The views expressed in this presentation are those of the author and do not necessarily coincide with the views of the Deutsche Bundesbank or the Eurosystem.
The role of house prices from the perspective of a central bank

- **Macroeconomic analyses**
  - Excess demand for housing, wealth effects in private consumption, or construction activity

- **Financial stability analysis**
  - Effects of fluctuations of housing collateral on financial intermediaries’ balance sheets or household mortgage debt

- **Inflation measurement**
  - Expenditure for rents or owner-occupied housing
Strong broad-based housing inflation in Germany – Supply expanding

Prices of residential property in Germany

Year-on-year percentage change

Indicators for residential construction

Seasonally adjusted, log scale

1 Transaction-weighted. Bundesbank calculations based on data provided by bulwiengesa AG. 2 Berlin, Düsseldorf, Frankfurt am Main, Hamburg, Cologne, Munich and Stuttgart.

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1 Volume, 2015 = 100; main construction industry: enterprises with 20 or more employees. 2 Volume, 2015 = 100; national accounts.

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House prices a combination of land and construction prices

- **Price effect of supply expansion** by house price component (Davis and Heathcote, 2007; Kajuth, 2021)
  - Building land expansion dampens land prices...
  - ... while more residential investment puts pressure on land or construction prices, all else equal.

- **Aggregate supply elasticity** also differs by house price component
  - Land price growth stimulates housing investment (NPV higher, all else equal; Gyourko and Saiz, 2004; Glaeser and Gyourko; 2005)...
  - ... while construction price growth dampens residential investment.
Elevated valuation of residential property in Germany

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

2010 = 100, quarterly, log scale

- Annuity-to-income ratio\(^1\)
- Price-to-income ratio\(^2\)
- Price-to-rent ratio\(^3\)

\* Bundesbank calculations based on data provided by the Association of German Pfandbrief Banks (vdp). 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. Deutsche Bundesbank

**Standard indicators to evaluate residential property prices in German cities**

Deviation from long-run mean in %

Source: Bundesbank calculations based on data provided by bulwiengesa AG.
Key takeaways

- Land price important transmission channel of macroeconomic shocks to overall house prices and housing supply (Deutsche Bundesbank, 2020; Kajuth, 2021).

- Land component particularly susceptible to overvaluation compared to structures (Bostic et al., 2007).

- Highlights importance of OECD housing toolkit’s chapter on land-use regulation (Chapter 8 of the report).
  - Caveat: Risk of overbuilding when land-use very flexible (lumpy and partly irreversible residential investment).

- Insights on the role of land supply for house price developments contrast with data gap on land-use regulation (Bourassa et al., 2011).
  - OECD‘s data collection efforts in this domain highly welcome (Chapter 9 of the report).
References


Structural features of the German housing market

- Low homeownership rate (approx. 44% of all households in owner-occupied dwelling 2018)
- Number of residential property transactions fluctuating around elevated, more or less constant level since 2011
- Regional transaction taxes varying from 3.5 % to 6.5 %. Total average additional costs of buying property 10 % to 20 % (incl. legal and real estate agent fee).
- Large share of initially fixed mortgage rate (almost 90% of new bank mortgage lending)
- Mortgage interest rates not tax-deductible for owner-occupiers (only for mortgage financing of rentals)
- Mortgage equity withdrawal not common
- Little government subsidies for home purchases; some stepping up of measures in recent years.
Further indicators to assess risks emanating from the housing market

Dynamics in domestic banks’ loans for house purchase

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

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

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

As a percentage

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

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

Net percentage

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.

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