pbbIX Office Property Market Germany 2020 | Q2





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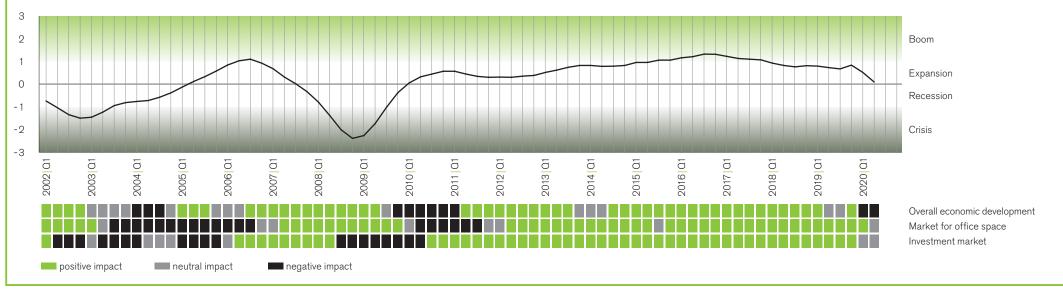
Overview

The pbblX index fell significantly in the second quarter, from 0.50 to 0.09 index points. This is the second consecutive drop in the index, which is now close to zero, on the **edge to recession.** In the second quarter, no sub-segment was a driver for growth. The German economy has slipped into deep recession. Accordingly, the market for office space and the investment market for offices are fluctuating somewhere between stagnation and recession, but have not collapsed.

The economic crisis is affecting the **market for office space** mainly on the demand side. In light of deserted workplaces and unfavourable economic prospects, new lettings fell sharply in the second quarter. This contrasts, however, with a supply side that is in good shape. Low vacancy rates and relatively subdued construction activity mean that rents remain stable.

This stability is a major reason why the German **office investment market** also proved relatively resilient to the coronavirus crisis over the course of the first six months of the current year 2020. While demand, in terms of the volume of investments, continued to fall in the second quarter in line with expectations, it did not bottom out. Two factors may have contributed to this. Firstly, stable rent levels and secondly very low interest rates, which are the reason for a positive performance.

As we enter the summer quarter, the economy seems to be turning a corner. It is questionable though as to whether this will lead to a short-term recovery of the office property market. Recent increases in the number of infections are causing **additional uncertainty**.



pbbIX BIG 7 | Index

Overall economic outlook

In the second quarter of 2020, **Germany's economic recession worsened sharply**. After seasonal and calendar adjustment, real gross domestic product was down 9,7% on the previous quarter, having shrank by 2.0% in the first quarter. Never before since the founding of the Federal Republic of Germany has there been such a drastic slump in overall economic output, which is now 11,2% below the previous year's level. Discretionary fiscal and labour market policies have so far prevented unemployment from rising to extraordinary levels. Still, 6.2% of the labour force was unemployed in June 2020, compared with 5.1% in March.

Based on the latest developments in different economic indicators, it appears that **economic activity has already bottomed out**. Surveys and various realtime indicators point to a gradual recovery. For instance, as a result of the relaxation of containment measures, mileage of vehicles subject to toll is beginning to clock up again, suggesting an upturn in industrial production. The ifo Business Climate Index shows that business sentiment across Germany is improving: in July, assessments of the current situation were noticeably more optimistic than before, and business leaders are now looking forward to the coming months with greater confidence.

The shadows are also getting lower on the labour market. More recently, the **rise in unemployment has been markedly lower** than in previous months. Nevertheless, economic recovery is still in its early stages and remains subject to the proviso that we will overcome the pandemic.

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



Working population | year-on-year change in %





Market for office space

In the second quarter, **empty offices** were a clear indicator for the detrimental effects of the COVID-19 pandemic on the market for office space. As a result of social distancing measures, a significant proportion of the workforce is now working from home. As expected, this development, coupled with unfavourable economic prospects, put a strong brake on demand for space. From April to June 2020, around 580,000 sqm of office space was leased in the Big 7 markets, 46% less than in the same period of the previous year, marking the weakest guarterly result since the financial markets crisis.

Despite this, the **vacancy rate rose only very slightly**. This is attributable to muted new construction activity coupled with very high preletting rates of around 90%. Overall, only approximately 2.8% of office space in the Big 7 markets was still vacant at the end of the second quarter, with Berlin and Munich in particular showing very low vacancy rates.

Across all markets, both top and average **rents showed no significant changes** compared with the previous quarter. This represents a year-on-year increase of 3.3% for top rents. According to real estate agents, however, tenants are increasingly more price-sensitive when concluding new contracts, which has so far mainly been reflected in the form of incentives such as rent-free periods and contributions towards fit-out costs. These factors suggest that the coming months are likely to see a very cautious development in rents for newly let space.

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



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



Investment market

By the end of the first quarter it was clear that COVID-19 was going to make investors more **reluctant** to act. Indeed, the following months saw office property purchases in Germany fall to their lowest levels since the second quarter of 2014. Due to the economic risks and uncertainties, many business transactions were cancelled or postponed. On top of this came travel restrictions and physical restrictions.

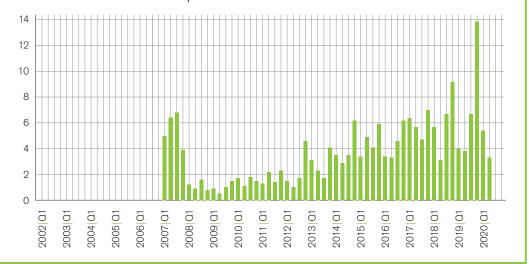
According to Real Capital Analytics, office properties with a total value of \in 3.95 billion were acquired in Germany, of which \in 3.3 billion was attributable to properties in the Big 7 markets. The acquisition volume for the Big 7 markets was thus 15% below the same quarter of the previous year and more than 40% below the five-year average. As in the previous quarter, **domestic investors dominated**, while the long-term average in Germany is fairly balanced between domestic and foreign investors.

Despite lower revenues, there have been **no significant price changes** so far, with net initial yields remaining at the previous quarter's level. It is clear that some well-capitalised investors were prepared to continue to pay high prices for office property in anticipation of continued low interest rates, irrespective of the risks associated with the pandemic. This gives reason for optimism for the coming quarters, especially since to date Germany has come through the crisis well compared to other large European countries. However, this assessment needs to be exercised with caution – in particular, this requires a gradual recovery of the economy.

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Investment volume (BIG 7) | in € billion

Net initial yield (BIG 7) | in %



BERLIN

In the second quarter, around 160,000 sqm of office space was taken up in Berlin, more than 40% of which went to public administration, resulting in a 9% miss guarter-on-guarter and an 18% miss year-on-year. Compared to the Big 7 markets, however, which declined by 17% and 46% respectively, Berlin is in a strong position. Vacancy rates remained on a very low level and were well below the fluctuation reserve. Top rents continued their sideways movement from the first guarter, and the development of average rents in the second guarter followed along the same path. There was little investment activity on the Berlin office investment market in this period. While properties worth € 1.5 billion were purchased in the first quarter, turnover in the second quarter only amounted to € 500 million. Initial yields remained unchanged from the previous guarter.

HAMBURG

In Hamburg, almost 70,000 sqm of office space was taken up by new tenants or owner-occupiers in the second guarter The demand for space was thus 60% lower than in the previous year, which was mainly due to a lack of large-scale lettings. The vacancy rate increased slightly, but was still very low at around 2.5%. Contrary to expectations, top rents rose slightly to € 30 per sqm. The Hamburg investment market enjoyed a good first half-year. An upwardly revised \in 427 million in the first quarter was followed by \in 546 million in the second guarter, which was spent on the acquisition of office property. Cash inflows in the first six months of 2020 were thus 24% higher than in the same period of 2019. The second quarter saw an increase in the number of foreign investors in particular. Yields for first-class properties declined slightly.

BIG 7 pbbIX Berlin | Index Berlin 3 2 Boom Expansion 0 Recession - 1 Crisis -2 -3

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2003



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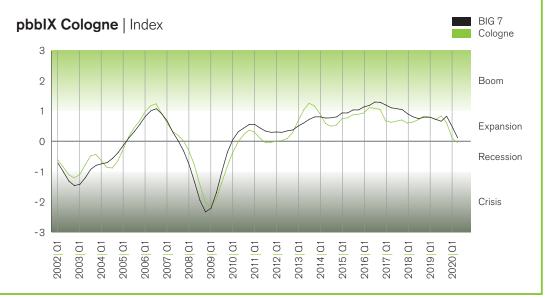
MUNICH

The effects of the COVID-19 crisis were particularly evident in the take-up levels. In the second guarter, at around 148,000 sgm, they were down 20% on the previous quarter and 37% on the same period of the previous year. A deal with Amazon was one of the most important contracts concluded. The supply of freely available space is increasing, but is still fairly limited. As in the previous quarter, top rents remained at a high level. According to RCA, the nominal transaction volume on the Munich investment market amounted to around € 1.5 billion in the first half of the year, significantly below that of the first half of 2019. The second guarter was particularly affected here, with a volume of around € 500 million. Net initial yields for first-class properties remained unchanged at around 2.8%.

COLOGNE

The market for office space in Cologne was again characterised by subdued takeup in the second guarter. Letting performance amounted to around 50,000 sqm and was thus higher than in the previous quarter, but well below the long-term guarterly average. With a vacancy rate of just over 2%, the amount of freely available space has not changed sig-nificantly. Rents - both top and average - have been stable despite the coronavirus-related slump in demand. Following € 220 million in the first quarter, investment volume was again low in the second guarter, at around € 137 million. Nevertheless, price levels remained stable. Net initial yields for first-class properties remained unchanged from the previous guarter at 3.2%.

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FRANKFURT

Banks and financial service providers only rented office space to a very limited extent in the first half of 2020. In the second guarter, only about 47,000 sgm was rented, meaning that the market fell short of the previous year by 75%. As a result of this development, vacancy rates are rising. In the second quarter, around 6.2% of space across the entire Frankfurt market area was unlet. Despite low demand and rising vacancy rates, rents remained stable. Almost € 700 million was invested in the purchase of office properties in the second quarter; this figure fell significantly below the long-term quarterly average and the results of previous guarters. Investments from the domestic market were weak following a good first quarter. Price developments in the core segment were stable, with initial yields remaining unchanged from the previous quarter.

DUSSELDORF

After a good start into the year, demand for office space fell significantly in the second guarter: only about 52,000 sqm was taken up, about 50% less than in the previous quarter. Combined with higher new construction activity, the comparatively high vacancy rate therefore continued to rise. In total, around 6% of available office space is unlet. Rents for newly-let space remained unchanged at the top end of the market compared with the previous guarter, but dropped slightly on average. Dusseldorf's investment market achieved a very strong result in the second guarter. According to RCA, € 850 million was invested in the acquisition of office properties during this period, with Düsseldorf out-performing all the other Big 7 markets. Price development was stable. Net initial yields for firstclass properties remained at around 3.1%.

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pbblX Frankfurt | Index

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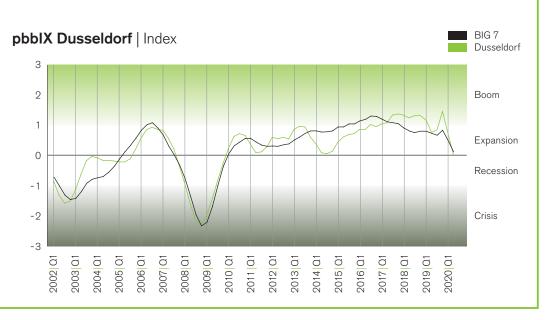
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2002 Q1 9

2003



BIG 7

Boom

Expansion

Recession

Crisis

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2018 2019 2020 Frankfur

STUTTGART

In the second quarter, letting performance rose only slightly from a low level. A total of around 45,000 sqm was taken up by new tenants or sold to owneroccupiers, the figure thus falling below the previous year's result by 20%. With little new construction activity, the already low vacancy rate sank further. Rents for newly let space in first-class properties rose to $\in 25$ per sqm in the reporting period, whilst average rents remained unchanged. The Stuttgart investment market was mainly driven by domestic investors. As at the beginning of the year, investment remained largely subdued in the second quarter. In total, office properties worth around \in 200 million were acquired. This figure was slightly below that of the previous quarter. Yields for first-class properties remained unchanged at around 3%.

BIG 7 pbbIX Stuttgart | Index Stuttgart З 2 Boom 1 Expansion 0 Recession - 1 -2 Crisis -3 2002 Q1 2003 Q1 2004 | Q1 2005 | Q1 2006 Q1 2007 | Q1 2008 Q1 2009 | Q1 2010| Q1 2011 | Q1 2012 | Q1 2013 | Q1 2014 | Q1 2015 01 2016 01 2017 | Q1 g g g 2018|0 2019|0 2020 (

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)