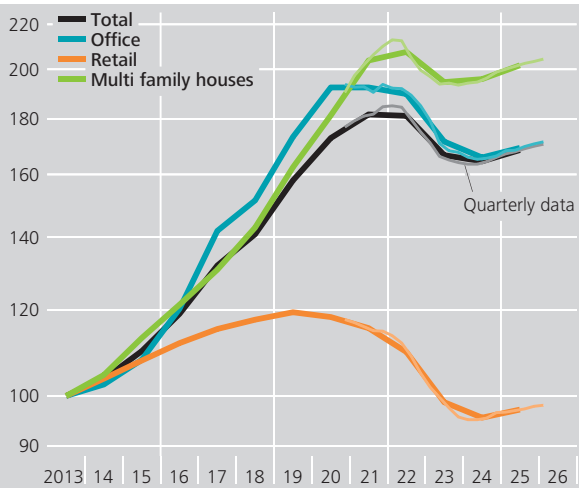


System of indicators for the German commercial real estate market

Price indicators

Prices of commercial real estate in Germany by type of property*

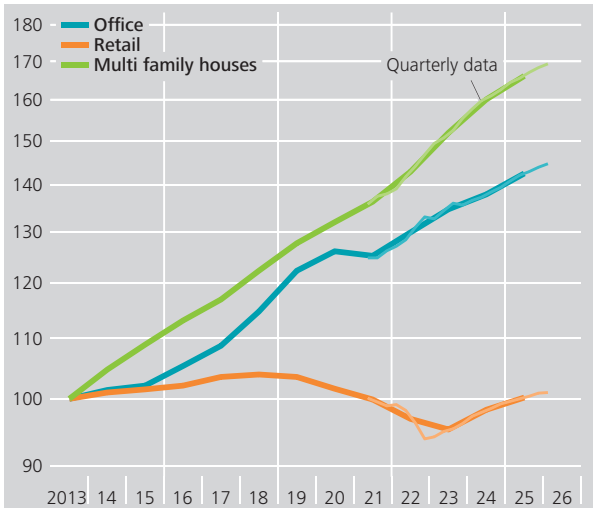
2013 = 100, log scale



* Commercial property price index of vdpResearch GmbH and the Deutsche Bundesbank based on the Real Estate Monitoring Database. Deutsche Bundesbank

Rents for commercial real estate in Germany by type of property

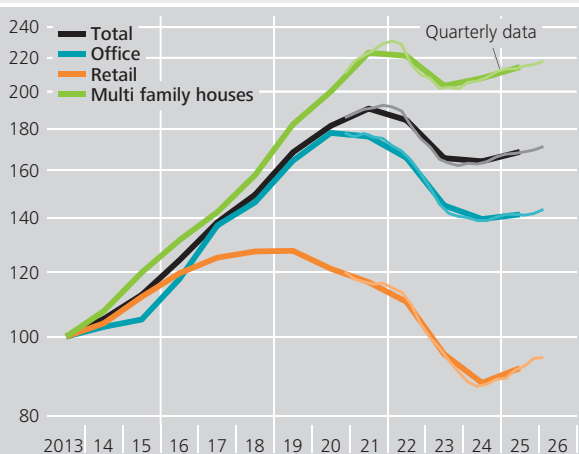
2013 = 100, log scale



Source: vdpResearch GmbH. Deutsche Bundesbank

Prices of commercial real estate for German cities of supra-regional importance by type of property*

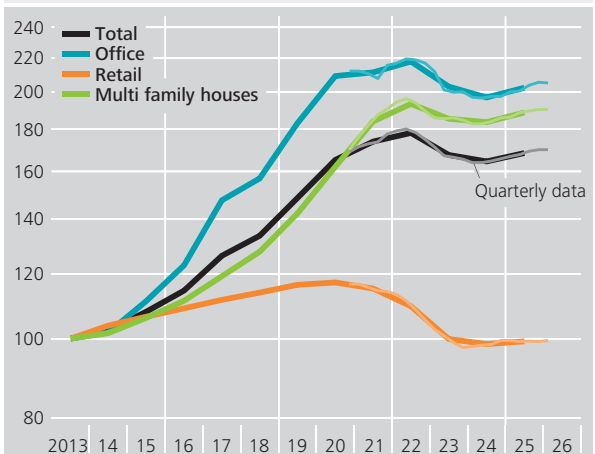
2013 = 100, log scale



* Commercial property price index of vdpResearch GmbH and the Deutsche Bundesbank based on the Real Estate Monitoring Database. Deutsche Bundesbank

Prices of commercial real estate in Germany excluding cities of supra-regional importance by type of property*

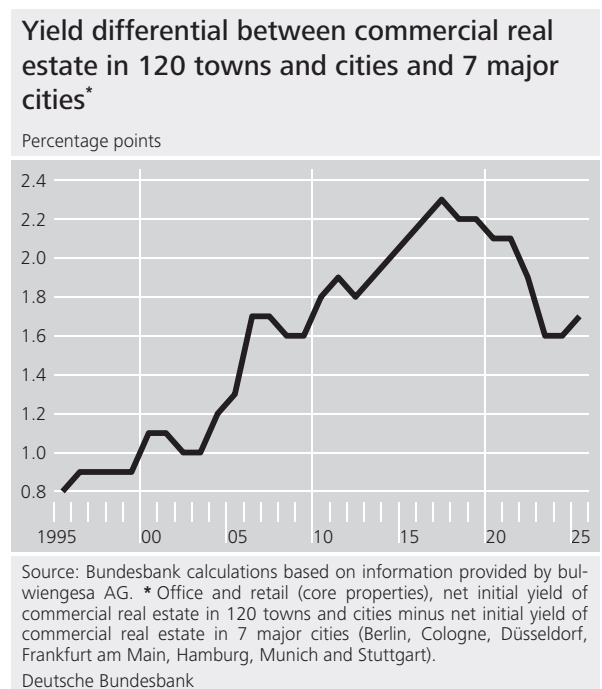
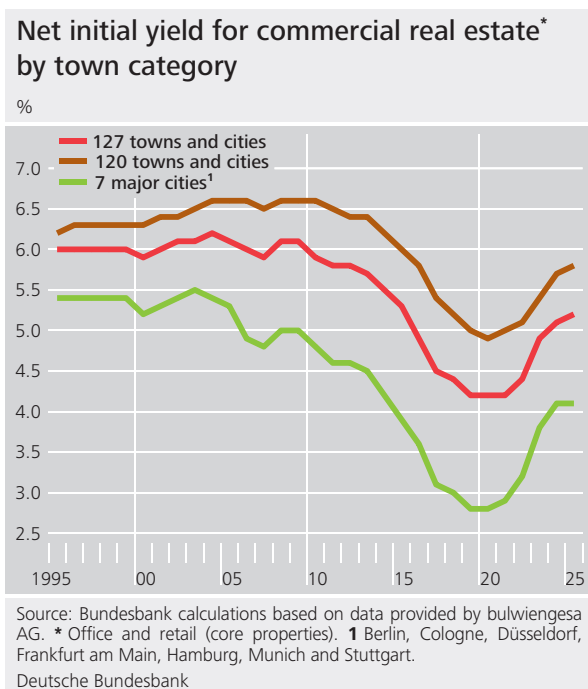
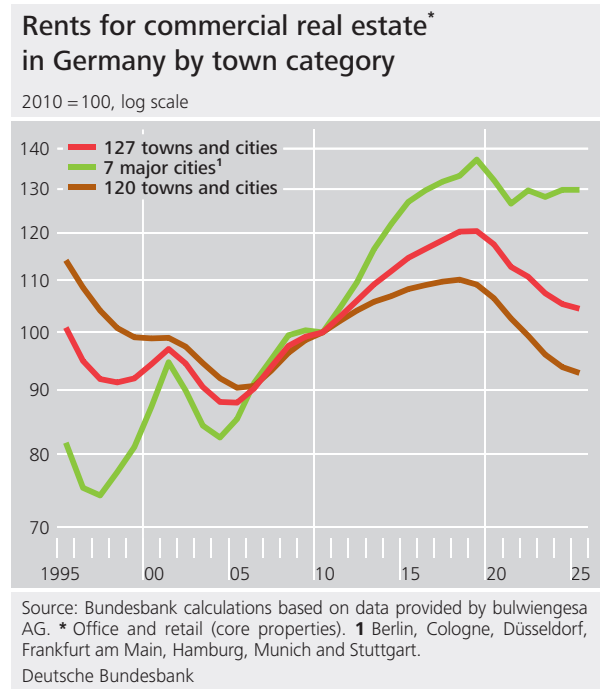
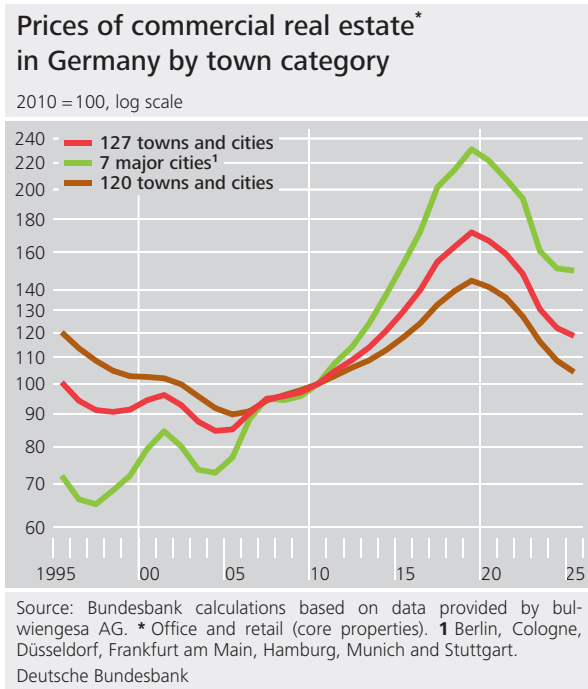
2013 = 100, log scale



* Commercial property price index of vdpResearch GmbH and the Deutsche Bundesbank based on the Real Estate Monitoring Database. Deutsche Bundesbank

System of indicators for the German commercial real estate market

Price indicators

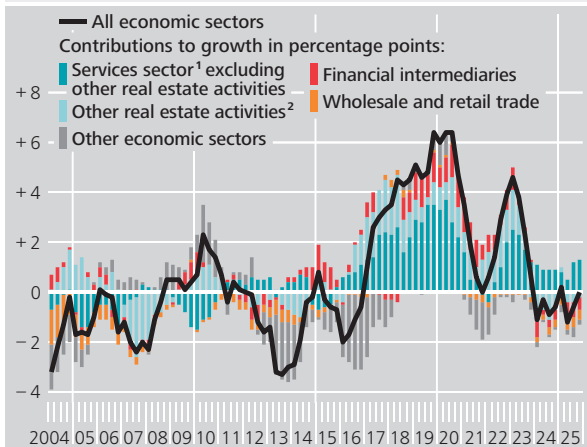


System of indicators for the German commercial real estate market

Financial Indicators

Mortgage loans on property for commercial use in Germany*

Year-on-year percentage changes, quarter-end data

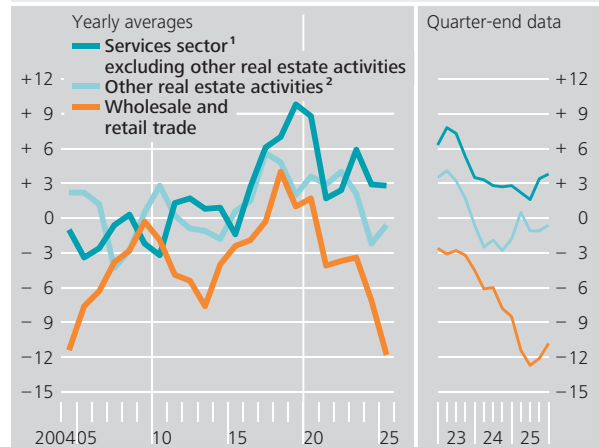


* Total mortgage loans minus mortgage loans on residential real estate according to the borrowers statistics. **1** Including self-employment. **2** Purchase, sale, rental and management of commercial real estate, facility management enterprises.

Deutsche Bundesbank

Mortgage loans on property for commercial use in selected economic sectors*

Year-on-year percentage change



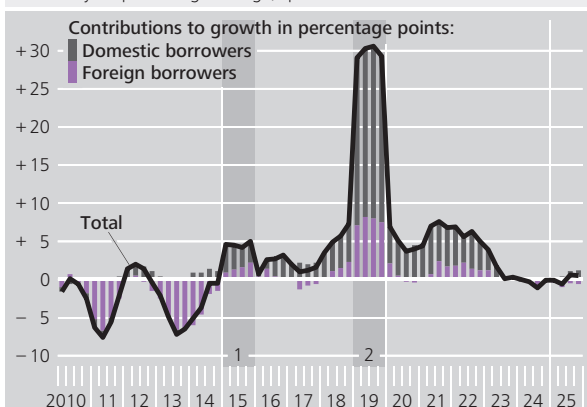
* Total mortgage loans minus mortgage loans on residential real estate according to the borrowers statistics. **1** Including self-employment. **2** Purchase, sale, rental and management of commercial real estate, facility management enterprises.

Deutsche Bundesbank

S3PR0309A.Chart

Loans by domestic credit institutions entailing commercial property risk*

Year-on-year percentage change, quarter-end data

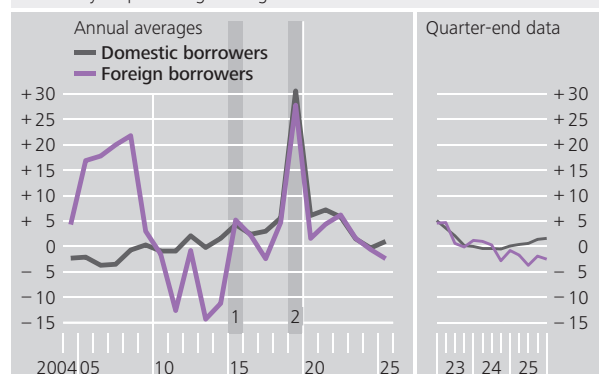


* Source: Bundesbank calculations consisting of balance sheet items, off-balance-sheet items and derivatives, based on data from the Deutsche Bundesbank's central credit register. Approximate implementation of the classification put forward by the European Systemic Risk Board ((ESRB), 2016/14). **1** Reporting threshold lowered from 2015. **2** Definition of "credit" expanded from 2019.

Deutsche Bundesbank

Loans by domestic credit institutions entailing commercial property risk to domestic and foreign borrowers*

Year-on-year percentage change



* Source: Bundesbank calculations consisting of balance sheet items, off-balance-sheet items and derivatives, based on data from the Deutsche Bundesbank's central credit register. Approximate implementation of the classification put forward by the European Systemic Risk Board ((ESRB), 2016/14). **1** Reporting threshold lowered from 2015. **2** Definition of "credit" expanded from 2019.

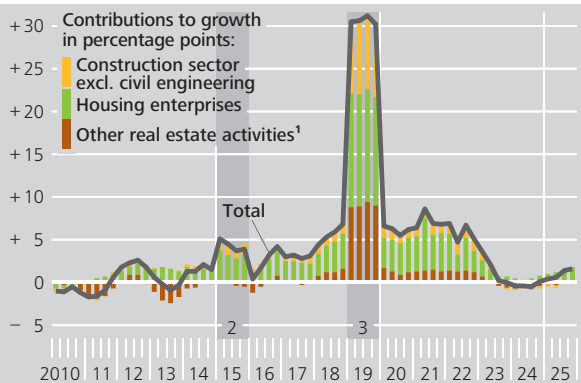
Deutsche Bundesbank

System of indicators for the German commercial real estate market

Financial Indicators

Loans to domestic borrowers entailing commercial property risk*

Year-on-year percentage change, quarter-end data

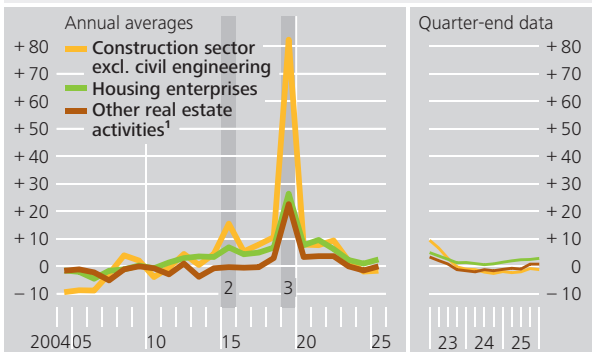


* Source: Bundesbank calculations consisting of balance sheet items, off-balance-sheet items and derivatives, based on data from the Deutsche Bundesbank's central credit register. Approximate implementation of the classification put forward by the European Systemic Risk Board ((ESRB), 2016/14). **1** Purchase, sale, rental and management of commercial real estate. **2** Reporting threshold lowered from 2015. **3** Definition of "credit" expanded from 2019.

Deutsche Bundesbank

Loans to domestic borrowers entailing commercial property risk by economic sector*

Year-on-year percentage change

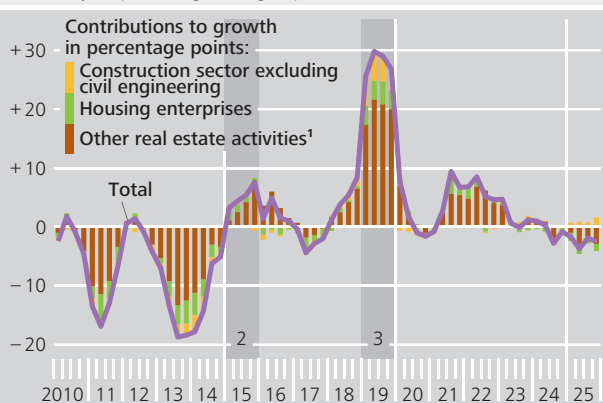


* Source: Bundesbank calculations consisting of balance sheet items, off-balance-sheet items and derivatives, based on data from the Deutsche Bundesbank's central credit register. Approximate implementation of the classification put forward by the European Systemic Risk Board ((ESRB), 2016/14). **1** Purchase, sale, rental and management of commercial real estate. **2** Reporting threshold lowered from 2015. **3** Definition of "credit" expanded from 2019.

Deutsche Bundesbank

Loans to foreign borrowers entailing commercial property risk*

Year-on-year percentage change, quarter-end data

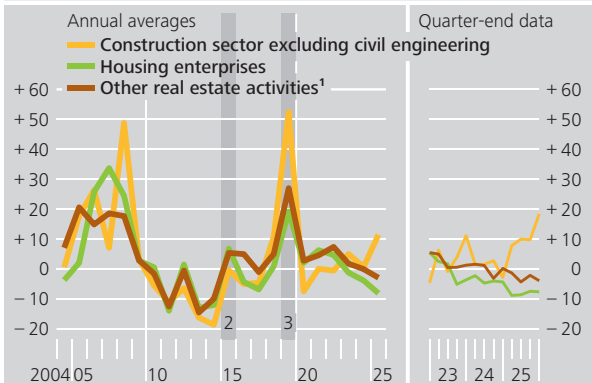


* Source: Bundesbank calculations consisting of balance sheet items, off-balance-sheet items and derivatives, based on data from the Deutsche Bundesbank's central credit register. Approximate implementation of the classification put forward by the European Systemic Risk Board ((ESRB), 2016/14). **1** Purchase, sale, rental and management of commercial real estate. **2** Reporting threshold lowered from 2015. **3** Definition of "credit" expanded from 2019.

Deutsche Bundesbank

Loans to foreign borrowers entailing commercial property risk by economic sector*

Year-on-year percentage change



* Source: Bundesbank calculations consisting of balance sheet items, off-balance-sheet items and derivatives, based on data from the Deutsche Bundesbank's central credit register. Approximate implementation of the classification put forward by the European Systemic Risk Board ((ESRB), 2016/14). **1** Purchase, sale, rental and management of commercial real estate. **2** Reporting threshold lowered from 2015. **3** Definition of "credit" expanded from 2019.

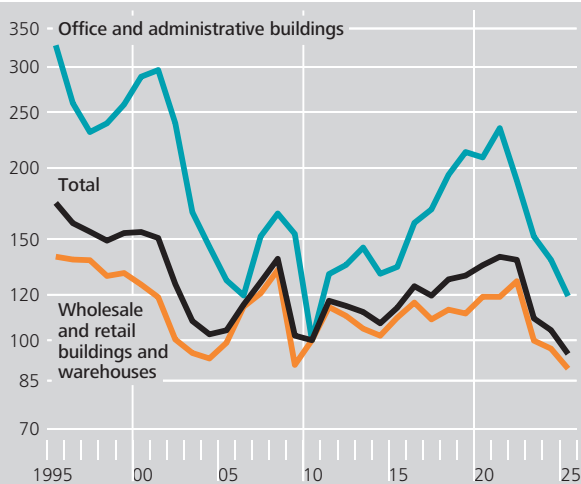
Deutsche Bundesbank

System of indicators for the German commercial real estate market

Real economic indicators

Building permits for commercial real estate in Germany by type of property*

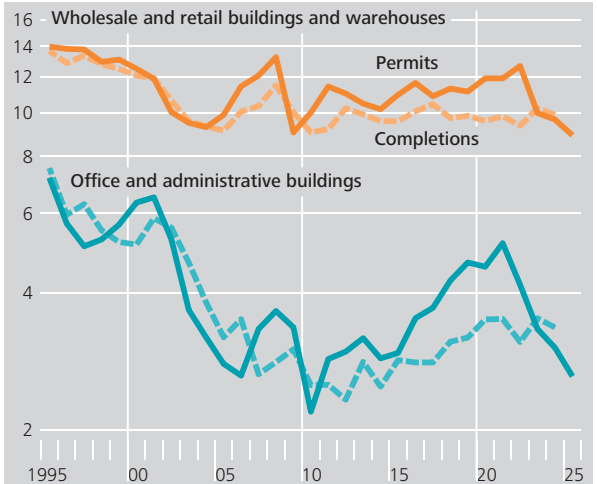
2010 = 100, log scale



Source: Federal Statistical Office. * Floor space of new buildings and existing buildings undergoing construction work.
Deutsche Bundesbank

Building permits for and completions of commercial real estate in Germany*

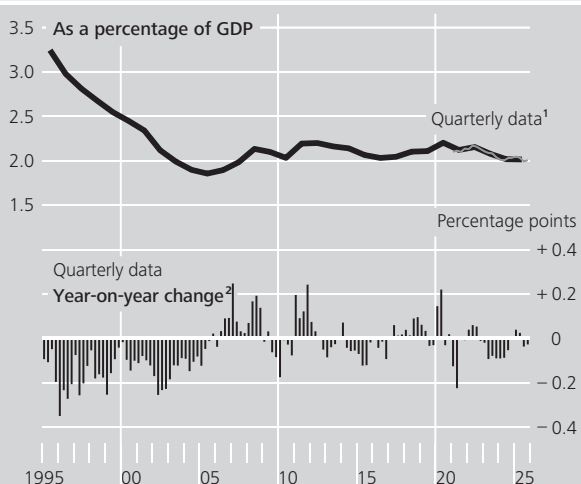
Floor space in millions of square metres, log scale



Source: Federal Statistical Office. * Construction of new buildings and construction work on existing buildings.
Deutsche Bundesbank

Commercial building construction in Germany

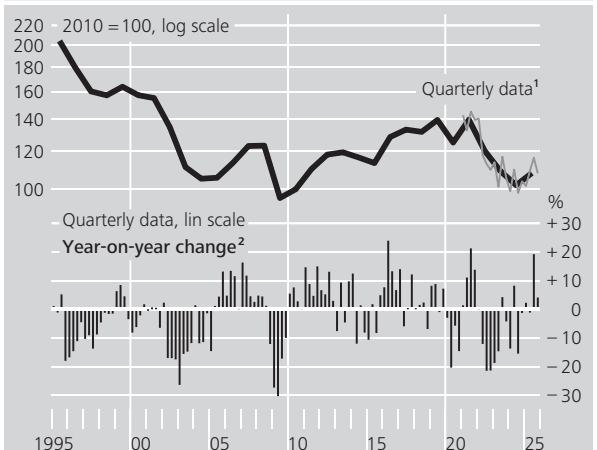
Annual data, at current prices



Source of the unadjusted figures: Federal Statistical Office. **1** Seasonally and calendar adjusted. **2** Only calendar adjusted.
Deutsche Bundesbank

New orders for commercial building construction in the main construction industry in Germany

Annual data, at constant prices



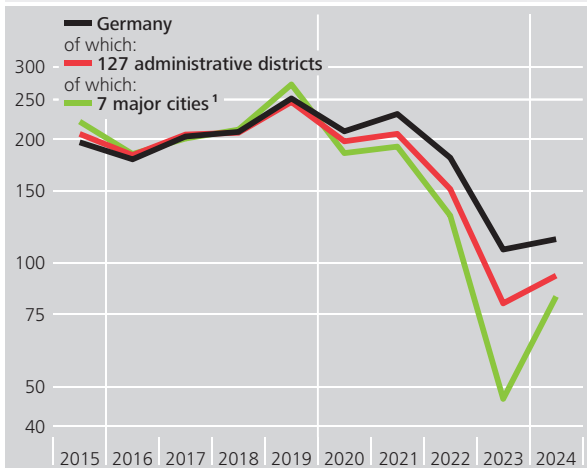
Source of the unadjusted figures: Federal Statistical Office. **1** Seasonally and calendar adjusted. **2** Only calendar adjusted.
Deutsche Bundesbank

System of indicators for the German commercial real estate market

Real economic indicators

Transaction volumes for commercial real estate in Germany

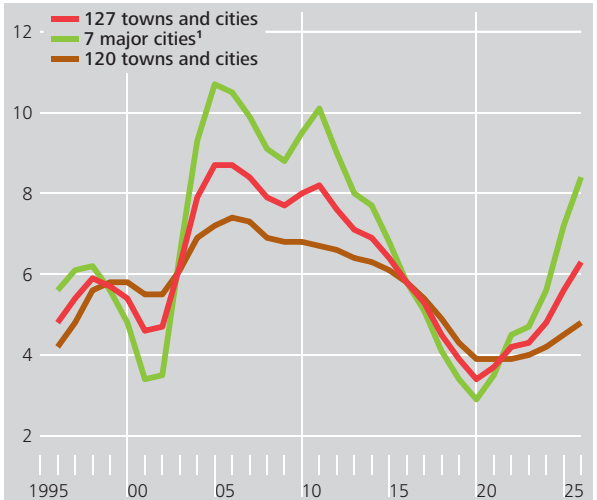
2010 = 100, log scale



Source: Extrapolation by vdpResearch GmbH based on purchase price data provided by surveyor committees. Excluding Share-Deals. ¹ Berlin, Düsseldorf, Frankfurt am Main, Hamburg, Cologne, Munich and Stuttgart. Deutsche Bundesbank

Vacancy rate for offices in Germany

%



Source: Bundesbank calculations based on data provided by bulwiengesa AG. ¹ Berlin, Cologne, Düsseldorf, Frankfurt am Main, Hamburg, Munich and Stuttgart. Deutsche Bundesbank