pbbIX
Office Property Market Germany
2022 | Q4

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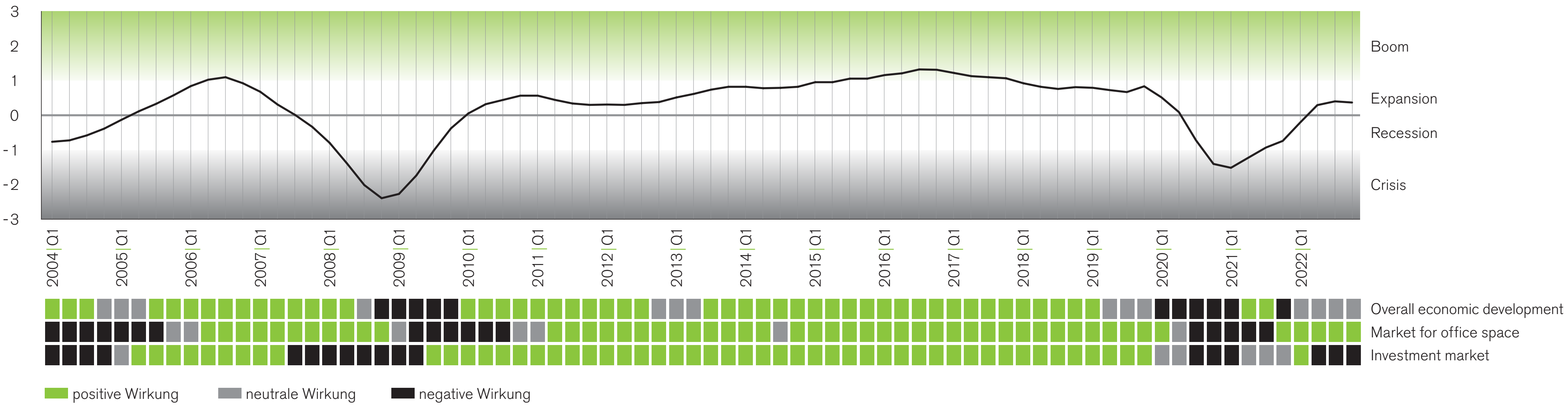
Overview

The pbbIX real estate index decreased marginally in the fourth quarter of 2022. However, at 0.38 points it remained slightly **above the zero line**. The decline was due to the overall subdued economic development – but above all, the very weak investment market. This was offset by a still relatively stable market for office space.

The markets for office space and for office investments currently show markedly divergent developments. The **market for office space** is being driven by relatively high demand for space and rising rents for first-class properties. Only the high level of new construction activity and increasing excess supply suggest that the market could slow down in the near future. On the **investment market**, this slowdown has already occurred quite some time ago. Indeed, investors have significantly reduced their overall exposure. Their evident reluctance to spend in view of higher capital market interest rates has inverted the upward price development. This is visible by the development of initial yields, which have been trending upwards since the second quarter of 2022, and which markedly gained momentum in the final quarter of the year, demonstrating that price expectations of buyers and sellers still do not match but have started moving on the back of weak investment demand.

The **macroeconomic environment** will remain challenging for now, even if pessimism has become less prevalent. This and a tighter monetary stance will lead to cautious tenant and investor behaviour and put pressure on both the space and investment markets.

pbbIX BIG 7 | Index



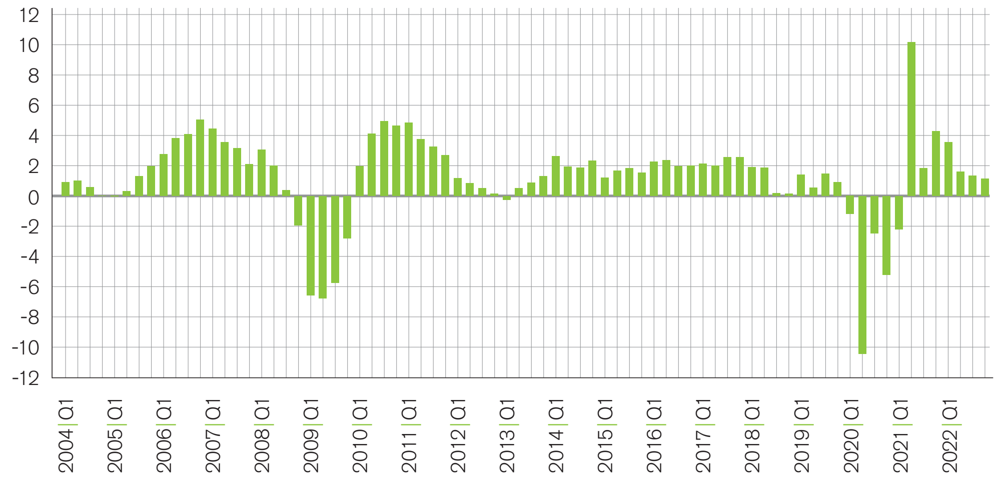
Overall economic outlook

In the fourth quarter of 2022, **real economic output** decreased **slightly by 0.2 %** compared to the previous quarter. This was due to the loss of purchasing power caused by inflation, which burdened private consumption. However, **real overall economic production** increased by 1.8 % compared to the previous year. This increase was mainly due to the lifting of pandemic-related restrictions: this increase in production, however, was burdened by various massive disruptions such as the energy crisis as well as significantly tighter monetary policy.

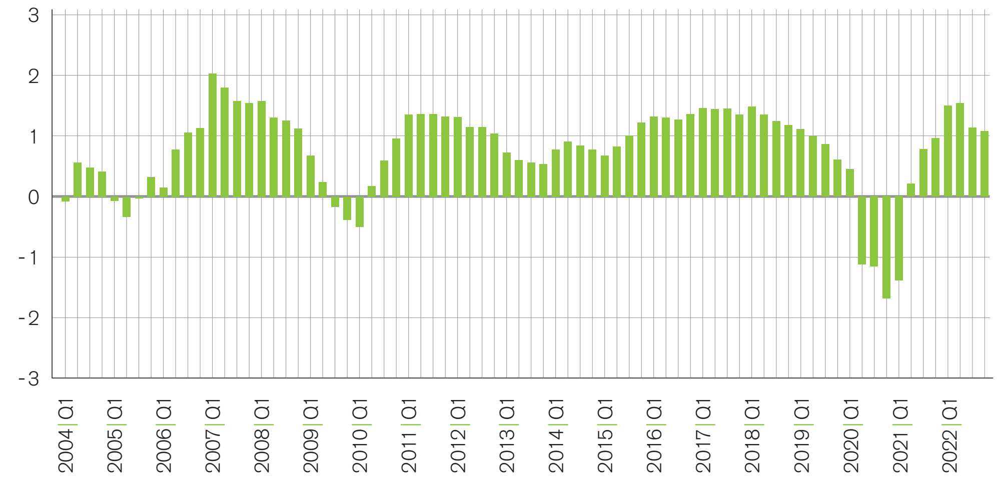
The **labour market was favourable** in the last quarter of 2022: despite the slight winter recession, the number of people in employment continued to grow in the fourth quarter of 2022, by **almost 500,000** compared to the same quarter in the previous year. Adjusted for seasonal effects, unemployment remained stable at a moderate level, while demand for new employees was high.

The latest business surveys and economic forecasts for the current year indicate that the overall economic development is in fact much better than had been expected only recently. According to the **ifo business climate index**, companies from almost all economic sectors are **comparatively confident**. This optimism is mainly due to the fact that the threat of an energy shortage has been mitigated for the time being, and that inflation is easing. On the downside, substantial challenges and risks remain: the ongoing war in Ukraine, for example, is associated with considerable uncertainty that weighs on investments in particular. The subdued global economy and the looming trade conflicts are tightly limiting export activities. In addition, interest rates could be hiked further.

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



Working population | year-on-year change in %



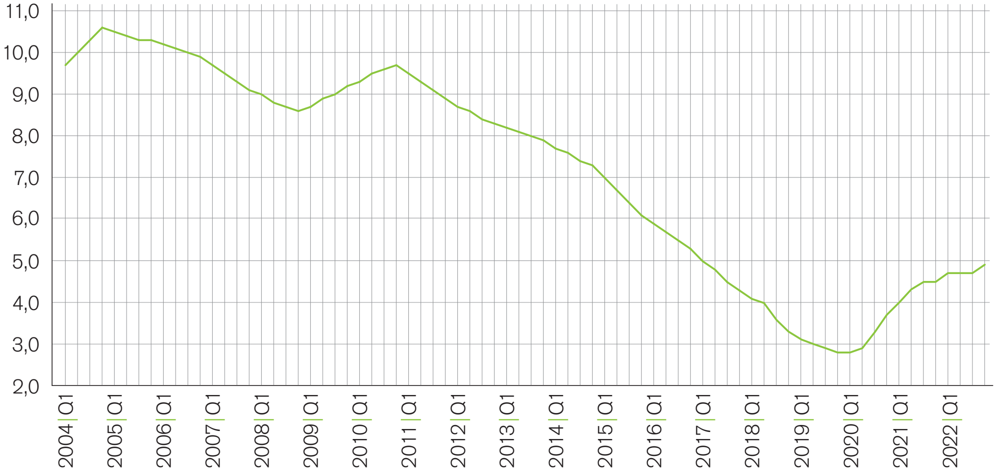
Market for office space

The market for office space showed very good demand in the past year, driven by a **stable labour market and high pre-letting rates**. A total of **3.5 million sqm** was taken up in the big 7 markets over the year, of which 20% was seen in the fourth quarter. Only in the boom years of 2016 and 2019 were higher annual takeups achieved. In this context, demand in the past year was again focused increasingly on quality and thus on office rental space in central locations with good public transport connections and low energy consumption. Around 70% of all new lettings showed this focus, which should also point the way for future investments.

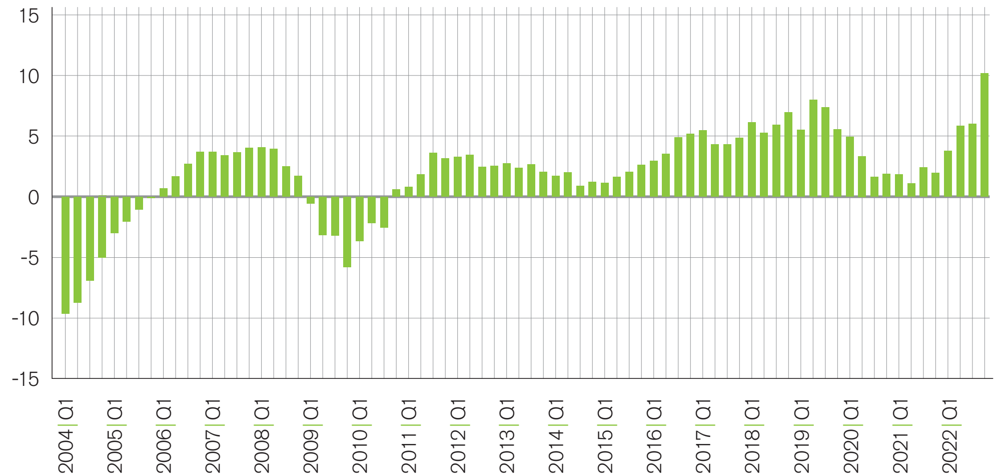
New construction activity was also positive. At 1.76 million sqm of office space (1.8 per cent of available office space), new construction activity markedly exceeded that of recent years. **Office space vacancies therefore increased** despite the strong demand for space: at the turn of the year, vacancies amounted to 4.9% (on a weighted average across all the big 7 markets), and were thus 40 basis points above the previous year's level.

In line with the **demand for high-quality space**, rents for first-class properties in prime locations showed an especially strong upward trend. For the fourth quarter of 2022, rents in this segment were more than 10% above their previous year's level. The increase in average rents for the entire sector was only half as strong. The situation on the office space market is likely to **deteriorate** somewhat in the near future, as high cost pressures and flexible work models limit demand.

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



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



Investment market

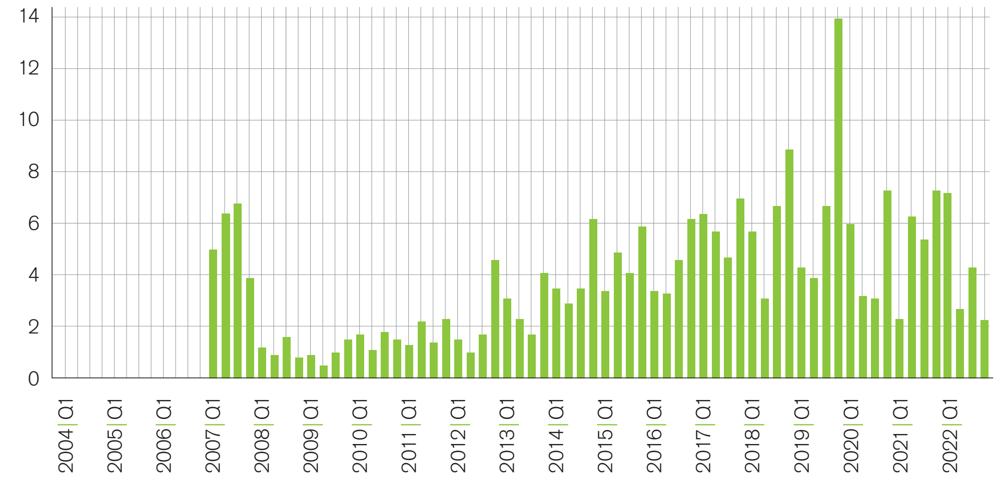
The inflows seen in the big 7 office investment markets continued to decline in the fourth quarter of 2022. The usual **year-end rally failed to materialise**, and investments in office properties amounted to €2.2 billion only. This compares to investments of around €7 billion in the same period of the previous year. In total, investments in 2022 thus amounted to €16.5 billion, of which around two thirds came from domestic investors.

This makes the **2022 the year with the lowest level of investments since 2014**. The decline in demand is closely linked to the **significant interest rates hikes and high prices being sought** for office real estate. Through higher discount rates of future net rental income, higher interest rates in principle go hand in hand with lower property values. In addition, the higher interest rates have increased cost of debt and fuelled demand for investment alternatives such as government bonds. All this led to **cautious behaviour amongst buyers** in the past year, with potential investors waiting for price concessions in accordance with the interest rate development.

Since the second quarter of 2022, waning investment pressure was accompanied by **rising initial yields**. While the upward trend was still gradual in the second and third quarters, increasing by 10 and 12 basis points respectively, the rise in the fourth quarter was much more pronounced. According to the major brokerages, the weighted average net initial yields for prime properties across all big 7 markets increased by 47 basis points, from 2.76% to 3.23%. This **increase in yields means significant value losses** and now indicates very clearly that the investment market is realigning.

Net initial yield (BIG 7) | in %

Investment volume (BIG 7) | in € billion

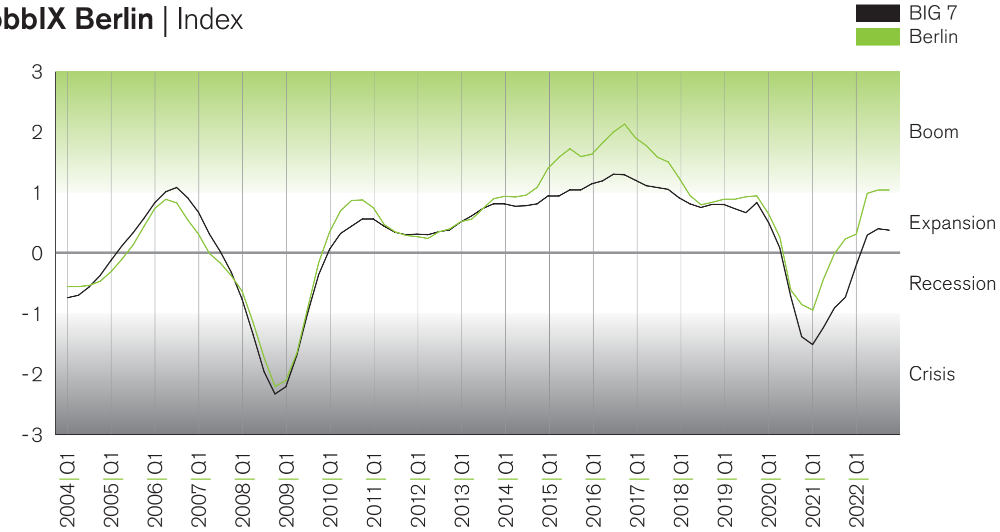


BIG 7

BERLIN

On Berlin's office space market, the take-up in 2022 amounted to 770,000 sqm – 12 % less than the previous year. This was down to a comparably weak fourth quarter, which saw a take-up of only 145,000 sqm. As new-built space increased at the same time, the vacancy rate rose from 4.1 % to 4.4 % during the course of the year. Due to increasing demand for first-class properties, top rents rose nevertheless, to more than €41 per sqm at the end of the year. The investment market put in a poor performance compared to the previous year: inflows amounted to a total of €4.3 billion, down 16 % year-on-year. This was attributable to reticence among investors in the fourth quarter and the increase in net initial yields for first-class properties of 50 basis points.

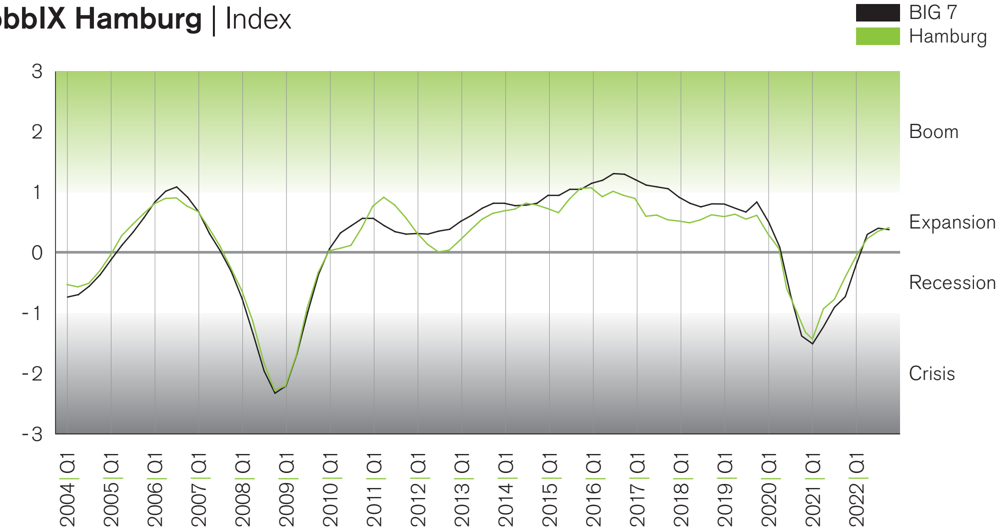
pbbIX Berlin | Index



HAMBURG

Due to a number of large-scale lettings, space take-up on Hamburg's office market was exceptionally high in 2022. Overall, almost 600,000 sqm was taken up by new tenants or owner-occupiers – an increase of 22 % over the previous year. Nevertheless, the vacancy rate slightly increased to 4.2 % due to brisk new construction activity. Top rents continued to trend upwards, reaching €34 per sqm at the end of 2022, up from €31.5 per sqm at the end of 2021. On the investment market, office properties worth approximately €3.3 billion changed hands last year, a significant share of which is attributable to the acquisition of alstria by Brookfield. As investment activities slowed significantly, net initial yields rose markedly from 2.8 % to 3.25 % in the fourth quarter.

pbbIX Hamburg | Index

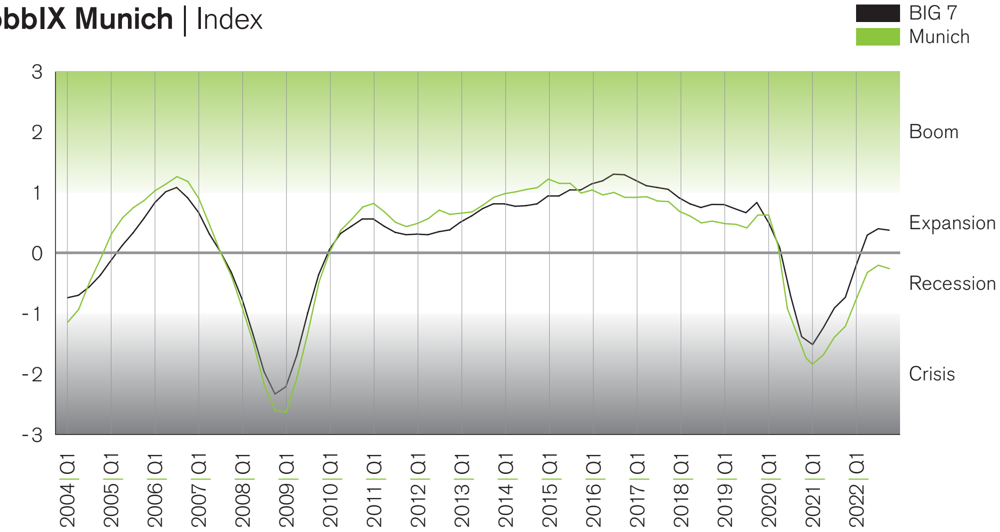


BIG 7

MUNICH

Over the past year, demand for space in Munich basically remained at the long-term average. A total of around 760,000 sqm was taken up, with demand losing momentum in the last quarter of the year. The vacancy rate was still at a moderate 4%, having remained around that level since the beginning of the year. Rents for first-class properties continue to trend significantly higher, whereas average rents across all segments moved sideways. Investment market players were decidedly reticent over the past year, investing only €2.5 billion. The last time a lower level was seen was in 2012 (€2.1 billion). Over the year, this was mirrored by the increase in initial net yields for first-class properties: it rose 55 basis points to reach 3.2% by year-end.

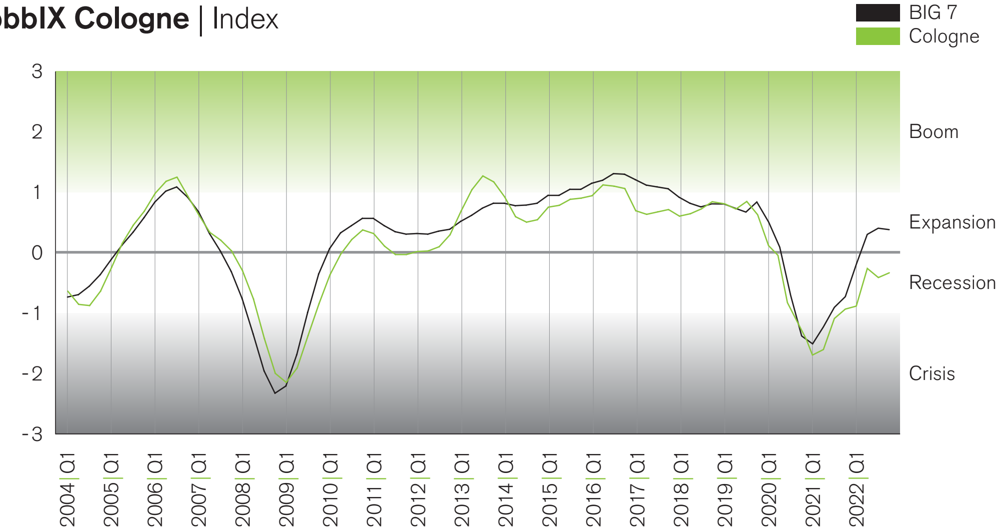
pbbIX Munich | Index



COLOGNE

Demand on the Cologne office space market has been stable at a relatively high level for two years now. In 2022, around 330,000 sqm was taken up, around the same as in the previous year. Over the last quarters, the vacancy rate has dropped by 70 basis points to 3%. Supply and demand thus lie close together, despite increased new construction activity. Accordingly, rents for first-class properties further increased towards the end of the year, with rents at €28-28.5 per sqm seen most recently. The situation on the investment market is rather different: inflows dropped sharply in 2022, with the purchase volume for office properties only amounting to €760 million. This reticence translated into an increase in net initial yields for first-class properties in the fourth quarter of 2022, by 50 basis points to 3.35%.

pbbIX Cologne | Index

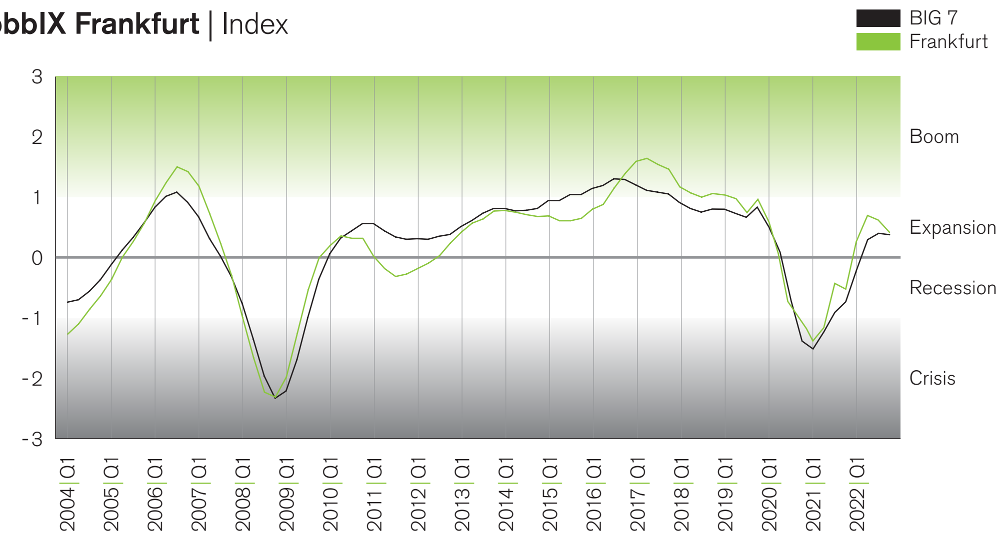


BIG 7

FRANKFURT

2022 was a solid, yet not particularly great year in terms of office space demand. At 430,000 sqm, the total take-up was actually 8% lower than in the previous year. This added to a growing oversupply, even if less new office space was completed. The vacancy rate at year-end amounted to 8.5%, compared to 7.6% at the beginning of the year. Top rents trended upwards over the year, reaching €46 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, only €3.1 billion was invested in 2022, after €6.2 billion p.a. on a five-year average. Net initial yields for first-class properties increased by 70 basis points to 3.4% over the year.

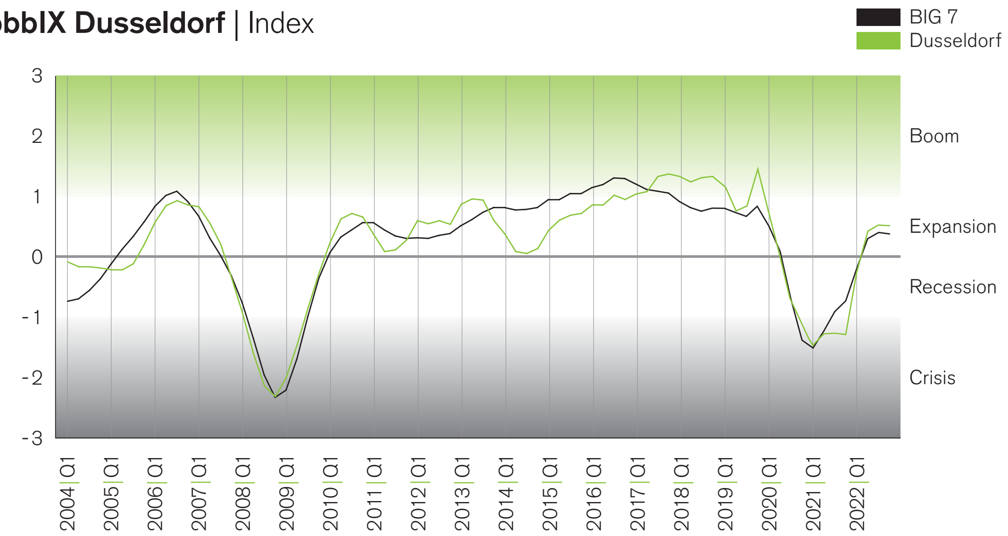
pbbIX Frankfurt | Index



DUSSELDORF

Office space demand did not provide particular impetus in 2022, but remained stable overall. The letting performance was largely driven by consultancy firms and the public administration sector, and at 318,000 sqm, was 2.4% less than the previous year's figure. At 8% as per year-end, the vacancy rate remained fairly high. Since first-class space in central office locations remained scarce, top rents nevertheless showed a significant increase, reaching €34-38 per sqm, depending on the source. On the investment market, fund inflows rose slightly over the previous year, but came in clearly below the mid-term average. Net initial yields increased by 65 basis points to 3.35% in 2022.

pbbIX Dusseldorf | Index

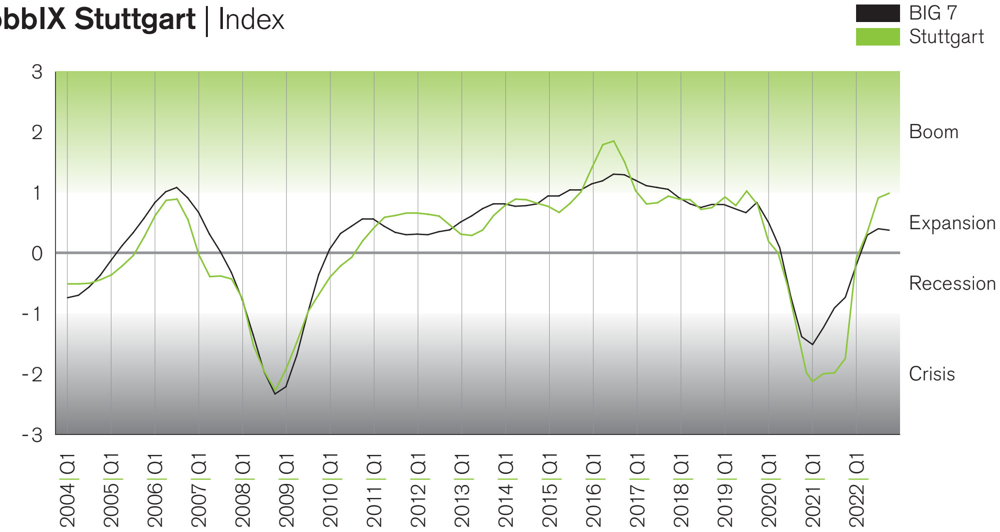


BIG 7

STUTTGART

Stuttgart's office market saw a marked increase in demand for space – especially in the first half of the year. The letting performance totalled 306,000 sqm, after around 140,000 sqm in each of the two preceding years. Vacancies rose in line with the overall trend, but remained very low at a rate of 2.6 %. Top rents trended significantly upwards over the year, finishing the fourth quarter at €33 per sqm. In contrast to the overall trend, fund inflows increased on the investment market, with the alstria takeover contributing substantially. A total of €1.1 billion was invested, 29 % more than in the previous year. Prime yields, which had amounted to 2.65 % back in the first quarter, climbed to 3.4 % 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)