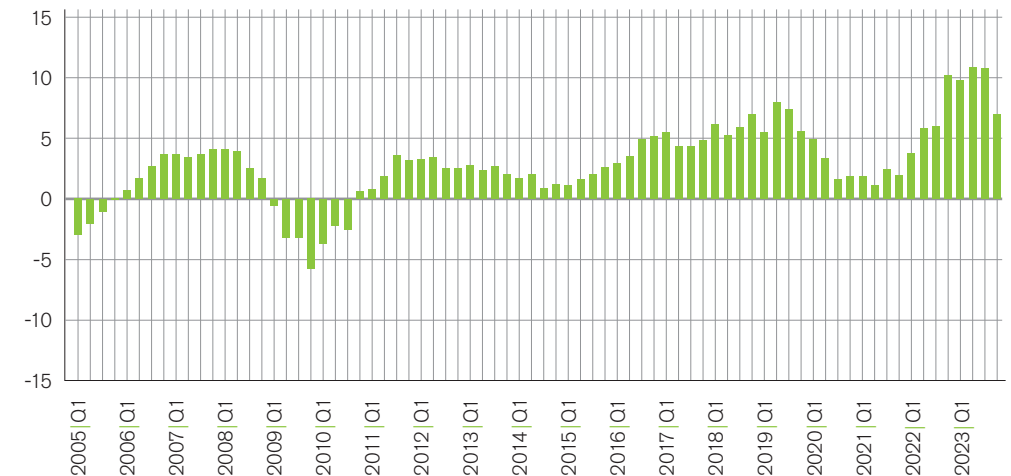
New construction activity was also **rather slow**; at 1.3 million sqm, it fell short of the previous year's figure by 26%. Nevertheless, the **vacancy rate saw a significant** weighted average **increase** of 5.8% across all the big 7 markets (+90 basis points compared with the previous twelve months). This momentum will likely slow over the next quarters, since even fewer new buildings will be completed in an environment where demand for space is weak and construction and financing costs are high.

In line with the **demand for high-quality space, rents for first-class properties in prime locations continued to trend upwards**. For the fourth quarter of 2023, top rents were more than 7% above their previous year's level, while average rents remained virtually stable. Slower growth is expected for the quarter ahead, on the back of higher vacancy rates and easing inflation.

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



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



Investment market

While the **very low inflows** seen over recent quarters in the big 7 office investment markets **picked up a little in the fourth quarter** of 2023, the overall recessionary development on the office investment markets persisted. Just under €1.0 billion-worth of office property was purchased in the big 7 markets during the quarter. For the entire year 2023, office investments totalled €4.1 billion compared with €17.1 billion in the previous year. Not since the crisis year 2009 has such a low level of inflows been seen. To put this into perspective, more than €20 billion per annum was invested in the years 2017 to 2021.

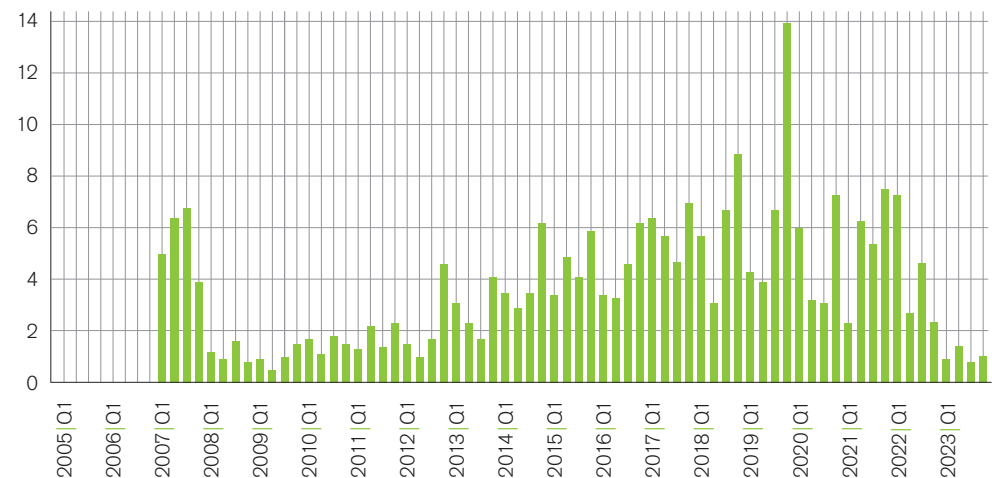
The current pressure on purchase prices manifests itself in the development of net initial yields for first-class properties (calculated as the ratio of net rental income to the gross purchase price). These **yields have been following a steep upward** trajectory since the second quarter of 2022, mirroring the development of capital market yields. **Yield momentum slowed during the fourth quarter** of 2023 (+17 basis points), after increasing by 34 basis points in the previous quarter. The yield spread vis-à-vis the current yield for 10-year German government bonds rose to 170 basis points over the course of the year. Considering that the lowest level in the current cycle was reached in the fourth quarter of 2022 at a spread of 112 basis points, this should bring real estate investments back into focus.

We expect a slow recovery for investment markets in 2024: **the peak in the interest rate cycle has passed**, market participants are starting to see eye to eye in terms of pricing, **inflation is easing**, and **visibility and planning security is growing**.

Net initial yield (BIG 7) | in %



Investment volume (BIG 7) | in € billion



BIG 7

BERLIN

On the Berlin office space market, the 2023 take-up of 530,000 sqm fell by 31% from the previous year's level and hit the lowest volume since 2009. Although new-built space saw a reduction by about half compared with the previous year, the persistent difficulty in marketing office space has been driving up the vacancy rate, which was up 100 basis points to 5.4% over the entire year. Top rents reached €44 per sqm at the end of the year. Inflows on the investment market totalled €1.3 billion, marking a 70% year-on-year decline. The net initial yield for first-class properties increased by 15 basis points to 4.2% in the fourth quarter.

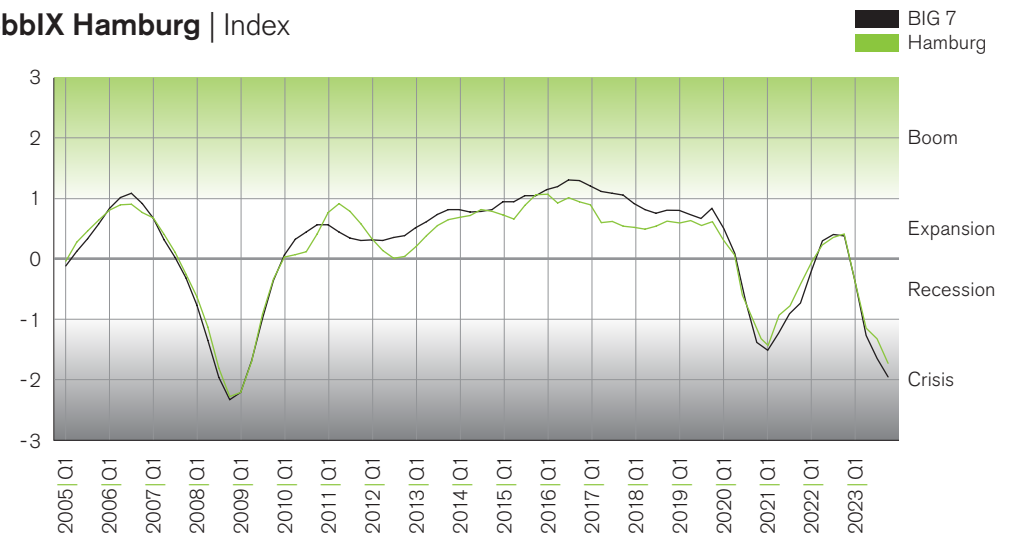
HAMBURG

The Hamburg office market proved comparatively resilient in 2023. The annual take-up of 460,000 sqm was 24% below the relatively high level of the previous year, and the market began to pick up during the fourth quarter. The largest volume drivers included public-sector institutions and providers of business services, together accounting for around 35% of office space take-up. While new construction activity was quite strong, the vacancy rate rose by 60 basis points to 4.8% at the time of writing. The top rent increased slightly by 1.5% year-on-year, to reach €34.50 per sqm. On the investment market, office property worth approximately €730 million changed hands last year, corresponding to a nearly 80% decrease compared with the previous year. The net initial yield increased by a further 10 basis points to 4.15% in the fourth quarter.

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pbbIX Hamburg | Index



BIG 7

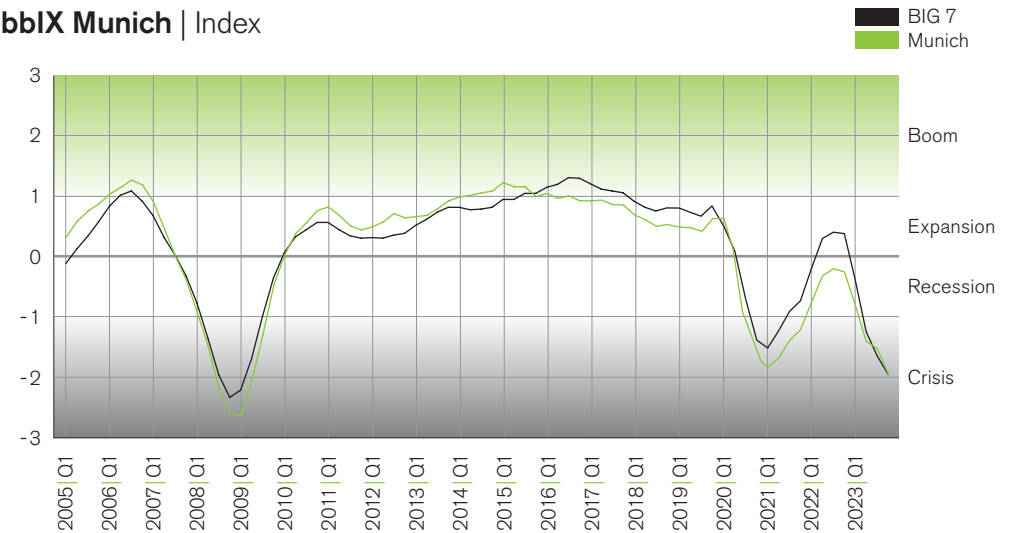
MUNICH

Demand for space in the Munich office market also saw a significant decline in 2023. At 480,000 sqm, space take-up fell by 37% year-on-year. However, demand picked up in the final quarter of the year. The vacancy rate rose by 40 basis points in the fourth quarter, to reach 5.2% at the time of writing. The low supply of high-quality space in prime locations led to a rising top rent, which has meanwhile reached the €50 mark. Average rents have been moving sideways. Investment market players were decidedly reticent over the past year; at only €700 million, the total investment volume plummeted by 75%. Accordingly, the net initial yield for first-class properties increased by 10 basis points, to reach 4.15% in the fourth quarter.

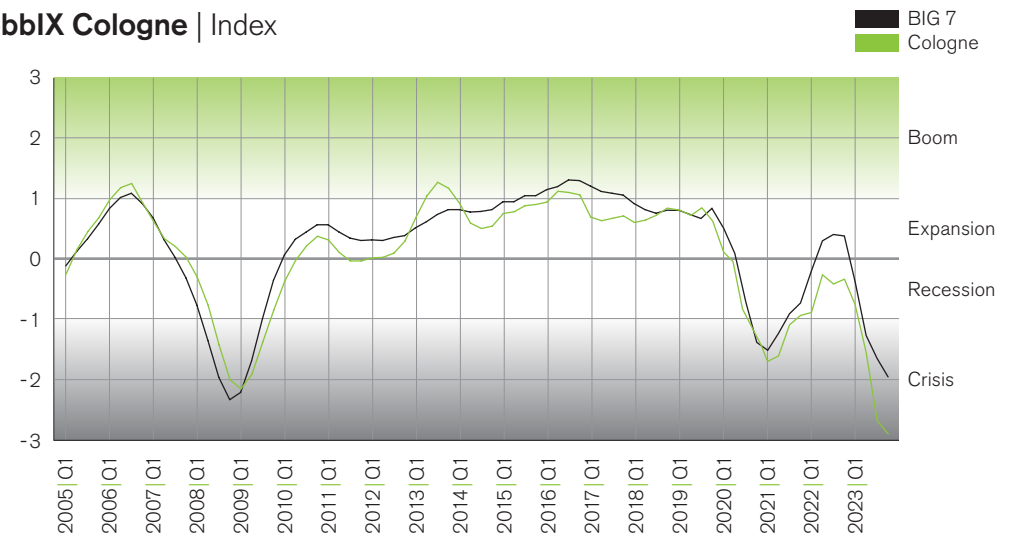
COLOGNE

Demand for office space came to 210,000 sqm during 2023, which marks a 36% decline compared with 330,000 sqm in each of the two previous years. As construction activity slowed, weak demand barely impacted the vacancy rate, which remained low at 3.3% (only +30 basis points in 2023). While the top rent remained stable quarter-on-quarter, at €32.50 per sqm, it rose 14% over the year. The Cologne investment market continues to be challenged. Inflows dropped sharply in 2023, with only €320 million-worth of office property changing hands, hitting the lowest office investment level since the crisis year 2009. This reticence translated into a 4.45% increase in the net initial yield for first-class properties in the fourth quarter (+20 basis points).

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pbbIX Cologne | Index



BIG 7

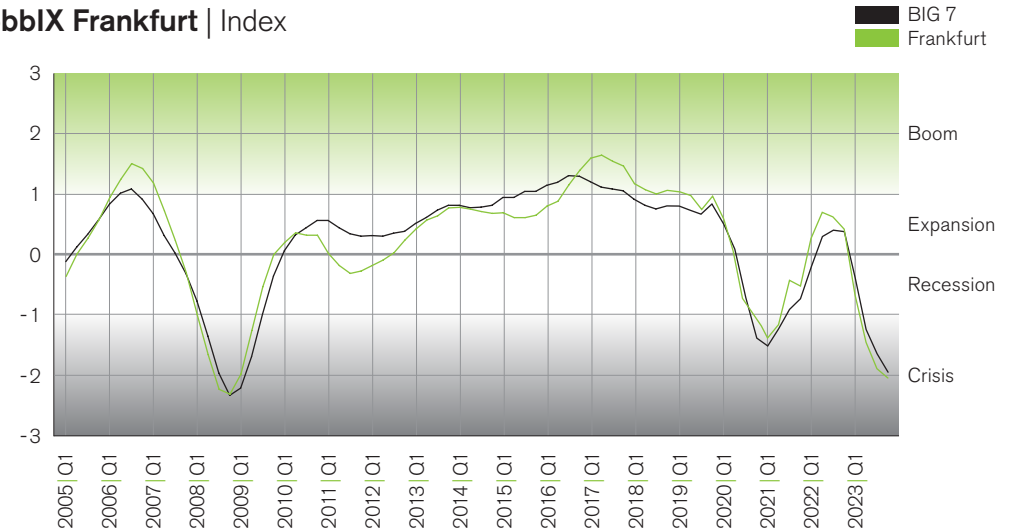
FRANKFURT

At 400,000 sqm, office space take-up in Frankfurt was roughly on a par with the previous year. The 6% decline was rather mild compared with the slump seen in the other big 7 markets. The combination of an increase in new-builds and a lower absorption of space contributed to a rise in vacancies, which stood at 8.8% at year-end. Top rents saw a slight upward trend over the year, reaching €46.50 per sqm in the fourth quarter. Looking at the investment market, investors in Frankfurt have been taking a very reticent stance for a few quarters now. All in all, just €360 million was invested in 2023, after €3.2 billion in the previous year. The net initial yield for first-class properties increased by 20 basis points to 4.45% at the last count.

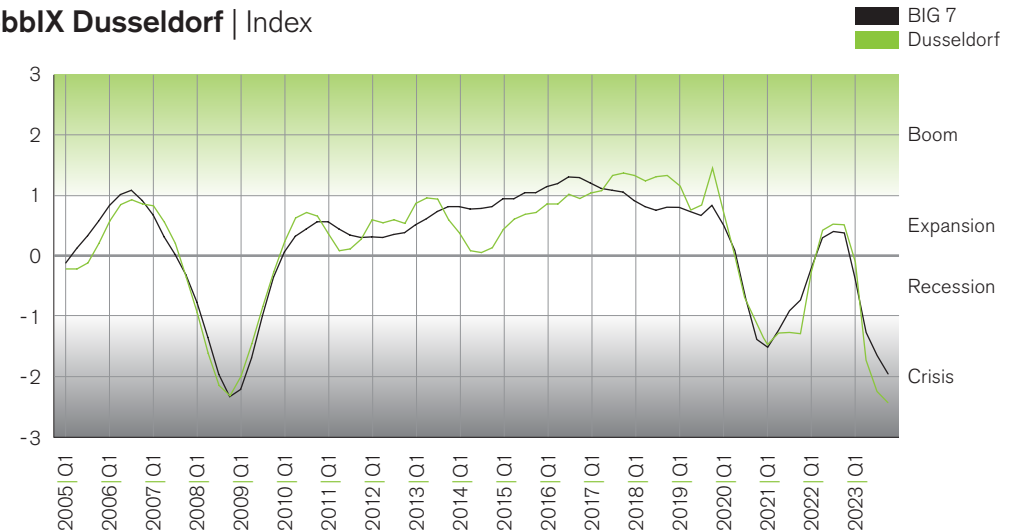
DUSSELDORF

Demand for office space remained almost stable in 2023 compared to the previous year. A letting performance of around 300,000 sqm – mainly driven by consultancy firms and industrial and trade management – fell only 5% short of the previous year's figure. However, at 9.7% the year-end vacancy rate was fairly high. While the top rent (€40 per sqm) remained unchanged quarter-on-quarter, it rose by 5% compared with the previous year. Inflows on the investment market saw a major year-on-year slump in 2023 (-80% to €300 million). Capital values were under considerable downward pressure in Dusseldorf as well, which is reflected in rising net initial yields. For first-class properties, the latter increased by 20 basis points to 4.45% in the fourth quarter.

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pbbIX Dusseldorf | Index



BIG 7

STUTTGART

Demand on the Stuttgart office market slowed compared with the previous year. The letting performance totalled around 160,000 sqm, after 305,000 sqm in 2022. New tenants took up 80,000 sqm, corresponding to a 22% decrease year-on-year. The vacancy rate continued to rise in line with the overall trend, albeit at a rather low level of 4.0%: at the end of 2022, it was 2.6%. Rents were unchanged in the last few months, with the top rent reaching €35 per sqm at the time of writing. Investment market inflows saw a 60% year-on-year decline, to €380 million. The net initial yield for first-class properties increased by another 20 basis points to 4.15% at year-end.

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, these markets are characterised by significant cyclical fluctuations. The pbbIX index family tracks economic developments on Germany's key office property markets. The index family comprises a total of eight indices: seven individual indices for the office real estate 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 single market indicator that measures overall development (for example, vacancies or new construction activity). The data list shown below sets out the indicators which were used for the dynamic factor analysis.

Over and above the office real estate market index, 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

Overall economic development

- 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 administration buildings (in sqm of usable space in the BIG 7 markets)
- Marketing volume (in sqm of rental space in the BIG 7 markets)
- Vacancies (in % of gross available area in the BIG 7 markets)
- Top rent (in € per sqm for the BIG 7 markets)
- Average rent (in € per sqm for the BIG 7 markets)

Investment market

- Initial net yield (in % for the BIG 7 markets)
- Inflow of funds (€ million)