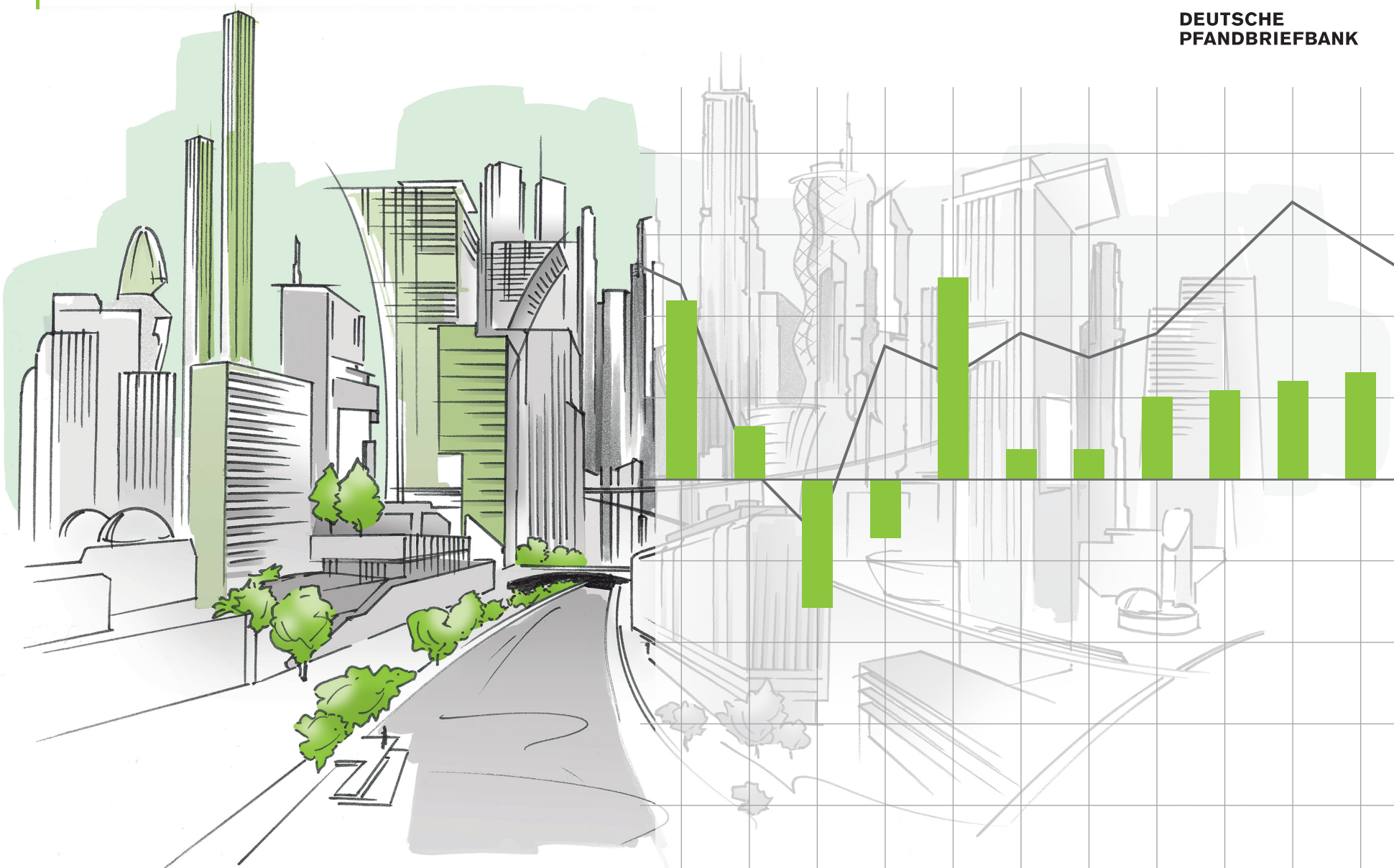


pbbIX Office Property Market Germany 2024 | Q2

pbb

DEUTSCHE
PFANDBRIEFBANK



Disclaimer

Deutsche Pfandbriefbank AG (pbb) is the sponsor of this document. vdpResearch GmbH, Berlin, is responsible for the content.

pbb does not verify the figures and other information used and does not accept any liability for the content. It shall not be obliged to correct or point out any inaccuracies or incompleteness. pbb may stop publication at any time.

Any liability for negligence on the part of pbb arising from or in connection with this document shall be excluded unless it is a matter of injury to life, limb or health, and unless such exclusion of liability is excluded for other legally compelling reasons.

All legal relationships arising from, or in connection with, this document in relation to pbb shall be governed solely by the substantive law of the Federal Republic of Germany. Exclusive legal venue shall be Munich, as far as this can be permissibly agreed upon.

Data and information contained in this publication are based on sources and methodical approaches which **vdpResearch GmbH** considers to be reliable. However, vdpResearch GmbH cannot guarantee the accuracy or completeness of the information provided. Any opinions expressed reflect the current views of vdpResearch GmbH. However, no assurance can be given with regard to the content of such opinions or forecasts.

Imprint

Deutsche Pfandbriefbank AG
Parkring 28
85748 Garching
Germany

Management Board:
Kay Wolf (CEO), Thomas Köntgen (Deputy CEO),
Dr. Pamela Hoerr, Andreas Schenk, Marcus Schulte
Chairman of the Supervisory Board: Dr. Louis Hagen
Registered office: Munich
Legal form: Aktiengesellschaft
Companies Register No: Munich District Court, record HRB 41054
International VAT ID code: DE811223976

Supervisory authorities:
Federal Financial Supervisory Authority, Graurheindorfer Str. 108, 53117 Bonn
and Marie-Curie-Straße 24-28, 60439 Frankfurt am Main
European Central Bank, Sonnemannstraße 20, 60314 Frankfurt am Main

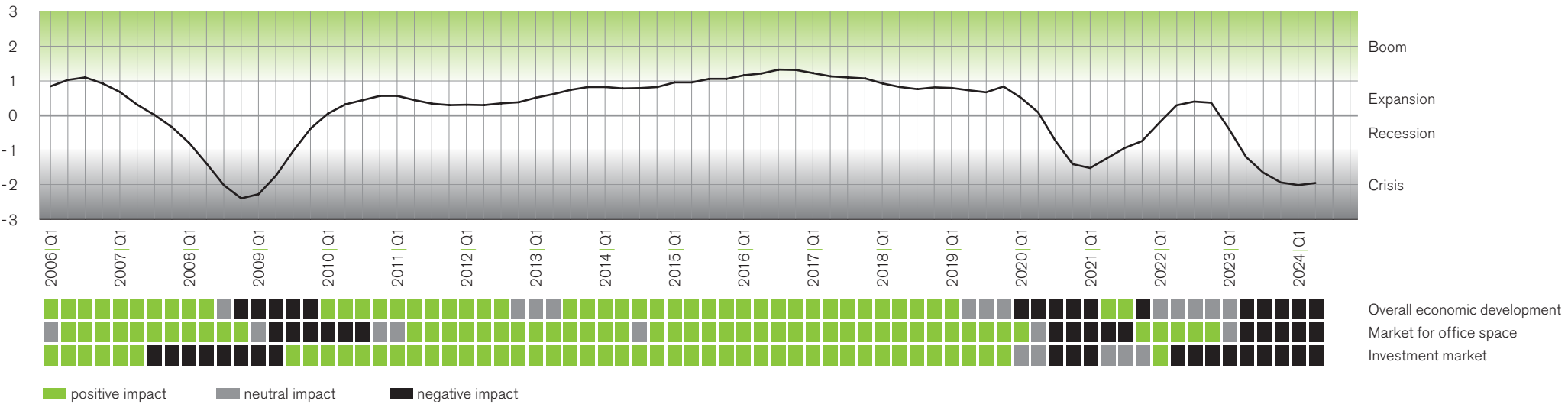
Overview

The pbbIX index ended the second quarter of 2024 at **-1.95 points, putting an end to six consecutive quarters of downtrend** in place since the end of 2022. It would appear that Germany's office markets are finally **bottoming out**. Germany's economy began 2024 with low economic growth and some prospects of a cautious economic recovery, but this was followed by an unexpected dampening of the macroeconomic environment in the second quarter. General economic weakness and ongoing structural changes as to how office space is used meant that **demand for office space remained below average**, while **investment market volumes increased** quarter-on-quarter, **albeit remaining on a very low level**. Initial yields stabilised and capital values rose marginally as a result of increasing rents. Although the ECB lowered interest rates for the first time in June, market participants are still uncertain as to how

economic and inflationary developments, along with associated interest rate movements, will pan out. This means that overall activity on the office markets is going to stay muted.

The German economy shrank marginally – by 0.1 % – in the reporting period, and the Spring Report published by the German Council of Economic Experts forecasts a modest GDP growth of 0.2% for the entire year. In the meantime, scepticism is rising that the economy will be able to record a sustained recovery as early as in 2024. Order backlogs in manufacturing are tumbling, whilst the industry sector as a whole is lacking new orders. The fact is that Germany's economy is stuck in a slump: in these circumstances it is no surprise that demand for office space remains depressed.

pbbIX BIG 7 | Index



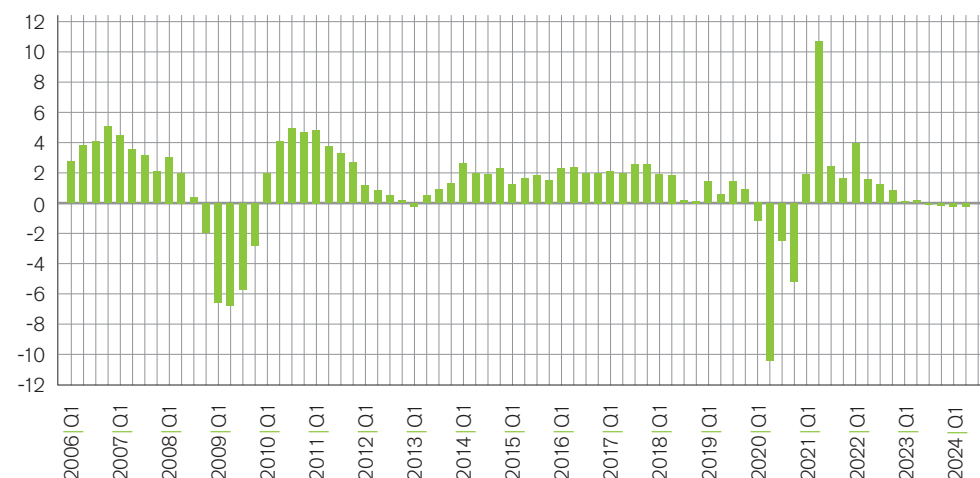
Overall economic outlook

The **German economy is moving sideways**. After a slight increase of 0.2% in the first quarter of 2024, preliminary data indicate that real **economic output fell slightly (by 0.1%) in the second quarter**. Figures from the German Federal Statistical Office indicate that the decline was mainly due to reduced investments in equipment and construction.

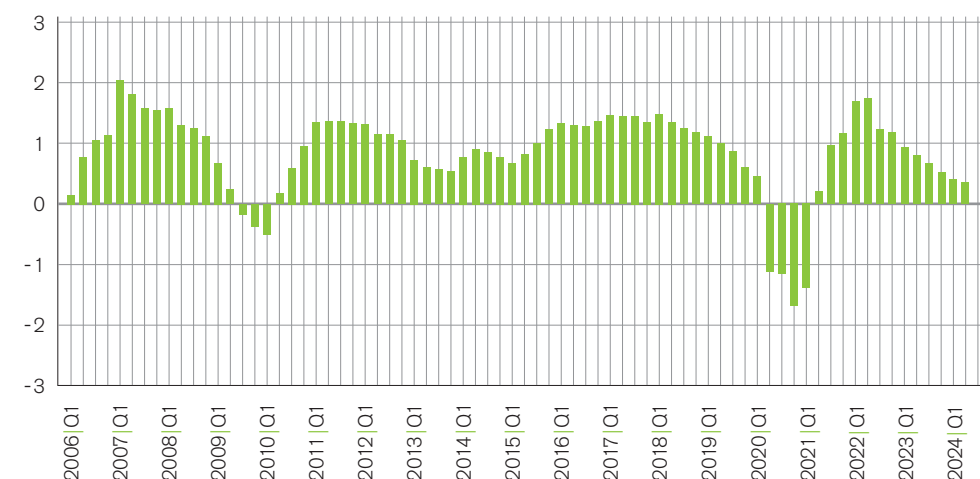
Nevertheless, an **inflation rate approaching the ECB's 2% target** and a **stable labour market** herald **decent prospects for an economic recovery**. Inflation stood at 2.3% in July 2024 according to preliminary figures, which, combined with anticipated wage increases of just under 5% for 2024, is benefiting private households and their purchasing power. The **labour market continues to demonstrate resilience**: 163,000 more people were employed in the second quarter of 2024 than in the same quarter of the previous year, and at 5.8% unemployment remained at a modest level in June 2024.

On the other hand, the macroeconomic **outlook** for Germany **has deteriorated over the past months**, and the latest confidence surveys do not suggest a rapid economic recovery. At 87.0 points in July 2024, the ifo business climate index fell for the third consecutive month, reaching the lowest level since February 2024. According to the ifo Institute, industry in particular is showing no signs of a turnaround. Sentiment regarding the current market situation – as measured in July 2024 – has not been this low since September 2020, and business expectations for the coming months have plummeted.

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



Working population | year-on-year change in %



Market for office space

In the absence of any economic support, and with market sentiment still gloomy, **demand for office space remained very weak in the second quarter**. A total of approx. 645,000 sqm was taken up in the big 7 markets, which compares to 627,000 sqm in the first quarter. In total, take-up during the first half of the year amounted to 1.27 million sqm – an increase of 9% compared to the previous year, but a decrease of around 20% compared to the ten-year average. Performance in the cities showed a very mixed picture; whilst letting performance tumbled by 15% in Hamburg and Cologne, it soared by 45% in Stuttgart.

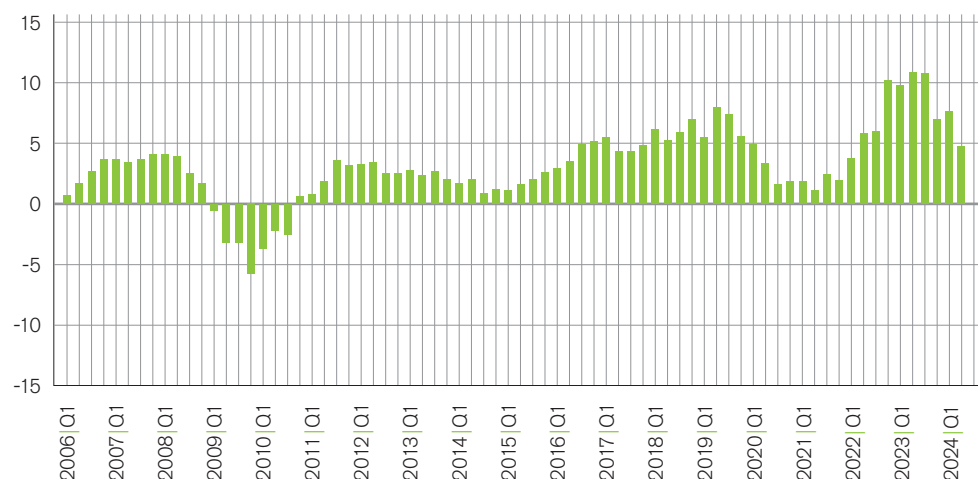
Across all markets, average vacancies increased only slightly despite weak demand. After 6.0% in the first quarter of this year, 6.2% of office space was unlet in the second quarter. **Figures for the individual markets ranged from below 4% in Cologne up to nearly 9% in Frankfurt and even 10% in Dusseldorf. New construction activity** in the first half of the year led to the completion of approx. 900,000 sqm of office space, i.e. **37% more than in the previous year**. New construction pipelines in the big 7 markets are expected to fall sharply from 2026 onwards.

In line with the demand for high-quality space, rents for first-class properties in prime locations continued to trend upwards. Top rents in the second quarter of 2024 were about 5% higher than in the previous year, whereas average rents edged up by only 1.5%. Competition for prime space in central locations with good accessibility remains strong: this will keep driving rental growth in the prime segment during the second half of 2024.

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



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



Investment market

Even though they were **up by 74% compared to the previous quarter**, **second-quarter inflows on the investment market remained distinctly subdued**. Aggregate investment volume of approx. €2.0 billion generated in the first six months of 2024 was at its lowest since the same period of 2009. To put this into perspective: investments in the first half of 2022, i.e. prior to the interest rate hiking phase, amounted to approximately €10 billion. Drivers for the current development include the ongoing price discovery process, still high interest rates affecting borrowing costs, high construction costs, the improving, albeit still weak, performance of office user markets, and a stagnant economy in the first half of the year.

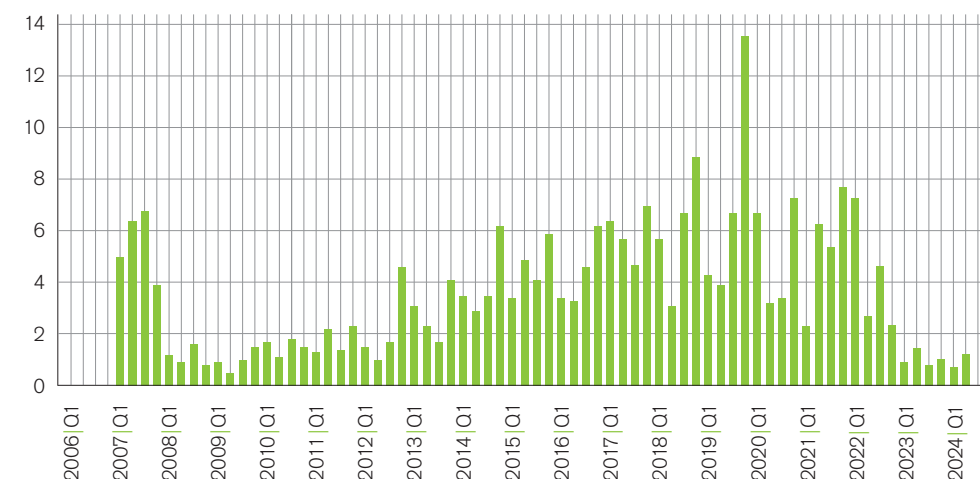
Prime yields in the office sector showed a stable performance in the second quarter when **compared to the previous quarter** and we expect the yield curve to have plateaued in this cycle. The development of net initial yields for first-class properties is an indicator for the pricing pressure on the markets: the average across all big 7 markets stands at 4.28 %, i.e. it has not moved since the beginning of the year. The yield spread vis-à-vis the current yield for 10-year German government bonds rose to 180 basis points at the end of the first half-year, compared to 134 basis points twelve months ago.

What the investment market needs is an environment that encompasses **stable purchase prices**, an **adequate risk premium** vis-à-vis risk-free investments, plus **steady to declining interest rate conditions** for borrowing. The **investment markets could record a slow and sustained recovery** if economic prospects begin to improve over the course of the year.

Net initial yield (BIG 7) | in %



Investment volume (BIG 7) | in € billion



BIG 7

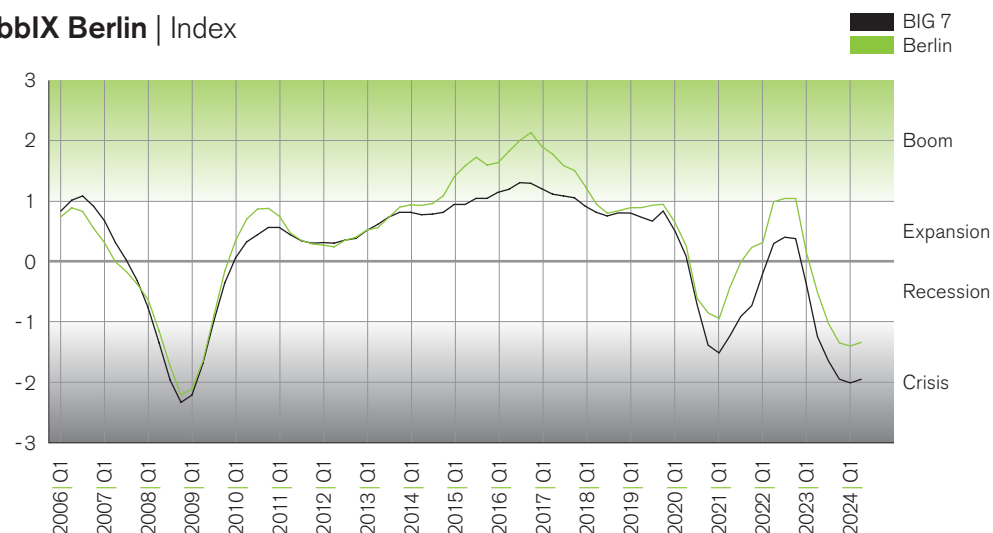
BERLIN

In Berlin, office space totalling approximately 295,000 sqm was let in the first half of 2024, 16% more than in the same period of the previous year. New construction activity soared by 41 %. The vacancy rate rose by 80 basis points to 5.6% over the last twelve months, despite improving letting activity. While the top rent remained stable quarter-on-quarter, at €44 per sqm, it increased by 1€ per sqm year-on-year. On the investment market, inflows in the office segment plummeted once again, reaching a mere €320 million during the first half of the year (-64% compared to the previous year). At 4.2%, the net initial yield for first-class properties remained stable in the second quarter compared to the beginning of 2024.

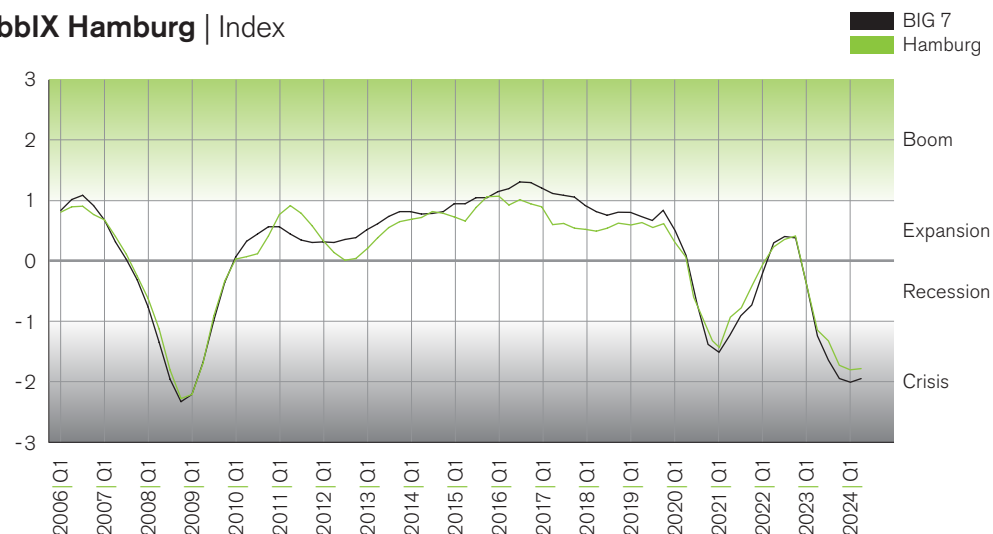
HAMBURG

Letting performance in the Hamburg office market improved moderately, leading to take-up of just under 200,000 sqm in the first half of the year. However, this is still actually a decline of about 15% vis-à-vis the previous year. Public administration and business services providers became the main drivers, each accounting for around 20% of space take-up. The vacancy rate went up to 5.0% in the first half of the year even though new construction activity decreased. The top rent rose by €0.50 quarter-on-quarter, to €35 per sqm. On the investment market, office property worth approximately €210 million changed hands in the first half of the year, marking a further fall of 40% from the previous year's already weak figure. The net initial yield for first-class properties remained at 4.25% in the second quarter.

pbbIX Berlin | Index



pbbIX Hamburg | Index



BIG 7

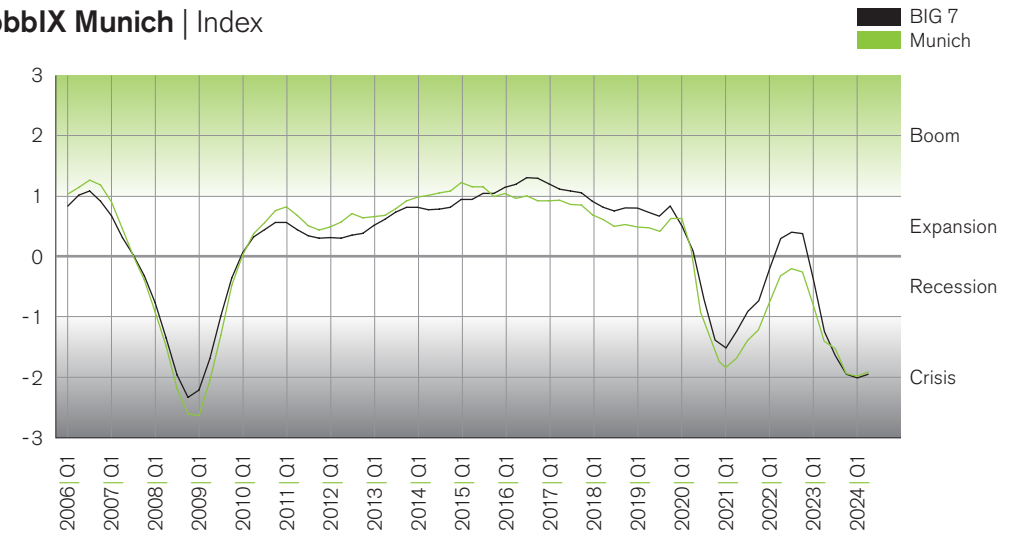
MUNICH

Demand for office space in Munich rose slightly during the second quarter, resulting in 300,000 sqm being taken up in the first six months of the year, i.e. 20% more than in the previous year. Leading the pack were industry administrative departments. The vacancy rate rose by 60 basis points in the second quarter, to reach 6.2%. Demand for high-quality space in prime locations ensures that the top rent remains at a very high level of €52 per sqm, but the average rent also picked up over the first half-year. The investment market, although still very weak, recorded inflows of around €330 million, exceeding the previous-year period by approx. 20%. The two-year upward pressure on yields came to a halt at the end of 2023; net initial yield levels for first-class properties have remained at 4.15% ever since.

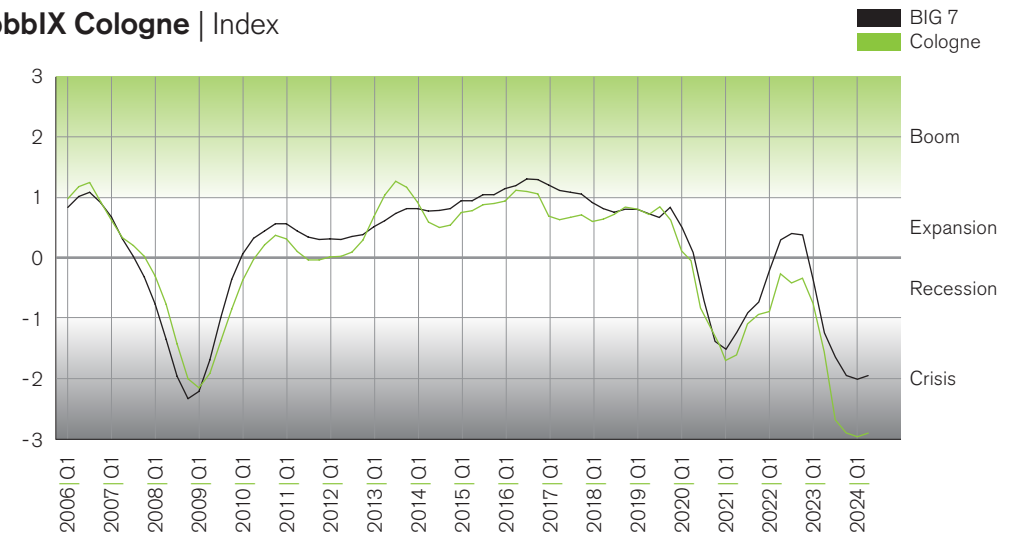
COLOGNE

Demand for office space in Cologne was very muted in the first half of the year. Total take-up amounted to only 72,000 sqm, falling significantly short of the comparative figures for the past 20 years. As new construction activity continued to decline, weak demand barely impacted the vacancy rate, which remained very low at 3.5%, up a mere 40 basis points year-on-year. The top rent increased by €0.50 year-on-year, to reach €32.50 per sqm. Inflows on Cologne's investment market were markedly higher than in the first half of 2023, reaching €380 million compared to around €140 million the year before. As such, the figure for the first half of 2024 was not far off from the ten-year average of approx. €400 million for the first six months of a year. During the second quarter the net initial yield for first-class properties remained unchanged at 4.55%.

pbbIX Munich | Index



pbbIX Cologne | Index



BIG 7

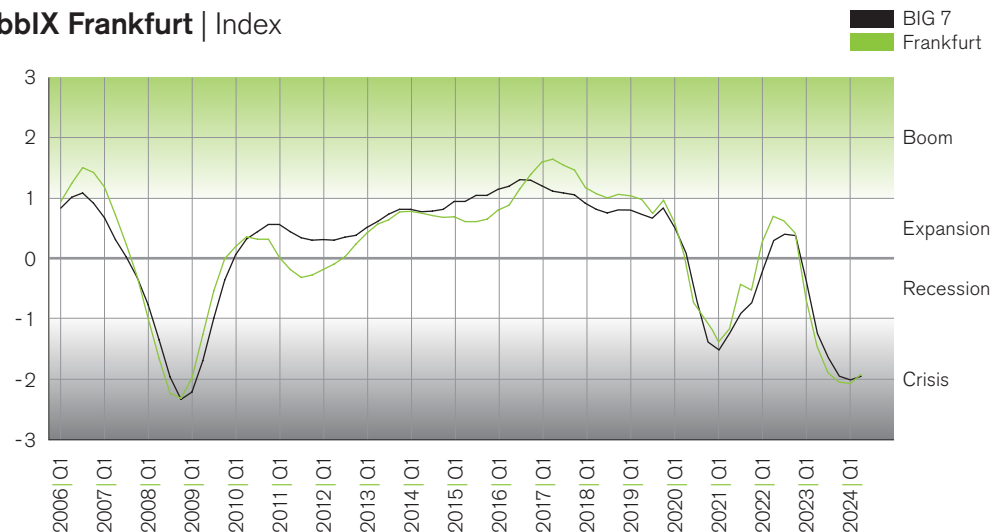
FRANKFURT

With a year-on-year increase in space take-up of around 6% to 186,000 sqm, the first half of the year ended well for Frankfurt's office market. The banking/finances, education/healthcare and business services provider sectors generated around half of total take-up. Even though new construction activity was above average, increased space absorption led to an unchanged vacancy rate of 8.6% as at mid-year. High demand, especially for prime locations with modern and ESG-compliant amenities, is being reflected in increasing rents, with the top rent currently at €47 per sqm. Investment inflows in the first half-year doubled compared to the previous year, reaching approx. €430 million. The net initial yield for properties in first-class locations increased by another 10 basis points to 4.6% in the second quarter.

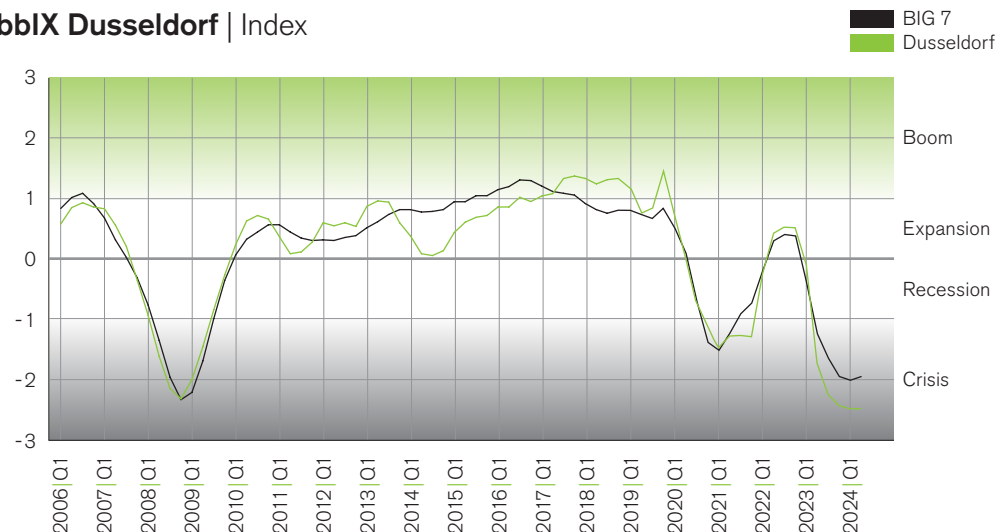
DUSSELDORF

On the market for office space in Dusseldorf, letting performance remained nearly unchanged compared to the first quarter of 2024. This led to a total of around 130,000 sqm taken up in the first six months, which exceeded the previous year's level by 23%. The vacancy rate increased from 8.7% to 10.0% over the last 12 months, reaching the highest level since early 2015. The top rent remained stable year-on-year, at €42 per sqm. Inflows on the investment market remained very low, with the investment volume of approx. €240 million barely increasing compared to the previous-year period. This is a massive 70% below the ten-year average. The net initial yield for first-class properties in Dusseldorf also remained stable quarter-on-quarter, at 4.55%.

pbbIX Frankfurt | Index



pbbIX Dusseldorf | Index

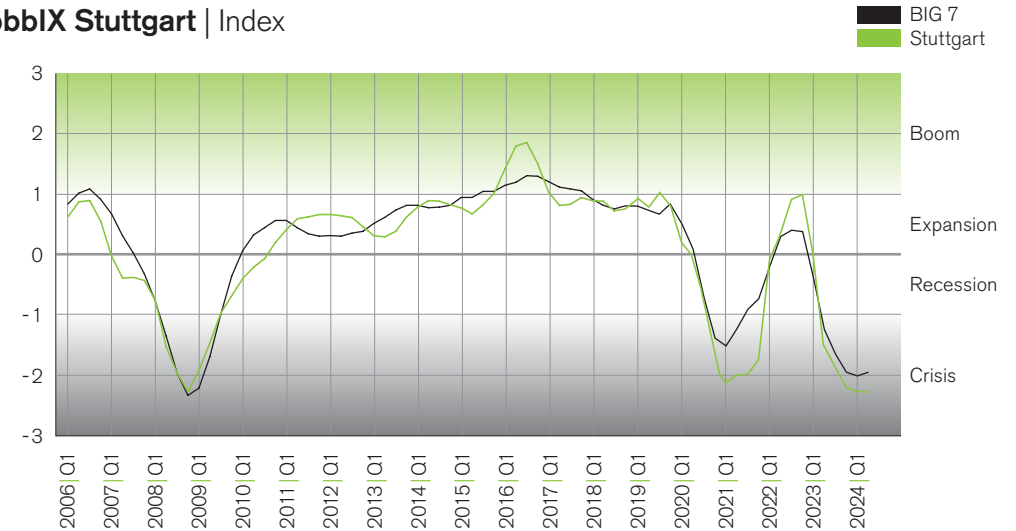


BIG 7

STUTTGART

Demand remained weak on Stuttgart's office space market, with only 38,000 sqm newly taken up in the second quarter. Over the first half of the year, however, space take-up amounted to 94,000 sqm, surpassing the very low result achieved in the first half of 2023 by 45 %. Whilst the vacancy rate remained unchanged compared to the previous quarter, it picked up by 140 basis points to 5.0% compared to the previous year. The top rent remained stable quarter-on-quarter, at €36 per sqm. Inflows of around €75 million were registered on Stuttgart's office investment market in the first half of the year, which is not only 70% below the previous year's result but also 70% lower than the ten-year average of approx. €420 million. At 4.25%, the net initial yield for first-class properties remained unchanged quarter-on-quarter.

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)