System of indicators for residential property markets

Price indicators

### Residential property prices in Germany

2010 = 100, log scale

![Graph showing residential property prices in Germany](chart1)

**Prices and rents of apartments in Germany**

2010 = 100, quarterly, log scale

![Graph showing prices and rents of apartments in Germany](chart2)

Both graphs include the following indicators:

1. **Transaction-weighted. Bundesbank calculations based on price data provided by bulwiengesa AG.**
2. **Deutsche Bundesbank**

### Standard indicators to evaluate residential property prices in Germany

2010 = 100, quarterly, log scale

![Graph showing standard indicators](chart3)

**Annuity-to-income ratio**

**Price-to-income ratio**

**Price-to-rent ratio**

### Price-to-rent ratio for apartments in Germany

![Graph showing price-to-rent ratio for apartments](chart4)

**Germany**

**127 towns and cities**

**7 major cities**

*Transaction-weighted. Bundesbank calculations for prices and new lettings of apartments based on data provided by bulwiengesa AG.**

1. Berlin, Dusseldorf, Frankfurt am Main, Hamburg, Cologne, Munich and Stuttgart.

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1. **Annuity of a mortgage loan with a fixed interest rate (between five and ten years) and a hypothetical term of 30 years in relation to household income.**
2. **Disposable income per household in Germany, nominal.**
3. **Prices and rents of apartments.**
System of indicators for residential property markets
Price indicators

Prices for rental housing in Germany

Rents for apartments in Germany

1 Bundesbank calculations based on data provided by bulwiengesa AG for multi-family houses.
Deutsche Bundesbank

1 Transaction-weighted. Bundesbank calculations based on data provided by bulwiengesa AG. 2 Berlin, Dusseldorf, Frankfurt am Main, Hamburg, Cologne, Munich and Stuttgart. 3 Source: Bundesbank calculations based on data provided by Federal Statistical Office (Destatis), to some extent including new lettings.
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System of indicators for residential property markets

Financial indicators

Dynamics in domestic banks’ loans for house purchase

Year-on-year rate of change as a percentage, end-of-quarter data, seasonally and calendar adjusted

- Data adjusted for statistical changes.
- 1 Including self-employed persons and sole traders.
- 2 Excluding self-employed persons and sole traders.

Deutsche Bundesbank

Stock of domestic banks’ loans for house purchase

As a percentage of GDP, seasonally and calendar adjusted

- 1 Including self-employed persons and sole traders.
- 2 Excluding self-employed persons and sole traders.

Deutsche Bundesbank

Changes in credit standards and interest margins on loans to households for house purchase in Germany

Net percentage

- Wider margins, Tightened standards
- Narrower margins, Eased standards

Source: Bank Lending Survey of the Eurosystem. * For credit standards (margins): difference between the number of respondents reporting “tightened considerably” and “tightened somewhat” (“widened considerably” and “widened somewhat”) and the number of respondents reporting “eased somewhat” and “eased considerably” (“narrowed somewhat” and “narrowed considerably”) as a percentage of the responses given.

Deutsche Bundesbank

Debt of households in Germany

As a percentage of GDP

- Total debt
- Loans for house purchase

As a percentage of disposable income

- Total debt
- Loans for house purchase

Source: Deutsche Bundesbank’s financial accounts (unconsolidated). Until 1998 according to ESA 1995; from 1999 according to ESA 2010.
- 1 Loans to private households and private non-profit institutions, annual average.
- 2 Four-quarter moving sum.

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System of indicators for residential property markets

Financial indicators

Interest payments on loans to households in Germany for house purchase

As a percentage of disposable income

* Data based on time-related stocks of MFI interest rate statistics for secured and unsecured loans, including overdraft loans.

Deutsche Bundesbank

Interest rates on loans to households in Germany for house purchase

With an initial rate fixation of...

% p.a.

+1.0

+0.5

0

+0.5

+1.0

% p.a.

0

Year-on-year change

Percentage points

-0.3

-0.2

-0.1

0

1.0

2.0

3.5

4.0

2004 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23

Data based on the monthly new business of the MFI interest rate statistics for secured and unsecured loans, excluding overdraft loans. 1 Calculated as the difference between the interest rate with an initial rate fixation of over 5 years and up to 10 years and the interest rate with an initial rate fixation of over 1 year and up to 5 years.

Deutsche Bundesbank

Fixed interest periods for loans to households in Germany for house purchase

As a percentage

With an initial fixed interest rate...

... floating rate or up to 1 year...

... over 5 years and up to 10 years...

... over 1 year and up to 5 years...

... of over 10 years

% p.a.

100

90

80

70

60

50

40

30

20

10

0

2004 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23

Data based on domestic banks’ volume of new business with respective rate fixation periods as a share of total new business (also including extensions).

Deutsche Bundesbank
System of indicators for residential property markets
Real economic indicators

Building permits and completed housing units in Germany

- Thousand apartments, yearly data, log scale
- * In residential and non-residential buildings, including construction work on existing buildings. Seasonally and calendar adjusted, annualised.
- Deutsche Bundesbank

Housing investment in Germany*

- As a percentage of GDP, seasonally and calendar adjusted
- * Quarterly calculations of gross investment at current prices according to national accounts.
- Deutsche Bundesbank

New orders for housing construction in the main construction sector in Germany

- Quarterly data, seasonally and calendar adjusted, at constant prices
- Deutsche Bundesbank

Number of transactions for apartments in Germany

- 2010 = 100, log scale
- Source: Extrapolation provided by vdpResearch GmbH on the basis of data from surveyor committees.
- 1 Berlin, Dusseldorf, Frankfurt am Main, Hamburg, Cologne, Munich and Stuttgart.
- Deutsche Bundesbank