



Is homeownership sacrificed on the altar of macroprudential regulation?

Housing purchasing affordability among non-homeowners.
Lindquist, Solheim, Vatne. Staff Memo 9/2023, Norges Bank. (In Norwegian.)

Plan for the presentation

- Introduction and motivation
- Main findings
- Method and data
- Results



Introduction and motivation

- Owning is preferable to renting in many countries
- Housing purchasing affordability is hit by
 - High interest rates
 - High (and increasing) house prices
 - Increasing cost of living (food and energy)
 - Stricter macroprudential regulation (Borrower-Based-Measures)
- BBMs are criticized for their distributional consequences
- But what is most important? Interest rates, prices or regulation?



Main findings

Non-homeowners make up about 1/4 of all households



The debt-servicing capacity requirement (including an interest-rate stress test) and LTV requirement are the most limiting BBMs.



The interest-rate stress test has become more limiting since 2020.



The limiting effects of the BBMs in combination has not changed much.

Addressing housing purchasing power (HPP)

Not directly observable, must be operationalized and calculated

- **House price-to-income.** *Does not take into account cost of financing or limitations set by regulation.* Data are readily available in most countries. [OECD Housing prices \(indicator\)](#).
- **Housing mortgage costs-to-income.** *Takes costs of financing into account.* [OECD Affordable Housing Database](#); Biljanovska et al. (2023): [Housing affordability: a new data set](#). BIS WP 1149.
- **Total housing costs-to-income.** [OECD Affordable Housing Database](#); Includes also housing related taxes, fees and regular maintenance.
- **Housing mortgage costs-to-income disposable to debt service.** Lindquist, Vatne (2019): [Housing affordability](#). Nordic Journal of Housing Research. (In Norwegian.) *Includes cost of financing, cost of living and a debt-servicing capacity requirement.*



Our method to assess housing purchasing power (HPP)

Takes financing costs, cost of living and BBMs into account

[After-tax income + disposable financial assets]

≥

[Cost of living excl. debt service + debt service on old debt and on the new mortgage if buying a suitable home]

- *Step 1:* Find the market price of a *suitable home*. The 10th percentile market value among homes owned by households of same size in same municipality.
- *Step 2:* Calculate *cost of living* incl. fixed housing costs.
- *Step 3:* Find the *mortgage necessary to purchase* a suitable home. Calculate interest payments and installments.
- *Step 4:* Check if the mortgage (and old debt) is *in conflict with the BBMs*.



Data

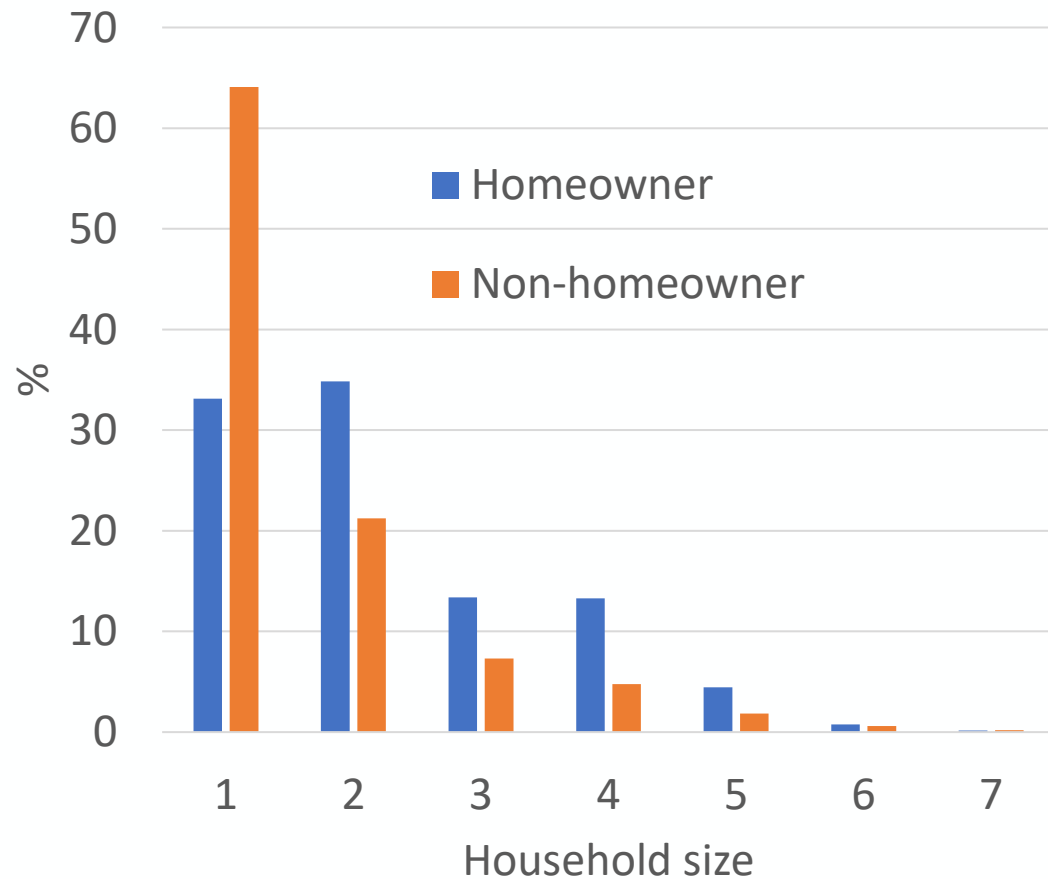
The analysis rests heavily on detailed microdata

- Household level income and wealth statistics (Statistics Norway)
- Ordinary consumer expenditure by type of household (SIFO)
- Fixed housing costs by type, size and municipality. Housing taxes and fees, insurance, electricity (Statistics Norway)
- Our sample includes 600k non-homeowner households, 100k in Oslo
 - Excludes students (-12%)
 - Excludes those who mainly live on public tax-free transfers (-5%)
 - Truncation on income and gross financial assets (-3%)

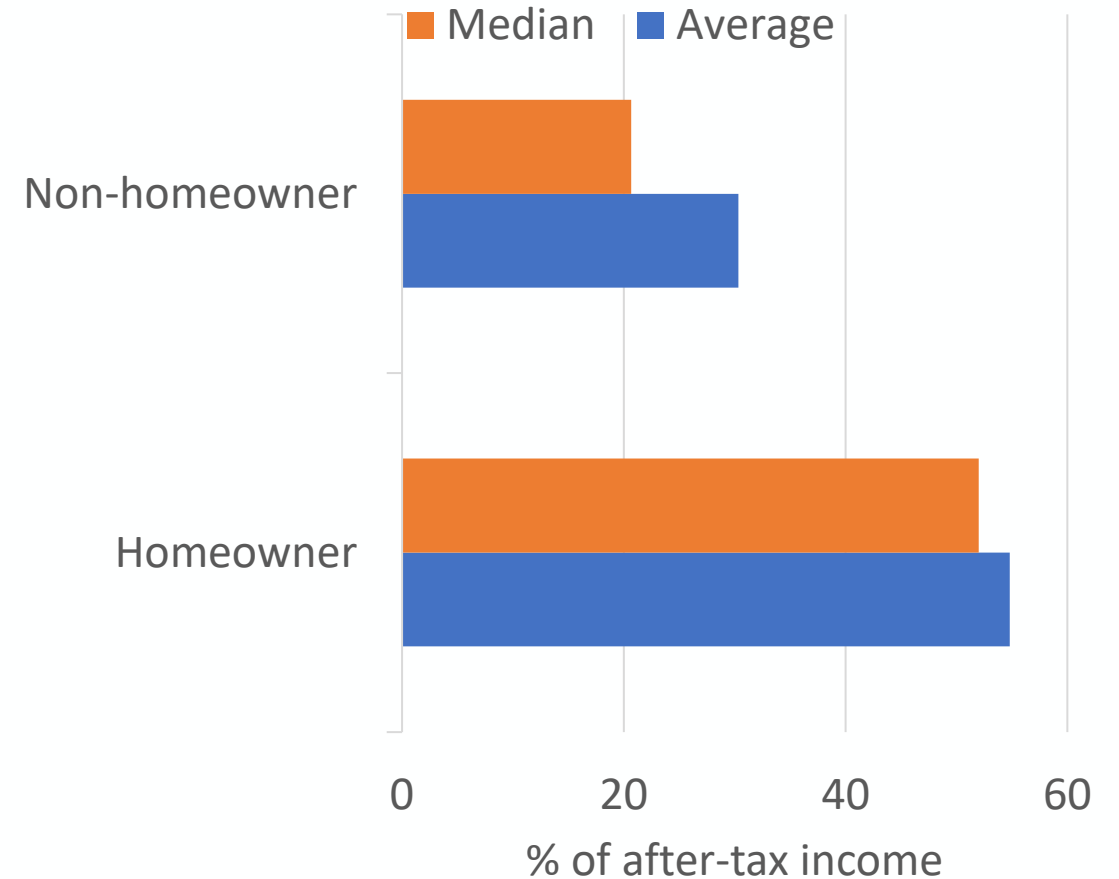


Many single-person households and limited income to save

Homeowners and non-homeowners by household size. 2022

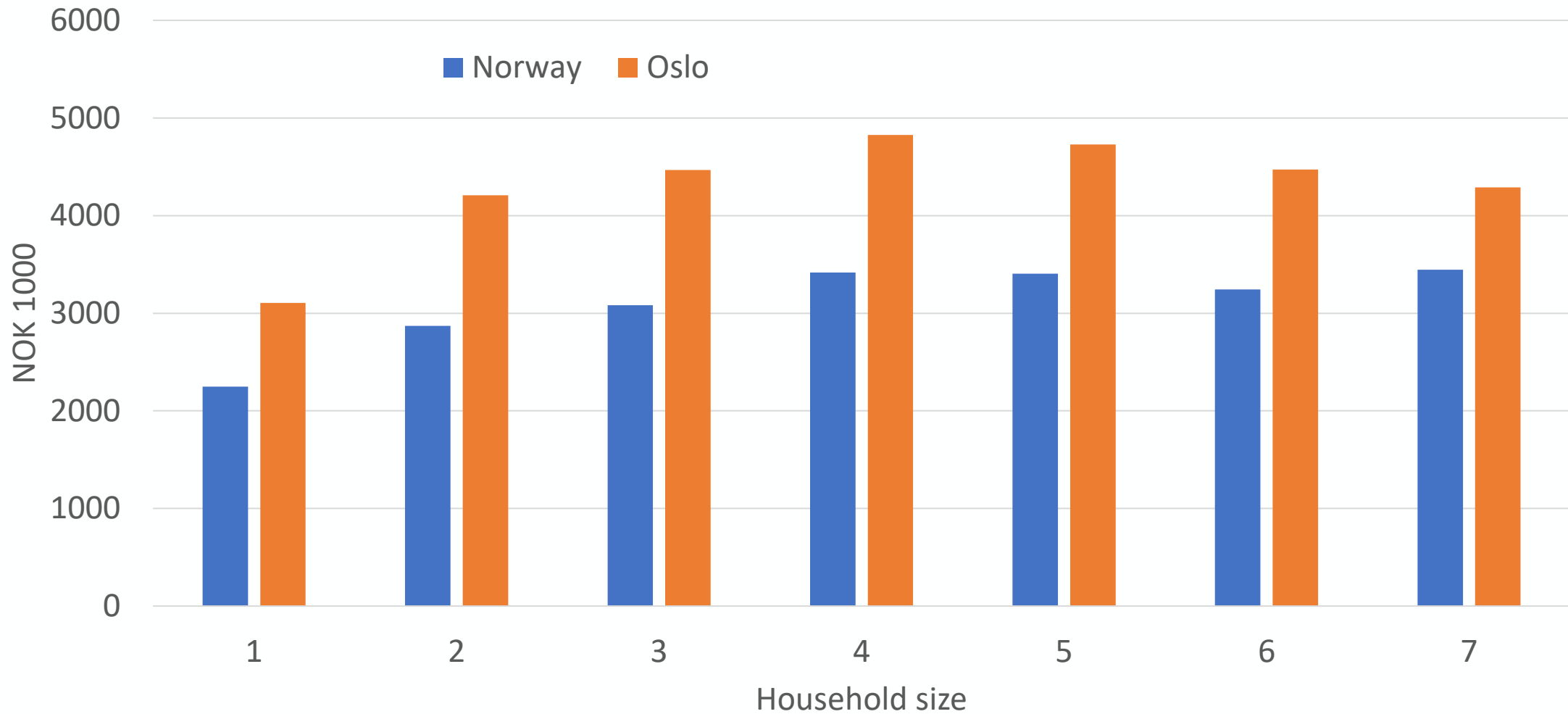


Free income (before instalment). 2022



The suitable home is expensive for single-person households

The price of a suitable home by household size. 2022



Lending regulation in Norway

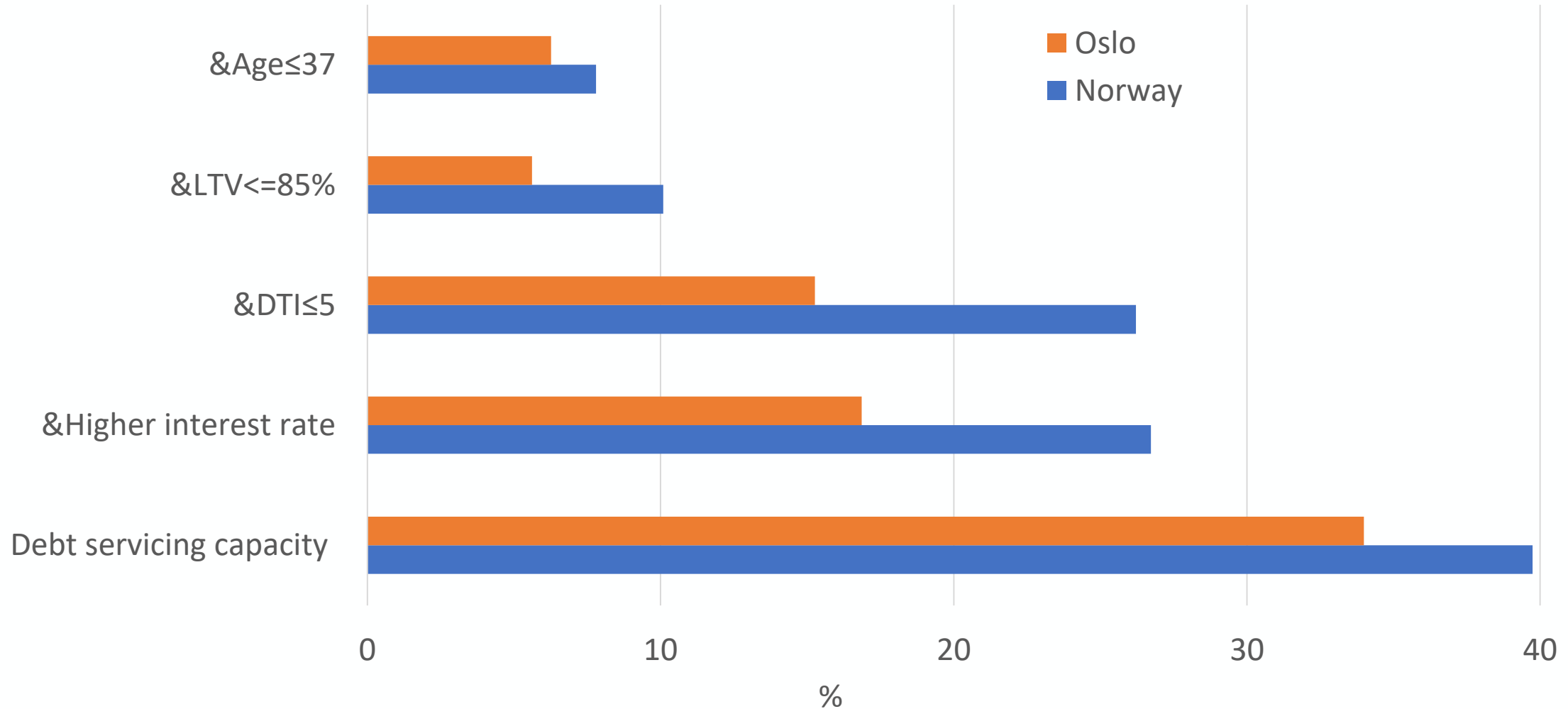
Borrower-Based-Measures (BBMs)

- Debt-servicing capacity requirement
 - Includes instalment requirement
 - Includes an interest-rate stress test (+5 pp, +3 pp from 2023)
- Debt-to-income (DTI) ratio ≤ 5
- Loan-to-value (LTV) ratio ≤ 85
- Flexibility quotas (speed limits)



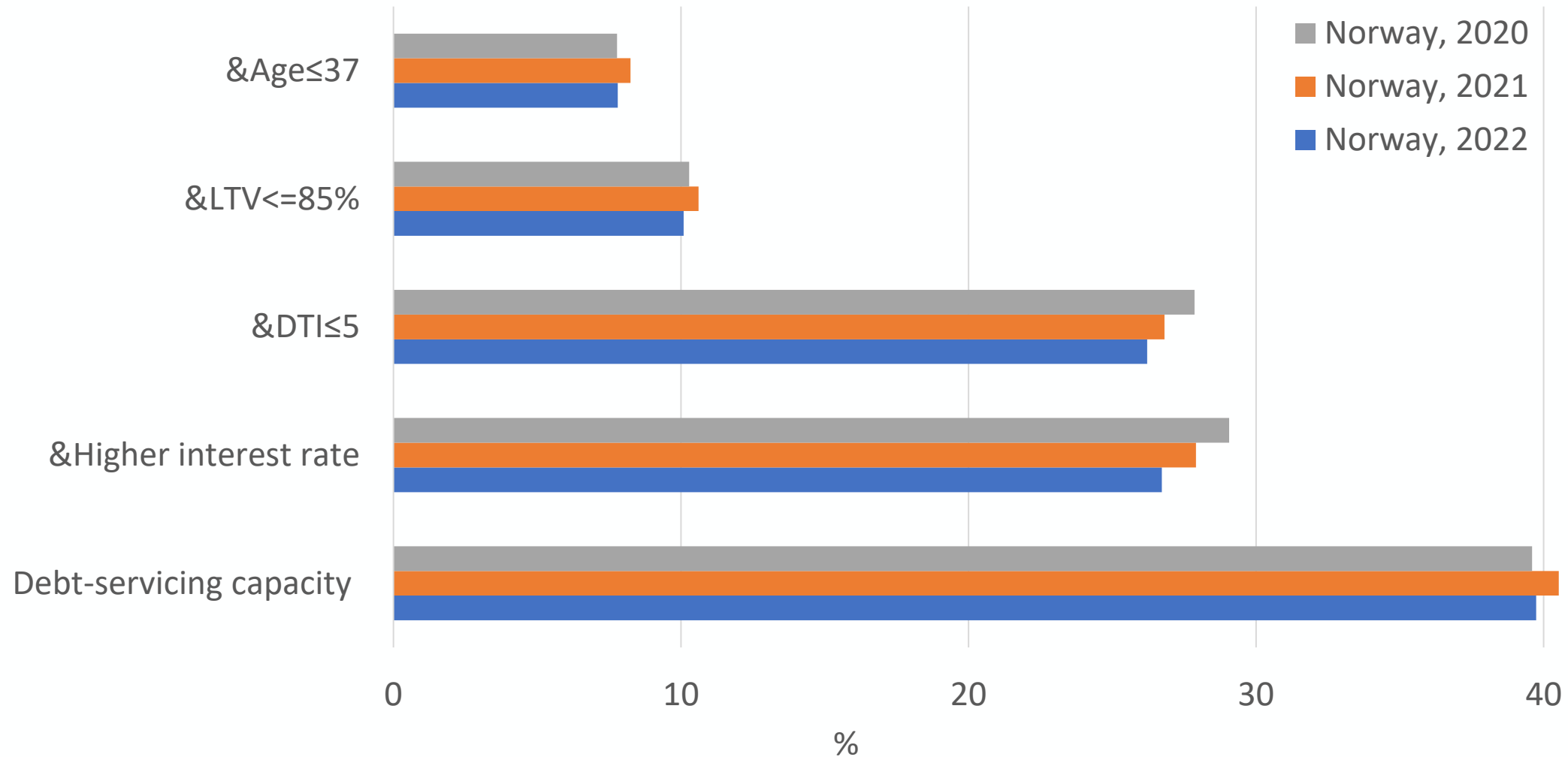
The interest-rate stress test and LTV restriction are most restrictive

Share of non-homeowners with HPP conditional on BBMs. 2022



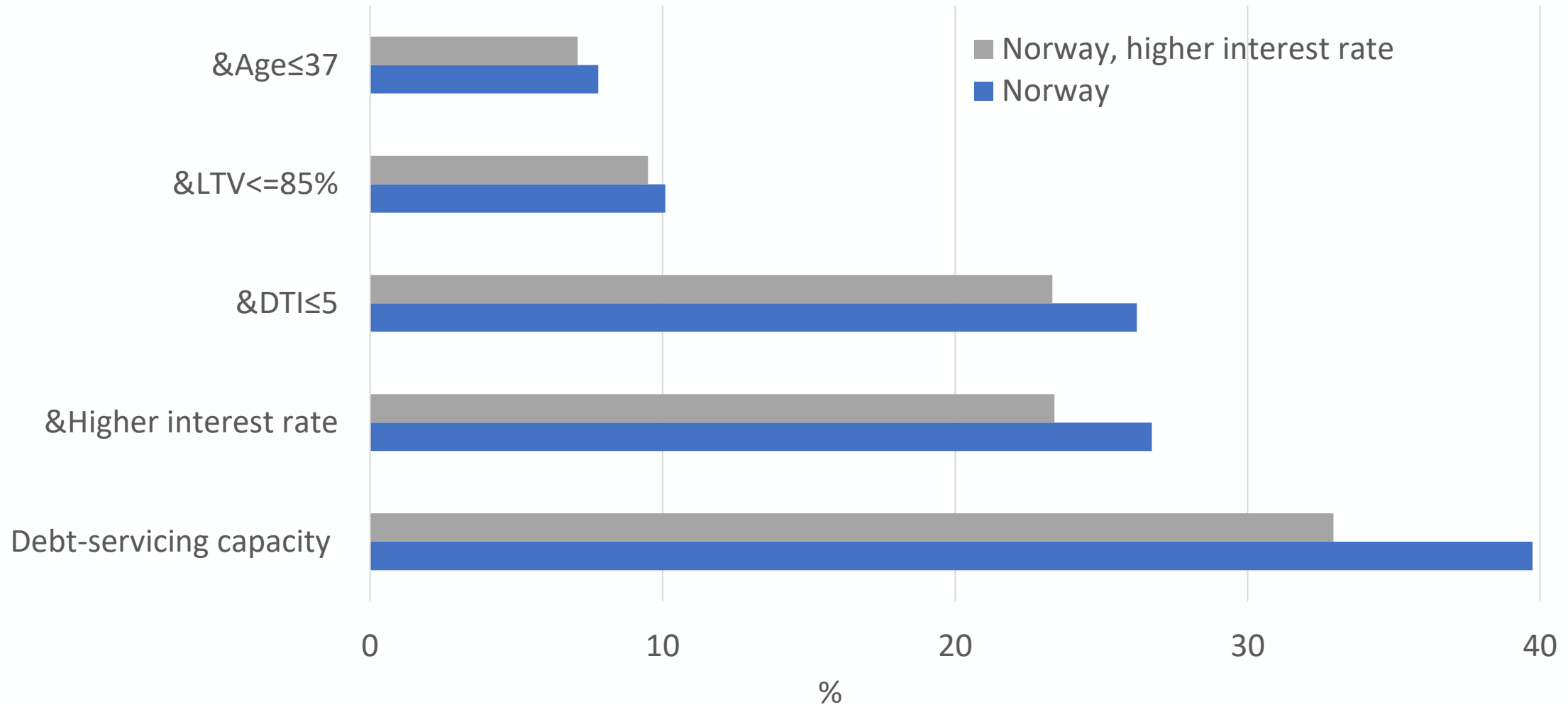
The interest-rate stress test has become more restrictive but not the combination of BBMs

Share of non-homeowners with HPP conditional on BBMs



The projected interest rate hike reduces HPP

Share of non-homeowners with HPP conditional on BBMs. 2022



Main findings

Non-homeowners make up about 1/4 of all households



10% of non-homeowners have sufficient funds to buy a home while not in conflict with the BBMs, 5% in Oslo.



The debt-servicing capacity requirement (including an interest-rate stress test) and the LTV requirement are the most limiting BBMs.



The interest-rate stress test has become more limiting since 2020.



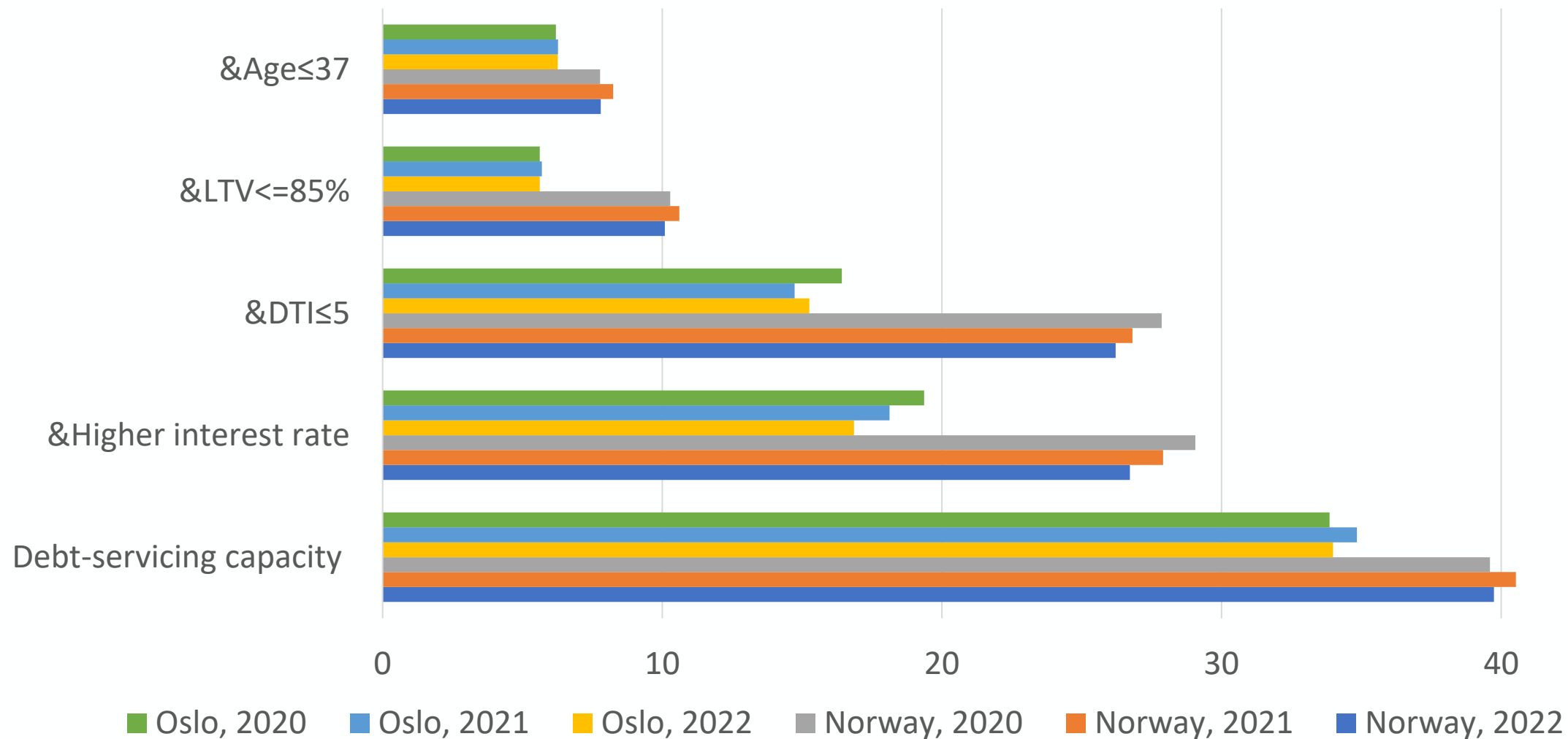
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Thank you for your attention!

The interest-rate stress test has become more restrictive restrictive but not the combination of BBMs

Share of non-homeowners with HPP conditional on BBMs



The projected interest rate hike reduces HPP

Share of non-homeowners with HPP conditional on BBMs. 2022

