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HOUSING MARKETS AND ECONOMIC RESILIENCE

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Based on papers written with M. C.
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Housing markets and macroeconomic risks

Why
housing and
resilience?

Where are
we?

How to
improve
resilience to
housing
risks?



Why do housing markets matter for economic resilience?

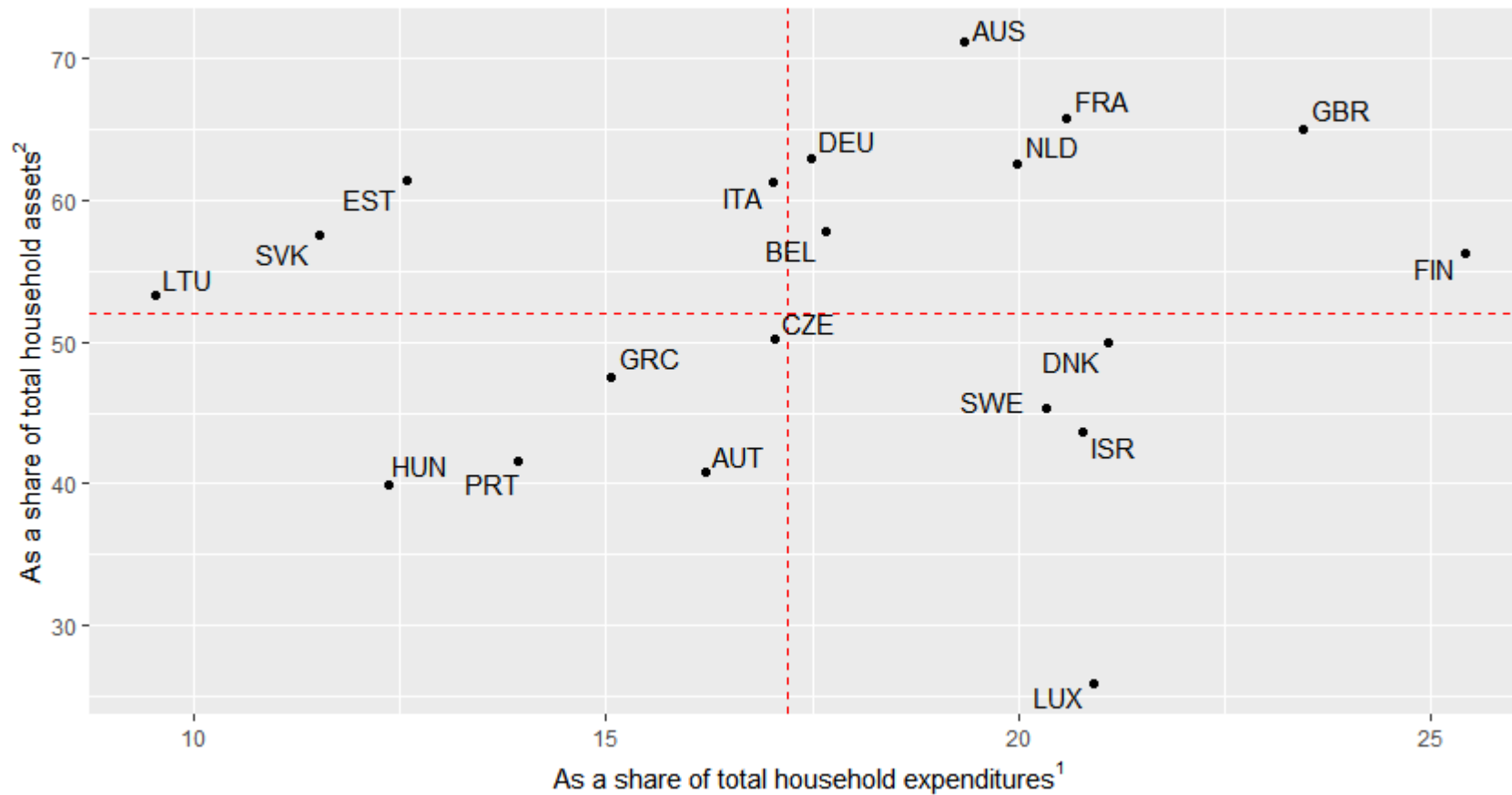
Why housing and resilience?

Where are we?

How to mitigate macro risks from housing?



Housing accounts for a large share of household wealth and consumption



Note: Dashed lines depict cross-country averages. Data as of 2017 or, if not available, 2016.

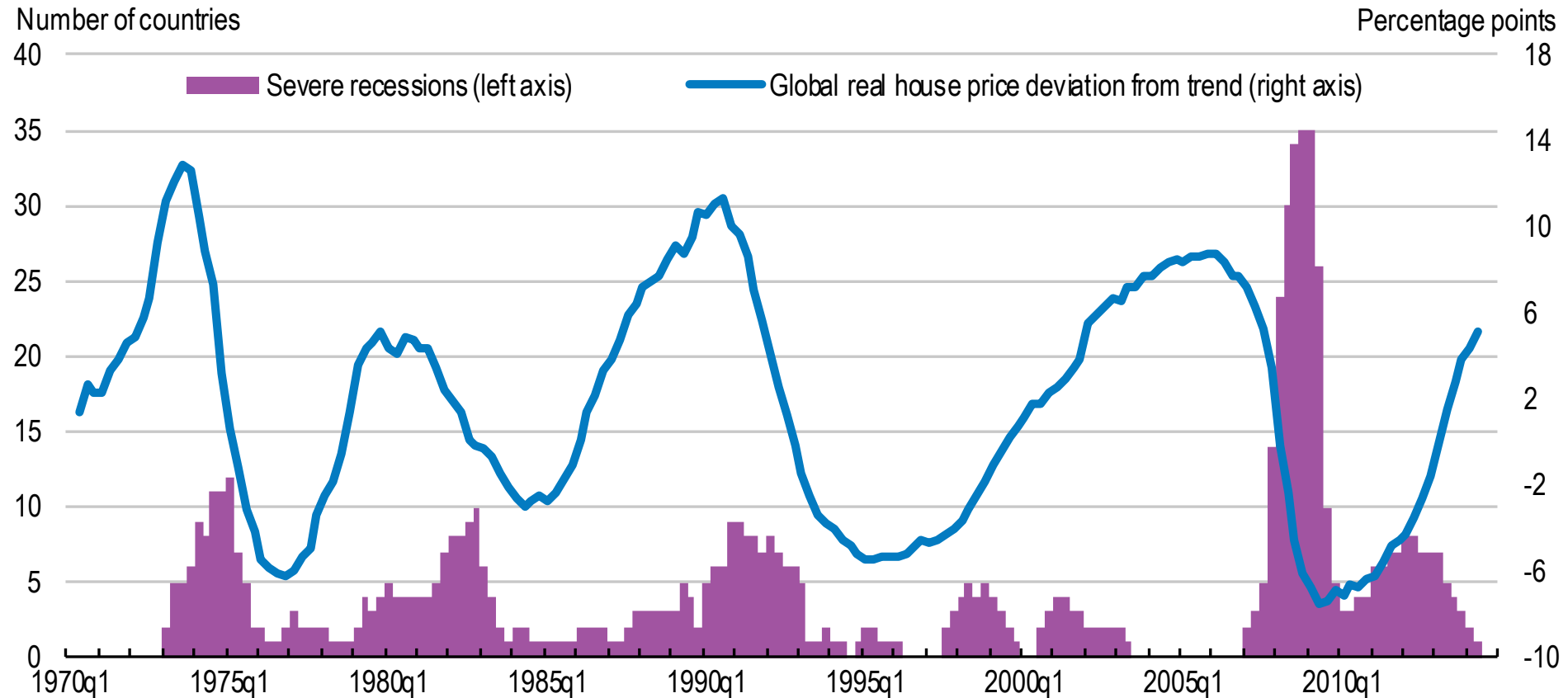
1: Rents (actual and imputed) and expenditure for maintenance and repairs as a share of final consumption of households.

2: Housing (dwelling + land) as a share of total assets (all w/o pension entitlements)

Source: OECD National Accounts.



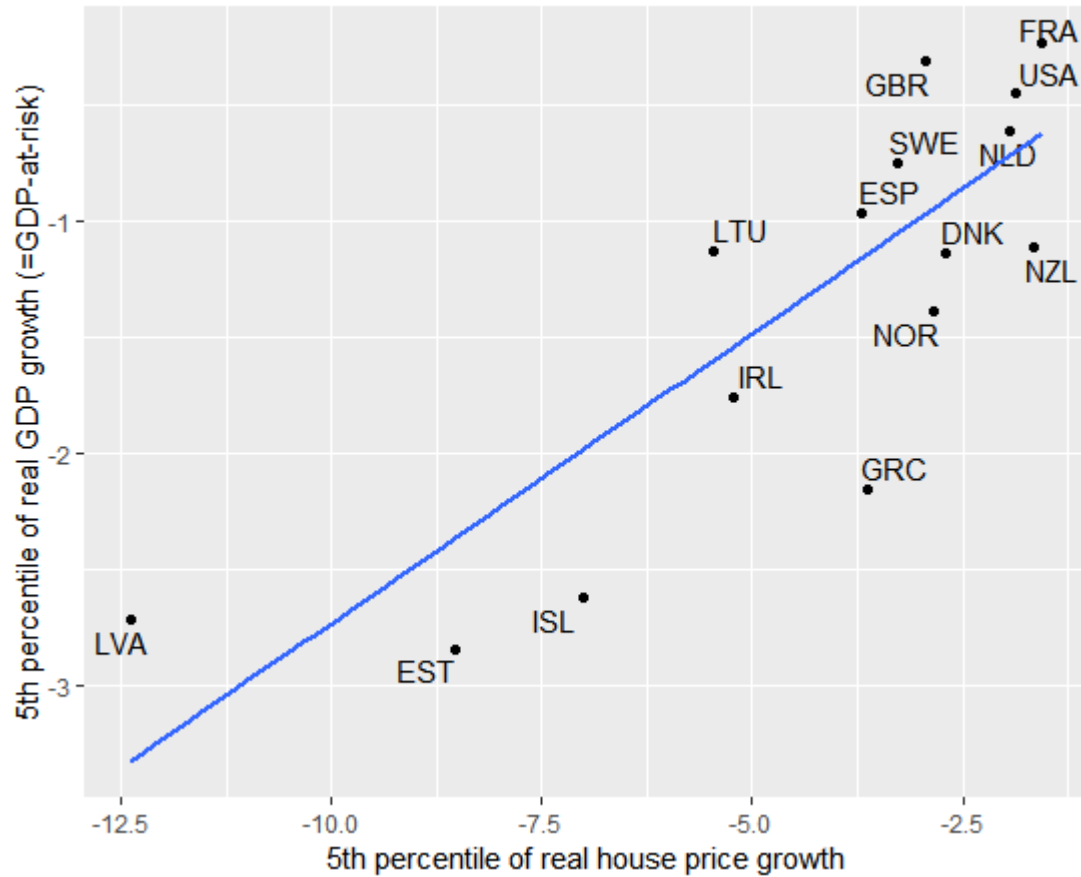
House price cycles have been associated with severe recessions



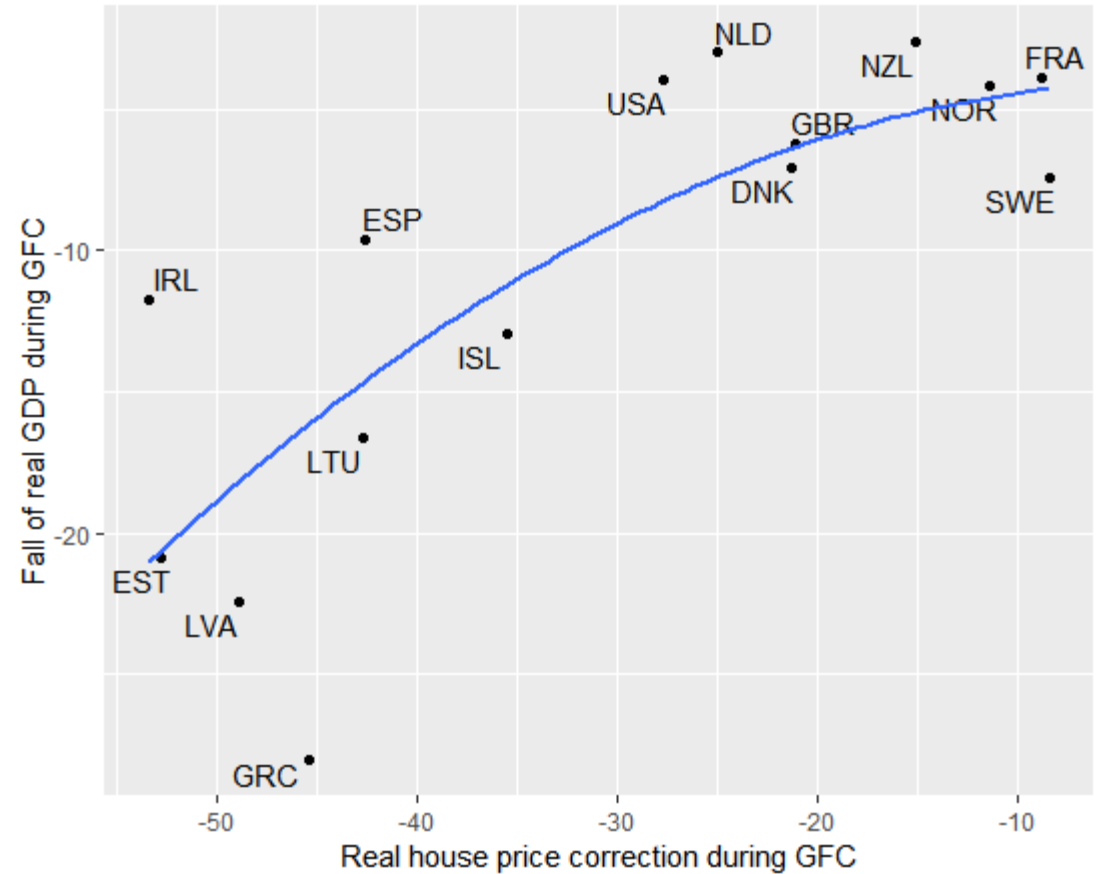
Note: The purple areas represent the number of countries being in a severe recession (from peak to trough). The global real house price index is a weighted mean across OECD countries measured in deviation from a moving average. *Source:* Hermansen and Röhn (2016).



House price corrections are associated with economic downturns



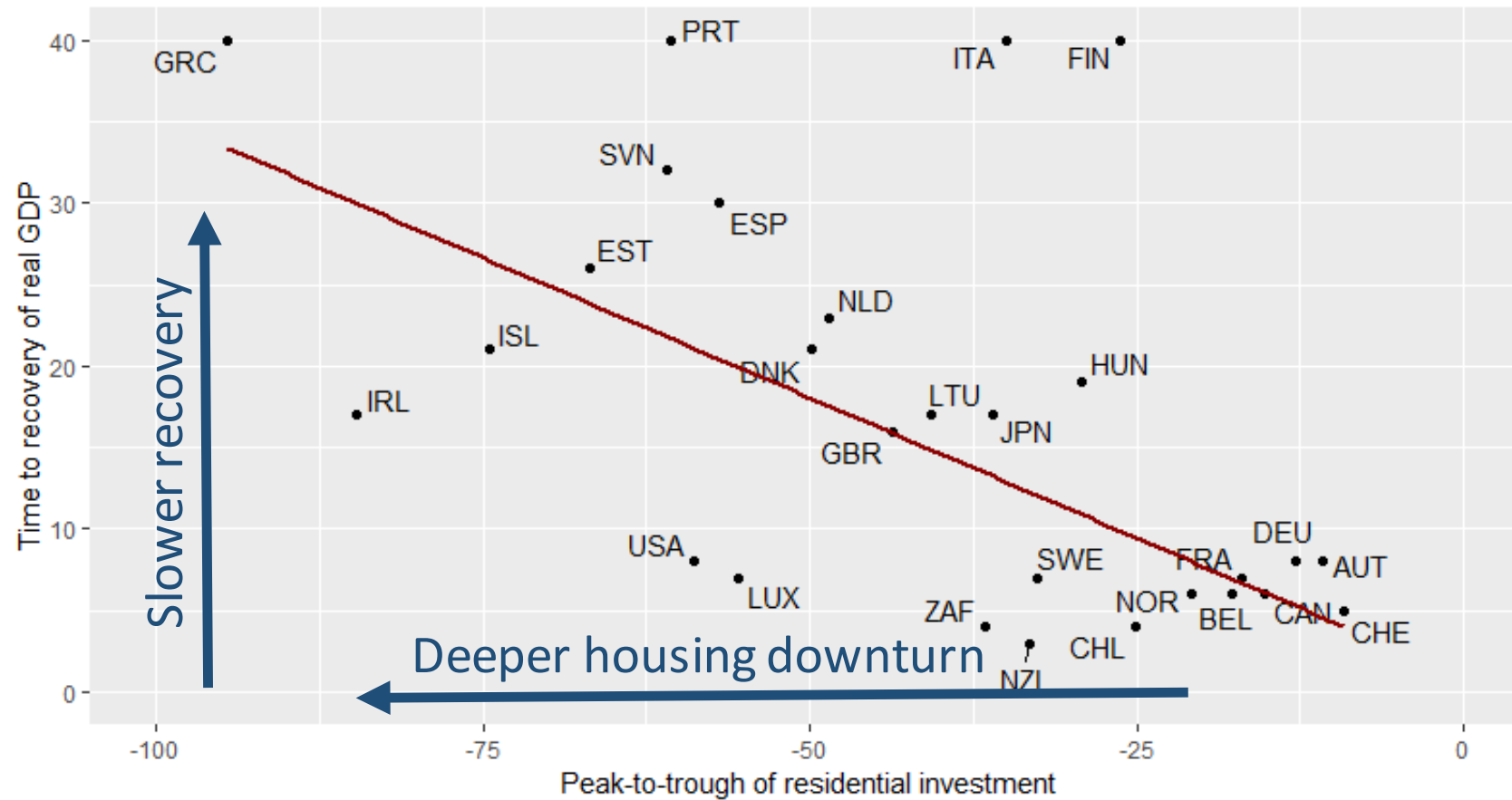
Note: Quarterly changes since 1990 or earliest available.



Note: Peak-to-trough of levels.



Recovery from the global financial crisis took longer in countries that experienced deeper housing downturns



Note: Time to recovery in quarters (equals 40 if not recovered by 2018). Peak-to-trough in % of pre-crisis peak.

Source: Cournède, Sakha and Ziemann (2019).



What is the current situation of housing markets?

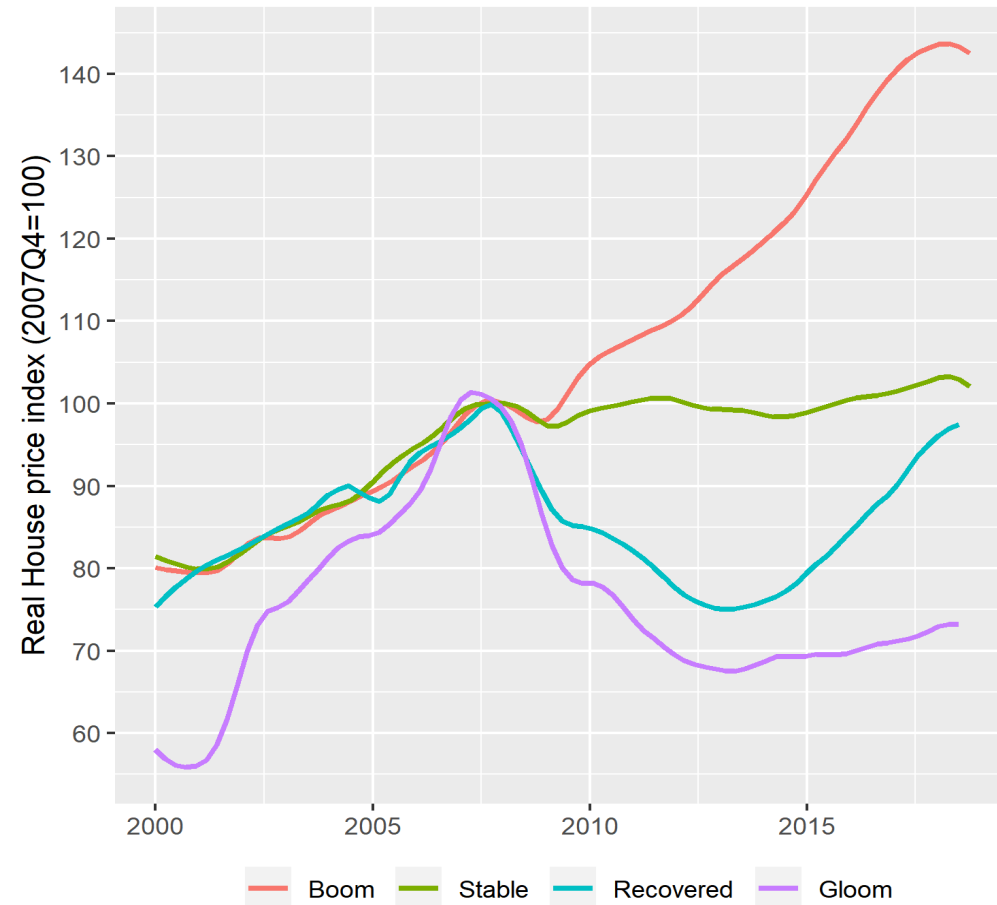
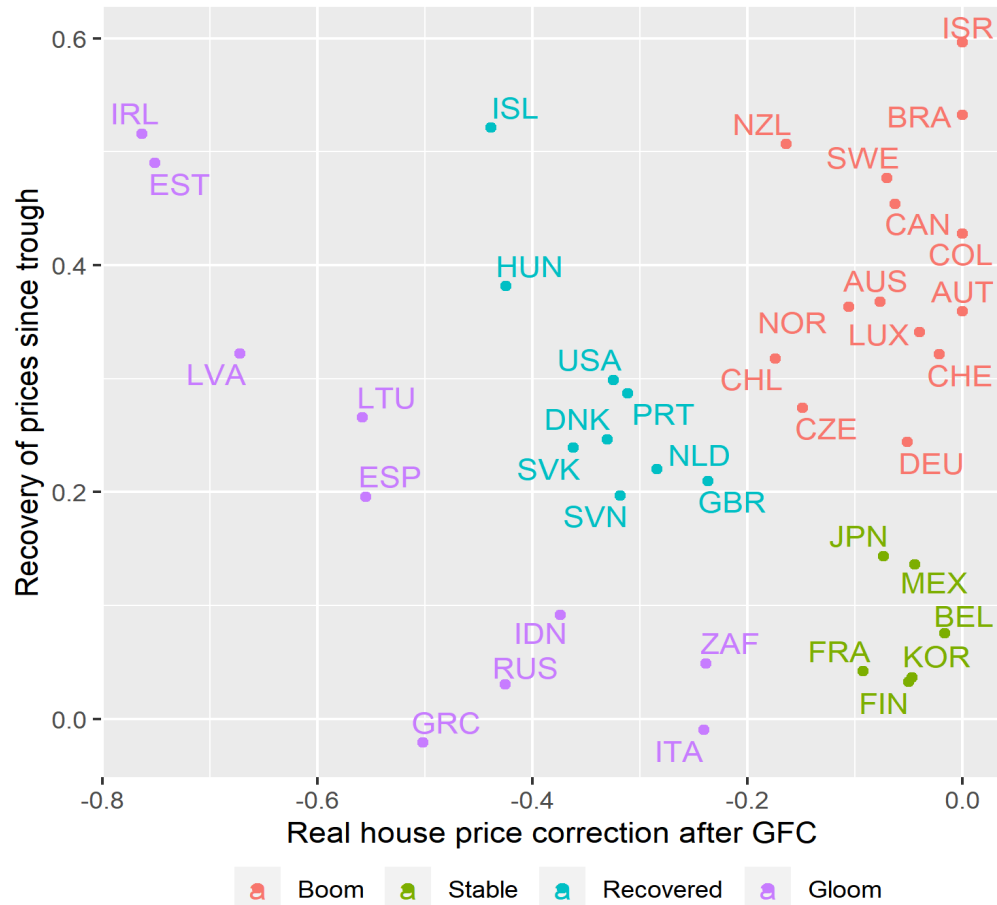
Why housing?

Where are we?

How to mitigate macro risks from housing?



House price trends have been very contrasted across countries since the global financial crisis



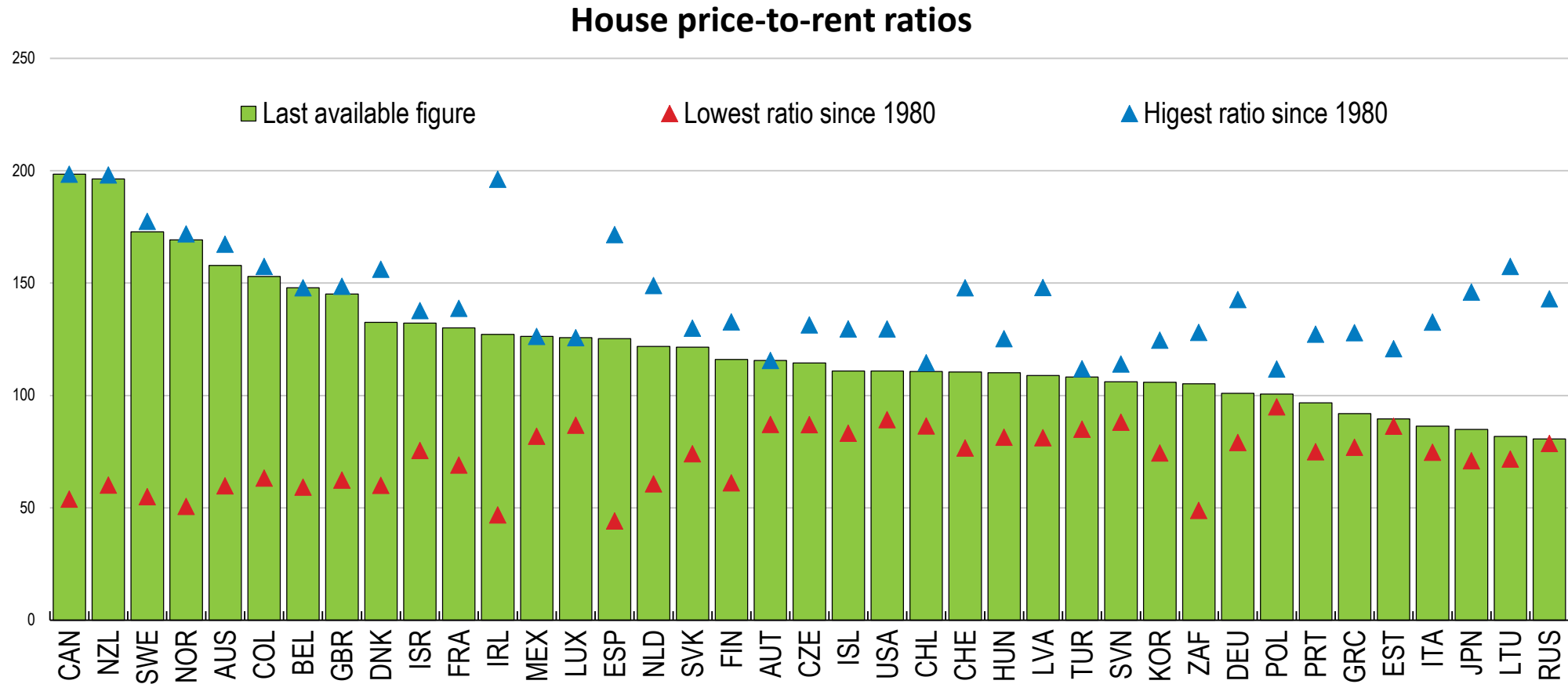
Note: The right panel depicts average price movements per country group.

- "Boom" and "Stable" countries encountered a limited prices correction (<20%) during the global financial crisis. The former witnessed sharp increases thereafter (>20%) and the latter did not.

- "Recovered" and "Gloom" countries experienced a major real house price correction during the crisis (>20%). The former benefited from an equally strong rebound while the latter did not.



Is there a risk of overheating in « booming » countries?



Note: Countries are ranked according to their last available figure.

Source: OECD Analytical House Price database; and OECD Economic Outlook database.



How can policies help to make economies more resilient to risks involving housing?

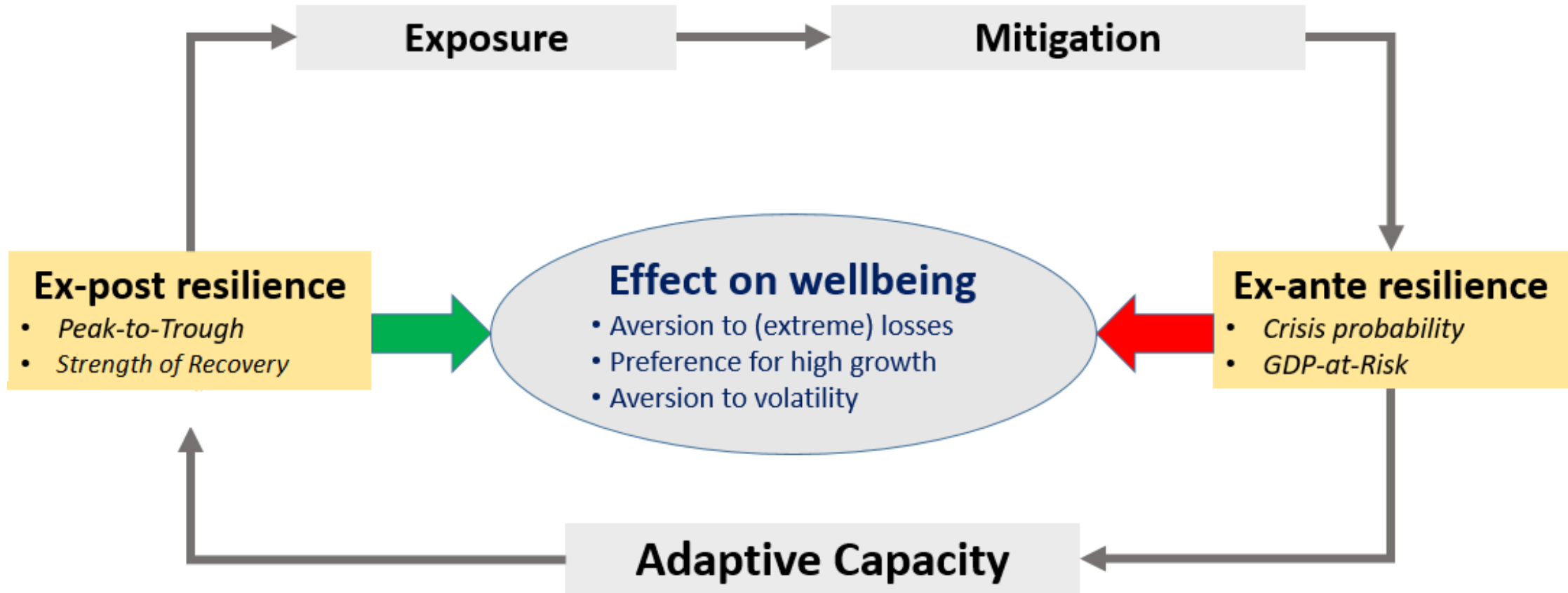
Why housing?

Where are we?

How to improve resilience to housing risks?



Resilience has multiple facets



Source: Cournède, Sakha and Ziemann (2019)



Resilience outcomes in G10 countries

| | Ex-ante resilience | | Ex-post resilience | | Number of episodes |
|-----|--------------------|--------------------------------------|--------------------|----------------------|--------------------|
| | GDP at risk (Q5) | Crisis (severe downturn) probability | Peak-to-trough | Strength of recovery | |
| | Percentage points | | | | |
| BEL | -0.9 | 3.6 | -1.7 | 1.1 | 9 |
| CAN | -1.1 | 4.5 | -2.4 | 1.1 | 8 |
| CHE | -1.0 | 3.7 | -2.3 | 1.6 | 8 |
| DEU | -1.3 | 6.3 | -2.8 | 0.9 | 9 |
| FRA | -0.7 | 2.7 | -2.1 | 1.3 | 6 |
| GBR | -0.9 | 4.5 | -1.5 | 1.3 | 10 |
| ITA | -1.1 | 3.6 | -2.9 | 1.3 | 7 |
| JPN | -1.4 | 7.1 | -3.6 | 1.8 | 9 |
| NLD | -1.0 | 2.7 | -3.1 | 1.3 | 7 |
| SWE | -1.2 | 6.3 | -4.0 | 3.5 | 5 |
| USA | -1.1 | 4.5 | -2.3 | 1.4 | 7 |

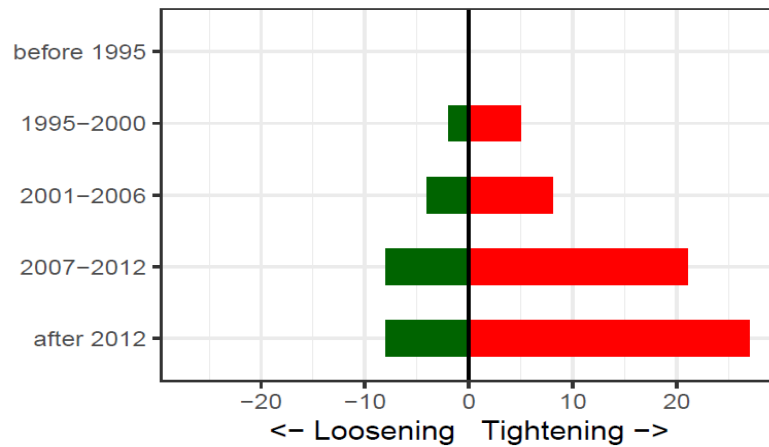
Note: Based on de-trended growth rate of real GDP from 1990 to 2017. *Crisis probability* denotes the probability of experiencing a cumulative two percentage point decline over two consecutive quarters. Q5 denotes the 5th percentile of the distribution of de-trended real GDP growth. Strength of recovery denotes growth over n quarters, n being the duration of the preceding bust period.

Source: Cournède, Sakha and Ziemann (2019)

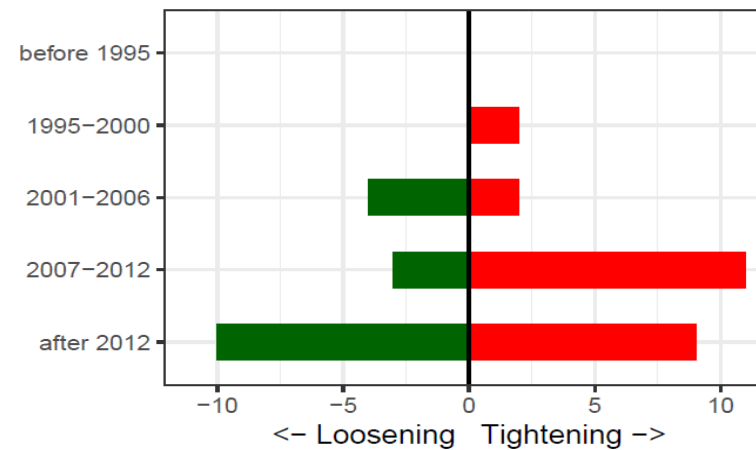


Macroprudential interventions have intensified since the global financial crisis

A: Risk weighted capital requirements



B: Loan-to-value caps

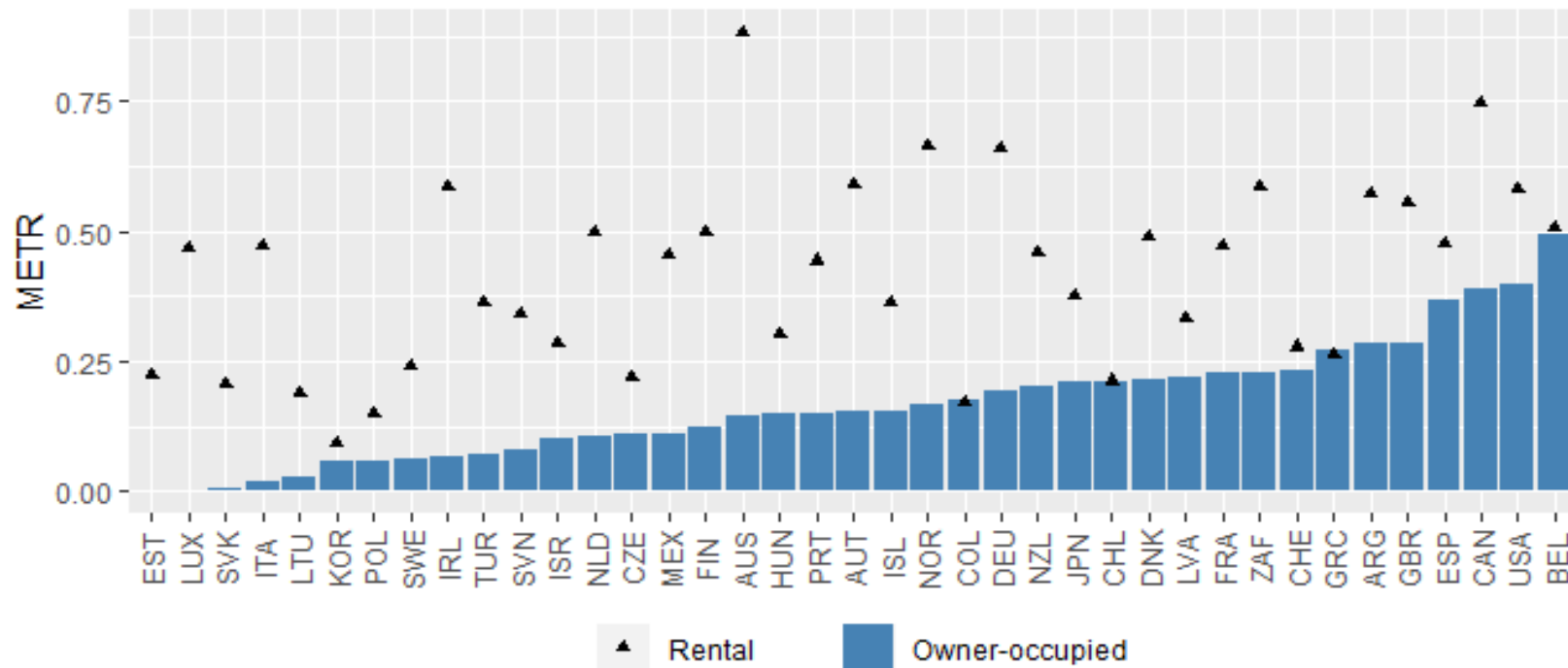


Note: Risk weighted capital requirements are the product of the minimum required Tier 1 capital ratio and the unweighted average of risk weights for mortgage loans with LTVs ranging from 50 to 130 (since Basel II, risk weights can differ by LTV). Loan-to-value caps refer to caps on mortgage loans for the purchase of the primary residence. Policy changes exceeding the average country-specific standard deviations qualify as policy interventions. The database comprises 19 countries for which LTV caps are registered at some point in time and 30 countries for which capital requirements are reported.

Source: Cournède, Sakha and Ziemann (2019).



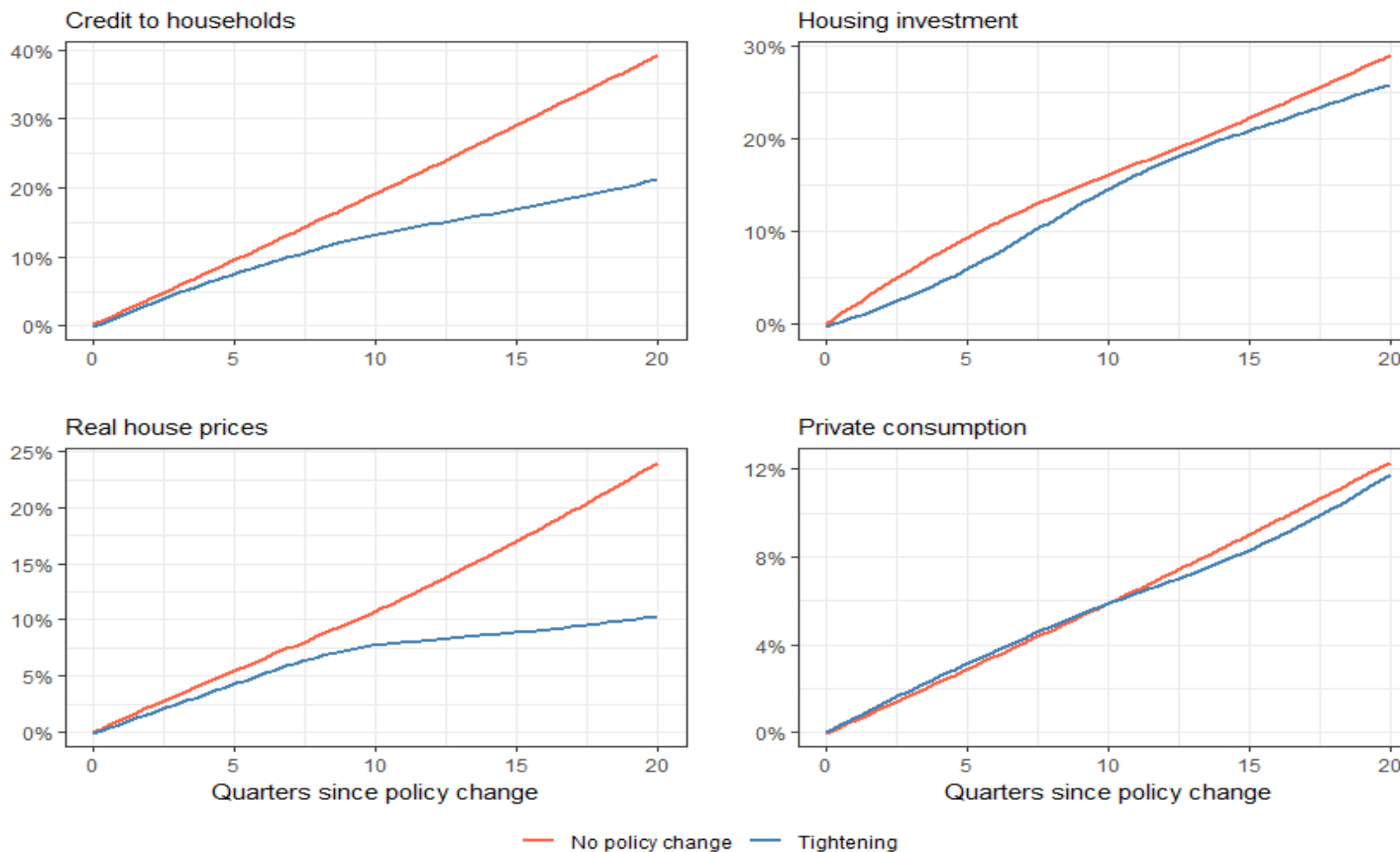
Marginal effective tax rates on residential property vary widely across countries



Note: METR stands for marginal effective tax rates.
Source: Taxation of Household Savings (OECD, 2018_[55]).



Propensity score matching analysis provides signs of causality from macroprudential policy to resilience



Note: The treatment group consists of country-episodes with a tightening of LTV caps at time=0. The control group, comprising country-episode pairings without such a policy change, has been determined by propensity matching techniques using a probit model with real and financial variables as covariates. *Source:* Cournède, Sakha and Ziemann (2019)



Probit regressions point to macroprudential as well as structural housing policies influencing macro risk

| | Severe downturn | Severe downturn (without EMEs) |
|--|-----------------|-----------------------------------|
| LTV caps | | |
| Sum of lagged coefficients | 0.026** | 0.025** |
| Standard error of sum of lagged coefficients | (0.013) | (0.013) |
| Observations | 1167 | 1101 |
| Rental regulation index | | |
| Sum of lagged coefficients | 2.69** | 4.03** |
| Standard error of sum of lagged coefficients | (1.38) | (1.29) |
| Observations | 1466 | 1374 |

Source: Cournède, Sakha and Ziemann (2019)



A range of housing-related policies are found to influence economic resilience

| | GDP-at-risk | Crisis risk | Severity of downturn | Strength of recovery |
|---|-------------|-------------|----------------------|----------------------|
| LTV caps | | ↘ | | ↘ |
| Capital requirements for mortgage loans | | ↘ | | ↗ |
| Rental regulation | ↗ | ↗ | ↗ | |
| Property taxation | | | ↘ | |

Notes:

- The table summarises the results of empirical exercises performed throughout the study. Only significant results are displayed. GDP-at-risk is the bottom 5% quantile of the distribution of quarterly real GDP growth.
- Green arrows show favourable outcomes, red ones unfavourable ones, both when policy is tightened (increases in policy indicators, except for LTV caps where a decrease of the policy value signifies a tightening).



Background papers and blogs provide more information

- Cournède, B., S. Sakha and V. Ziemann (2019), “Empirical Links Between Housing Markets and Economic Resilience”, *OECD Economics Department Working Papers*, No. 1562, OECD Publishing, Paris.
- <https://oecdecoscope.blog/2019/08/09/housing-related-policies-matter-for-economic-resilience/>
- Cavalleri, M. C., B. Cournède and V. Ziemann (2019), “Housing Markets and Macroeconomic Risks“, *OECD Economics Department Working Papers*, No. 1555, OECD Publishing, Paris.
- <https://oecdecoscope.blog/2019/07/18/are-there-ways-to-protect-economies-against-potential-future-housing-busts-2/>