pbbIX
Office Property Market Germany
2022 Q 1 DEUTSCHE PFANDBRIEFBANK



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Overview



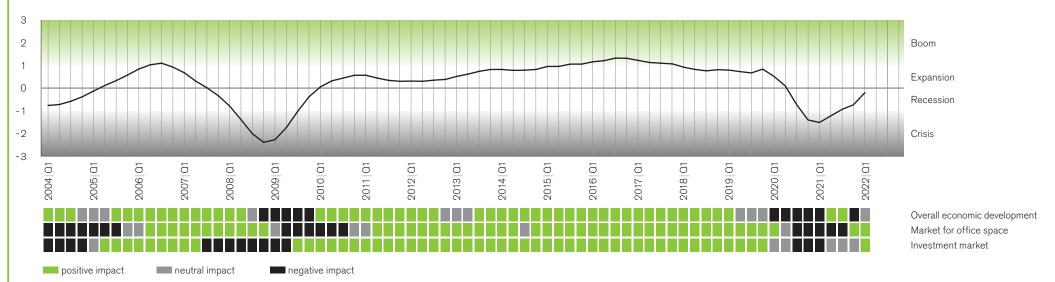
To start 2022, the pbbIX real estate index saw its fourth consecutive increase, coming very close to the zero line with an 0.54 point rise in the first quarter of 2022, to be precise from -0.74 to -0.20. The big 7 markets as a whole are **hovering between recession and expansion**; individual sub-markets such as Berlin and Frankfurt have already crossed past the recession threshold, while for various reasons, Cologne and Munich continue to lag behind.

The big 7 markets saw a surprisingly solid start to the year in both the market for office space and the investment market due to a modestly increased demand for space – especially in prime locations – alongside only a slight increase in vacancies and a stable to slightly positive trend in rents. At the same time, **individual portfolio purchases and large transactions** generated high turnover in the

investment market. These sales processes, however, had been initiated last year and do not reflect the situation since the beginning of the Ukraine War.

Broader economic developments are currently confronting office markets with a **multitude of burdens and imponderables**. Accompanied by a steep wave of inflation, economic growth – in terms of real gross domestic product – was weak in the first quarter of 2022. Moreover, the Russian invasion of Ukraine has reinforced expectations that a post-COVID-19 economic recovery may be delayed in coming. It thus remains to be seen whether office markets can maintain their upward trajectory, as the combination of a slow gross domestic product growth, inflation and higher inter-est rates serves to inhibit growth in both the market for office space and the invest-ment market.

pbbIX BIG 7 | Index



Overall economic outlook



Measured in terms of overall economic production, the German economy is currently struggling to make headway. After seasonal and calendar adjustment, real GDP rose by only 0.2% in the first quarter, after falling by 0.3% at the end of 2021. Year-on-year, however, GDP was up by 3.7%. The moderate **pace of expansion** can be put down, in particular, to weak foreign demand.

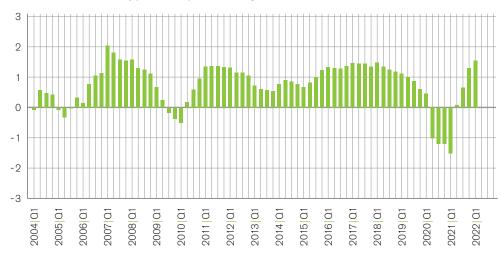
The economy in the first part of the year was still reeling from the effects of **global supply chain bottlenecks**, closely related to the strict lockdowns in China. Initial effects were also felt from Russia's war of aggression on Ukraine: not only did the conflict exacerbate existing supply chain difficulties, the sharp increase in commodity and energy prices also gave rise to higher production costs for companies and affected private consumption.

The labour market, meanwhile, continued its positive trend; in fact, the number of people in employment came in just higher than the pre-pandemic level of early 2020. **Germany's economic sentiment** also stabilised in April, according to the ifo Business Climate Index — following the previous marked, war-related decline. Whilst the index was up slightly in the manufacturing sector, the business climate improved significantly in the services sector. Nevertheless, overall sentiment remains subdued, with an economy confronted by numerous uncertainties whose consequences are difficult to predict. Among these are possible stoppages of gas deliveries, additional sanctions against Russia, inflation and restrictive monetary policy aimed at halting inflation with rising interest rates.

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 held up well in Q1/2022. The **moderate recovery in demand** continued parallel to the upward trend in employment. A total of 860,000 sqm of office space was newly let in the top markets – 16% more than in the same quarter last year. Though this represents a vast improvement above the quartlay results of the last two years, it nevertheless falls short of the strong letting performance in the fourth quarter of 2021.

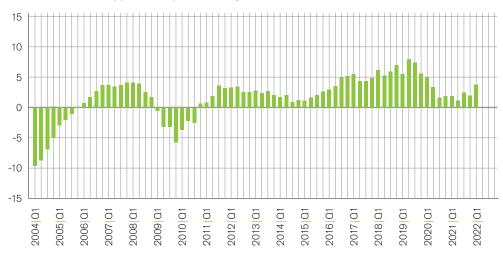
Without the trend towards working from home and the associated uncertainty regarding future demand, demand for office space would certainly have been stronger in recent months. However, given the good starting position at the beginning of the pandemic, cautious new construction activity and high pre-letting rates, the market remained stable with **manageable office space vacancies** overall. In the first quarter, 4.7 % of office space in the BIG-7 remained vacant, compared to 4.5 % in the previous quarter. All markets contributed to this modest rise. The only markets with vacancy rates above 5 % were Frankfurt and Dusseldorf.

Relatively low vacancy rates along with a noticeable interest in first-class properties in particular, have led to a renewed increase in top rents. Demand for office space is increasingly shifting towards new space in class A locations, and **rents for this space are trending upwards** accordingly, despite the somewhat more difficult rental situation overall. Prime rents in the first quarter of 2022 were around 4% higher year-on-year, while average rents remained almost unchanged over the same period.

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



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



Investment market



The first quarter of 2022 saw more than €7 billion in office property turnover in the big 7 markets – matching the most recent quarter and fully doubling the very weak result of the prior-year quarter. A significant part of the turnover, however, resulted from just **two major transactions**: the 90% acquisition of alstria by Canadian investor Brookfield, with an estimated €4.5 billion of the value attributable to Germany, and the sale of Frankfurt's Marienturm to DWS.

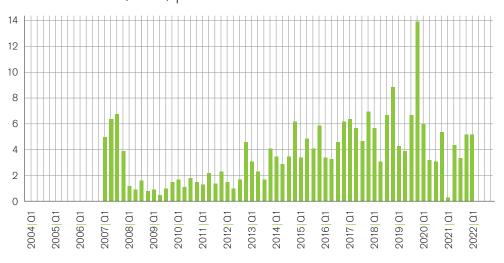
Even discounting the alstria portfolio effects, this high turnover shows that the office investment market in Germany remains in high favour among investors. Given the gloomy state of affairs globally, however, it is still too early to interpret the latest figures. Most of the transactions were initiated and concluded before the Ukraine war, so that the **consequences of the hostilities did not yet impact transactions in the first quarter of 2022**.

Initial yields for first-class properties in the first quarter of 2022 remained broadly unchanged compared to the previous quarter. Only in Stuttgart did prime yields fall slightly, while elsewhere there were sideways movements. Net initial yields stood at 2.54% in the first quarter in the face of emerging head-winds from rising capital market yields, which are increasingly coming off their historic lows and leading to a **deterioration in yield spreads** on balance. In the the first quarter of 2022, current yields for ten-year public-sector bonds rose by 45 basis points, to 0.15%.

Net initial yield (BIG 7) | in %



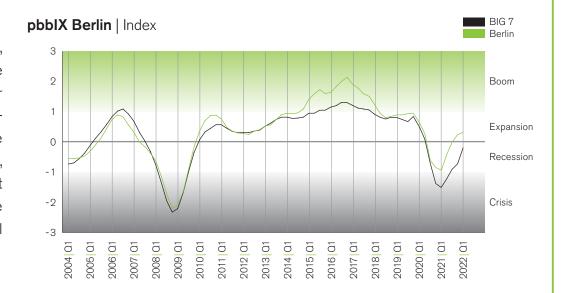
Investment volume (BIG 7) | in € billion





BERLIN

In Berlin, following the very high level of take-up in the fourth quarter of 2021, the first quarter of 2022 saw a weakening. In total, only 180,000 sqm of office space was let – compared to more than 320,000 sqm in the previous quarter and around 218,000 sqm a year earlier. In view of a relatively high influx of newbuilt space, the vacancy rate rose from 4.1% to 4.3% during the course of the quarter. Top rents nevertheless increased slightly, from \leq 39 to \leq 39.5 per sqm, while average rents fell slightly. At around \leq 1.4 billion, capital inflows in the first quarter of 2022 came in at a similar level to the previous quarter and have remained extraordinarily stable overall for several quarters. As a result, initial yields for first-class properties remain poised at 2.5%.



HAMBURG

For more than a year, quarterly letting performance in Hamburg has fluctuated between 90,000 sqm and 150,000 sqm. The first quarter of 2022 joins this pattern with a very solid result in the upper quartile of the range − roughly 134,000 sqm were newly let or occupied. In a period with little new construction activity, the vacancy rate rose slightly, reaching 4% at last measurement. Top rents remained unchanged at the beginning of the year, at €31.5 per sqm. The investment market saw extraordinarily high turnover of at least €1.5 billion. This is almost entirely down to the change in ownership of the alstria portfolio, many of whose properties are located in Hamburg. Net initial yields for first-class properties remained unchanged at 2.6% in the first quarter of 2022.





MUNICH

In the first quarter, the Munich market for office space continued to enjoy momentum from last year, with take-up of 196,000 sqm. This is just short of the high turnover seen in the previous quarter and nearly double compared to the prior-year quarter. The vacancy rate remained unchanged at 3.9%, while prime rents per sqm increased from \leqslant 42 to \leqslant 42.5. By contrast, the very volatile investment market measured by inflows of capital began the year on a relatively weak note. After reaching \leqslant 2.3 billion in the fourth quarter of 2021, office property turnover came in at just over \leqslant 600 million in the initial quarter of the year – half of which from the sale of the Olympia Business Center. Net initial yields for first-class office properties stood at 2.65%.



COLOGNE

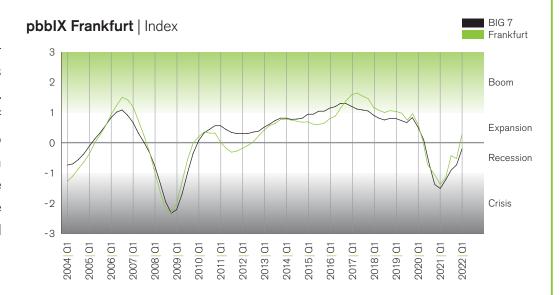
Measured against last year's average letting performance, the first-quarter development in Cologne was rather muted. Around 66,000 sqm were newly let in the first quarter of 2022, 19% less than the first-quarter average for 2021. Tenants were mainly public-sector institutions or departments, and companies. The vacancy rate crept upwards in the reporting period, ending at 3.7%. Top rents remained stable at €26.5 per sqm, while average rents fell slightly. The investment market saw a relatively good quarter with a turnover of more than €300 million. As in Hamburg, this was partly attributable to properties from the sale of the alstria portfolio. Net initial yields for first-class properties remain unchanged at 2.6% in the first quarter 2022.





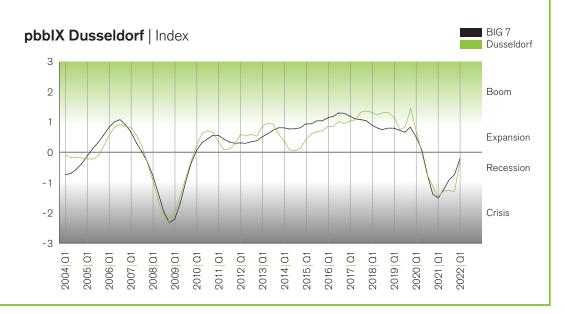
FRANKFURT

The Frankfurt office market was characterised by brisk demand at the beginning of the year. In total, more than 110,000 sqm were newly occupied, thus clearly exceeding the corresponding quarterly figures of the last two years. However, the vacancy rate rose once more, hitting 7.9% in the first quarter of 2022 compared to 6.3% a year earlier. Top rents remained unchanged at €42.5 per sqm, while average rents fell slightly. In the investment market, turnover in the first quarter of the year totalled approximately €1.8 billion. This high volume is due largely to the purchase of the Marienturm by the DWS Group and the alstria acquisition. Net initial yields for first-class properties remained unchanged during the period under review.



DUSSELDORF

With letting performance of just under 83,000 sqm, the Dusseldorf office market had a significantly better start to the new year than it faced 12 months previously. Consultancy firms accounted for a solid 20% of lettings, followed by retail and 'other services', which had shares of 16.5% and 15% respectively. The office vacancy rate increased marginally, from 7.8% to 7.9%, while prime rents stagnated and average rents even fell slightly. In the Dusseldorf investment market, the alstria acquisition also led to a significant nominal increase in turnover compared to the previous quarters. In total, about €930 million in properties changed hands. Net initial yields held steady at 2.7%.





STUTTGART

The Stuttgart office market saw very high letting performance in the first quarter of 2022, bolstered by several major transactions. Take-up reached as high as 89,000 sqm, greatly exceeding the results achieved in any other quarter over the past two years. The vacancy rate was up slightly, but remained at a very low level of 2.1 %. In light of a very limited supply of first-class office space, rents showed a strong upward trend. The investment market also recovered, with properties changed hands foraround €500 million, for which the alstria acquisition was of secondary importance. During the period under review net initial yields for prime properties fell by 10 basis points to 2.65 %.



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 (m² of floor space in the BIG 7 markets)
- Marketing volume (m² of floor space, in the BIG 7 markets)
- Vacancies (% of gross available area, in the BIG 7 markets)
- Top rent (€ per m², for the BIG 7 markets
- Average rent (€ per m², for the BIG 7markets.

Investment market

- Net initial yield (in %, for the BIG 7 markets)
- Inflow of funds (€ millions)