

Governor Ida Wolden Bache  
Norges Bank

REASSESSING THE EFFECTIVENESS AND

# TRANSMISSION

OF MONETARY POLICY



Jackson Hole Economic Policy Symposium  
Federal Reserve Bank of Kansas City  
August 22-24, 2024

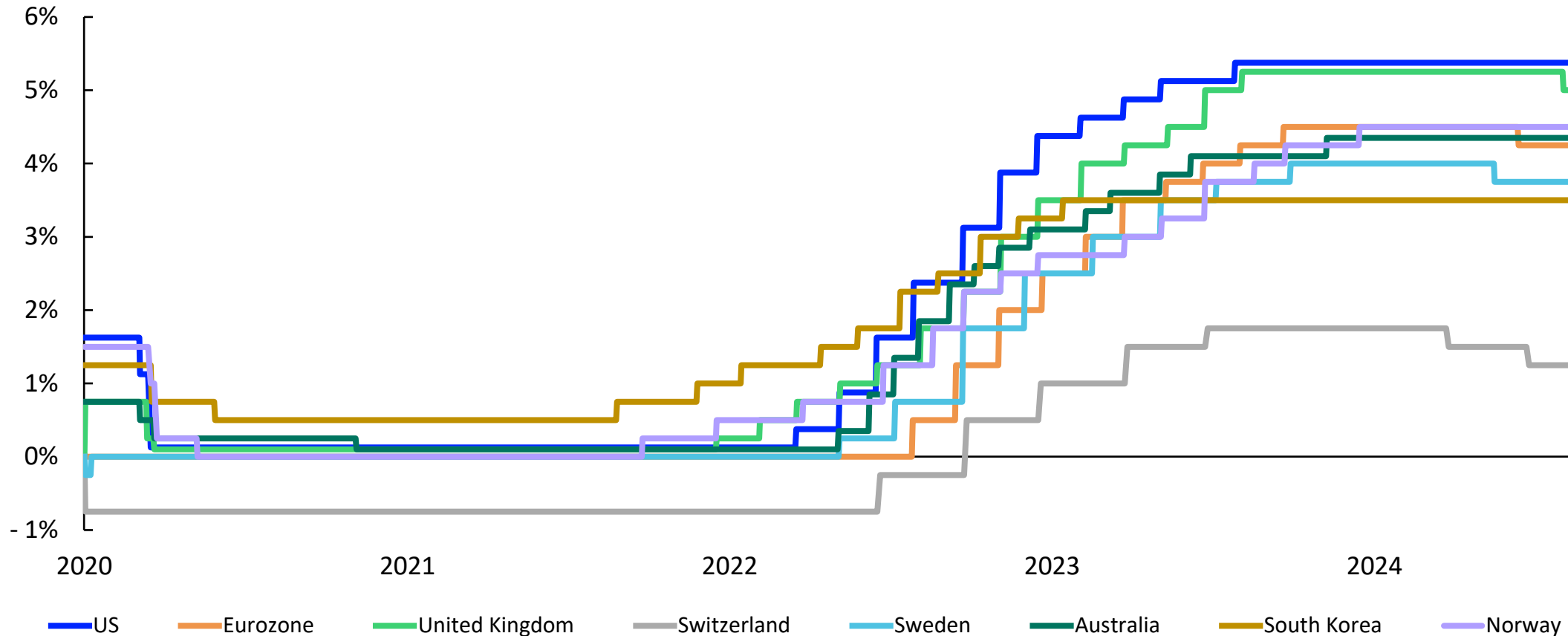
# Handout with charts

Governor Ida Wolden Bache, Norges Bank  
Remarks at the 2024 Jackson Hole Economic Policy Symposium  
August 24, 2024



# Chart 1: The tightening was synchronized across countries

Nominal policy rates 2020-2024

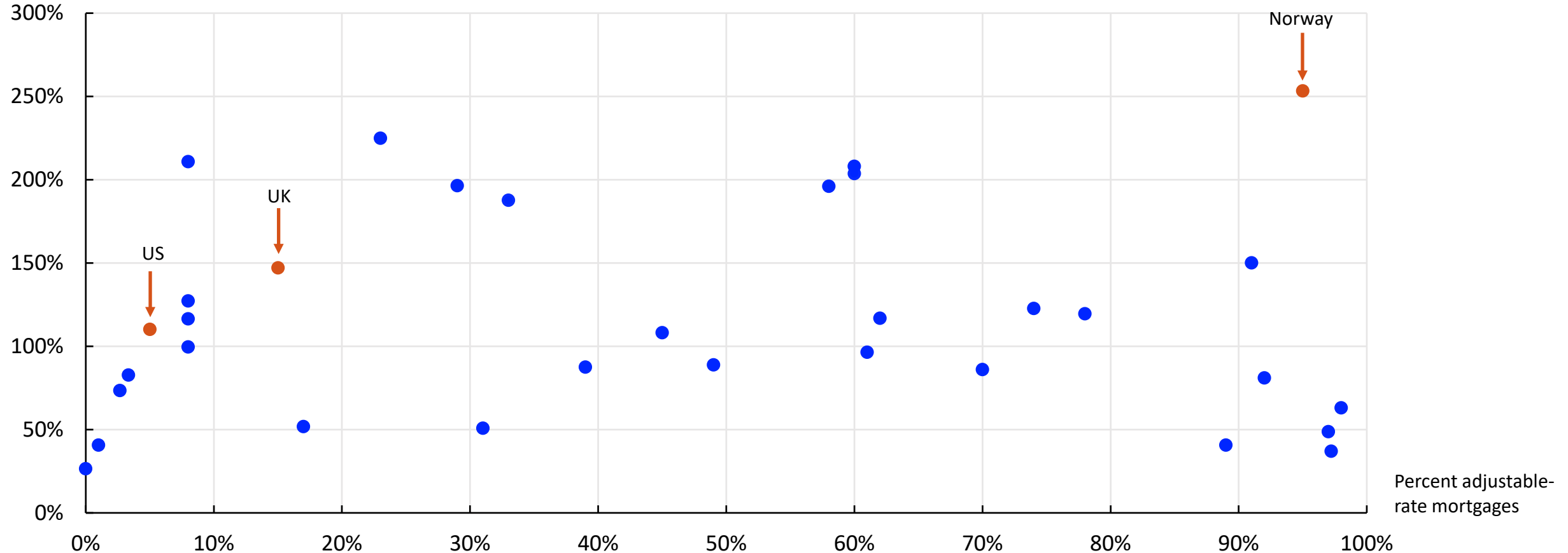


# Chart 2: Large differences in pass-through of monetary policy to disposable income

Sources: OECD, IMF and national statistical agencies

## Household debt/disposable income and fraction adjustable-rate mortgages, by country

Debt, percent of disposable income



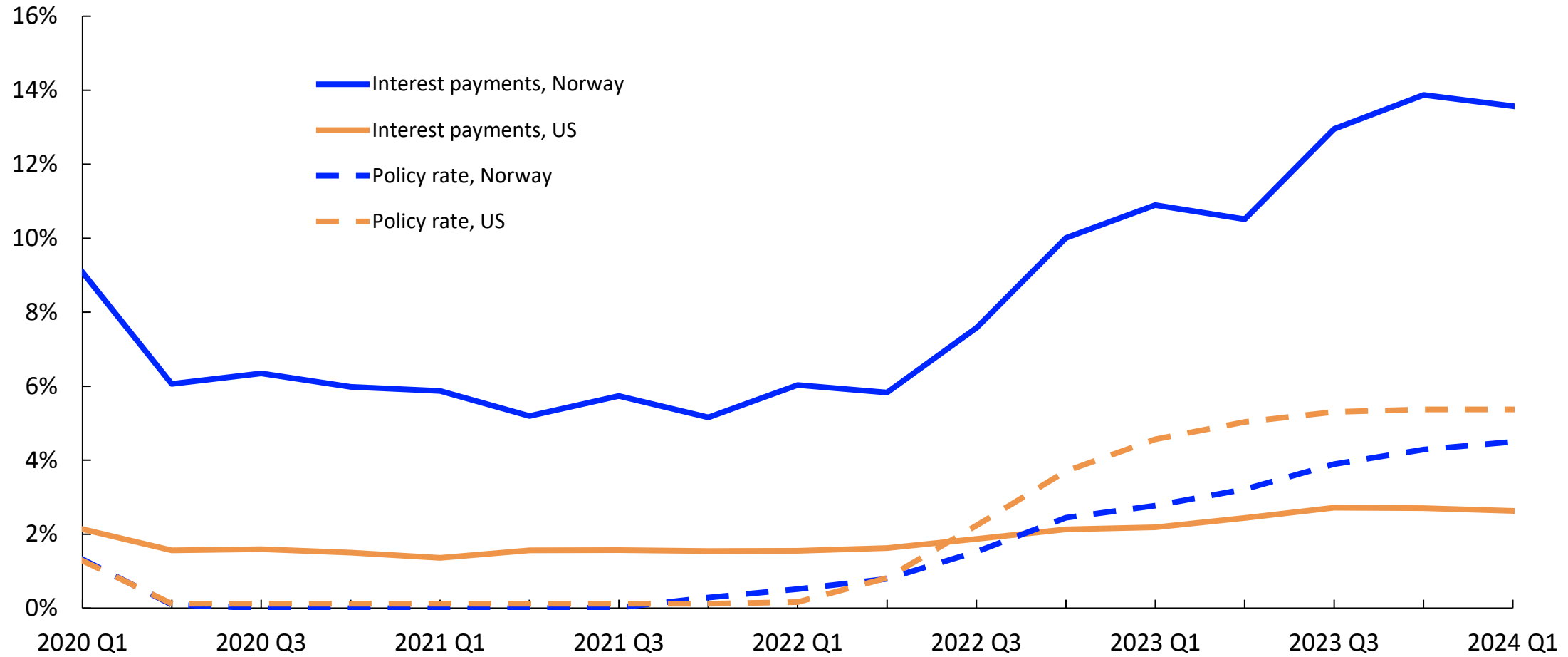
Selected countries based on data availability, mostly OECD members. Data from 2022 and 2023. For most countries, mortgages defined as fixed-rate if > 12 months residual fixation period (see IMF World Economic Outlook April 2024, chapter 2).



# Chart 3: Faster pass-through to interest payments in Norway than in US

Sources: Norges Bank, Statistics Norway and Bureau of Economic Analysis

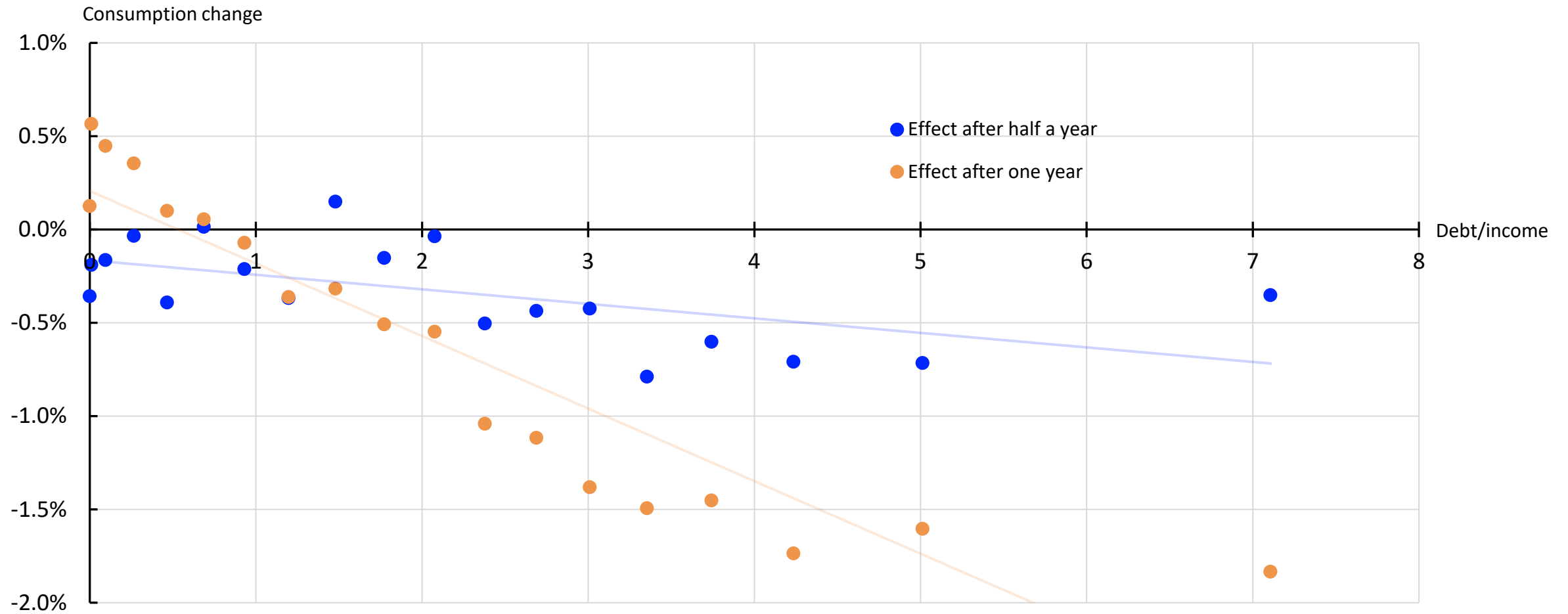
Policy interest rates and personal interest payments in percent of disposable income



# Chart 4: More indebted households respond more strongly to interest rate

## Effect of 1 percentage point increase in interest rate on consumption, by debt/income of household

Source: Ahn, Galaasen & Mæhlum. 2024.  
*The Cash-flow Channel of Monetary Policy:  
Evidence From Billions of Transactions*



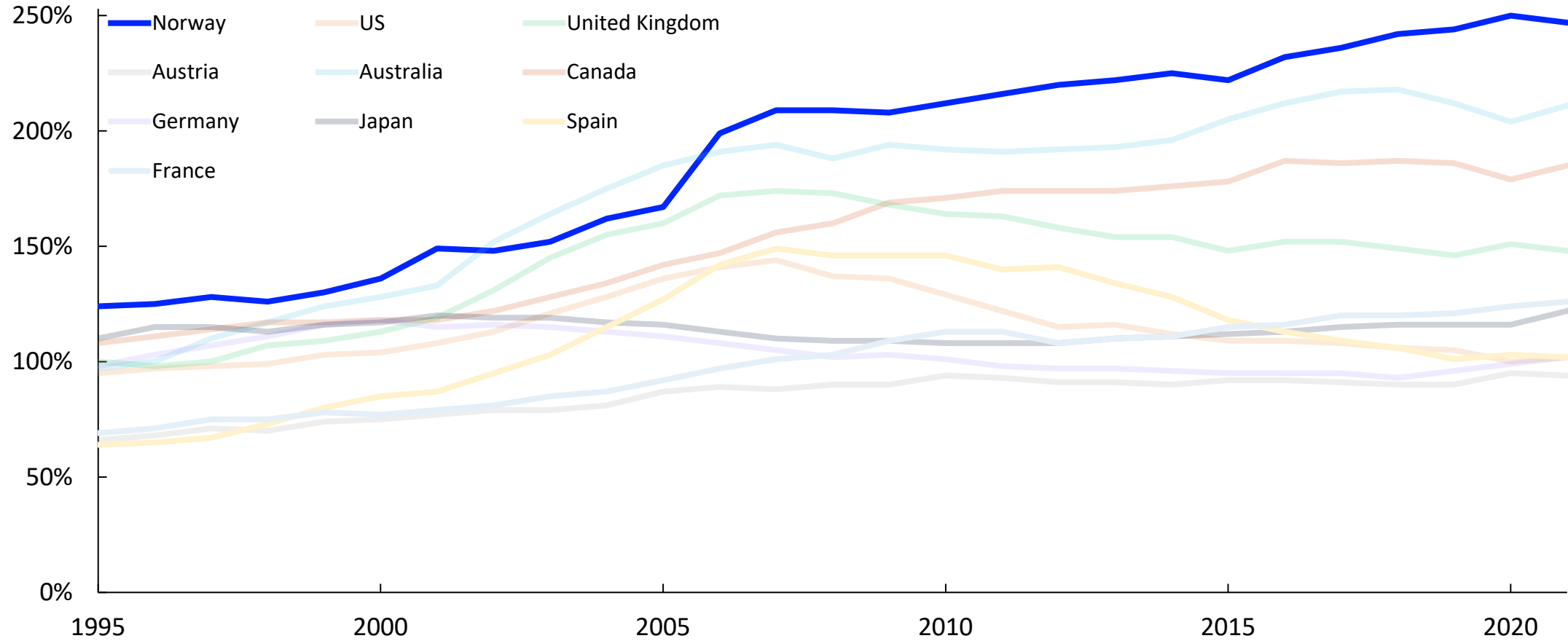
Short-run interest rate instrumented with high frequency monetary policy shocks. Separate regressions for 20 quantiles of debt/income. Effect in percent of after-tax income.



# Chart 5: Households around the world have become more indebted

Source: OECD

Household debt in percent of disposable income, 1995-2021



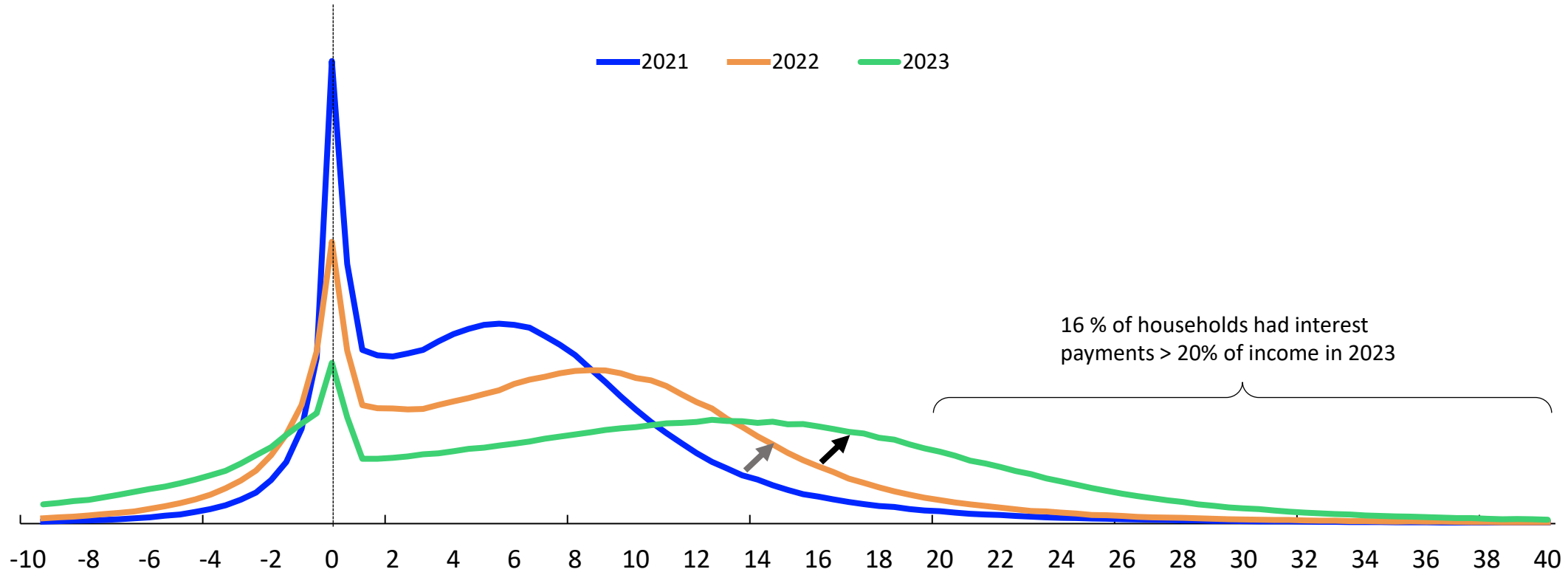
Selected OECD member countries



# Chart 6: Households have spent an increasing share of income to cover interest payments

Source: Norges Bank and Statistics Norway

## Distribution of net interest expenses in percent of after-tax income, Norwegian households



Histogram based on tax returns for balanced panel of Norwegian households (provisional numbers for 2023).



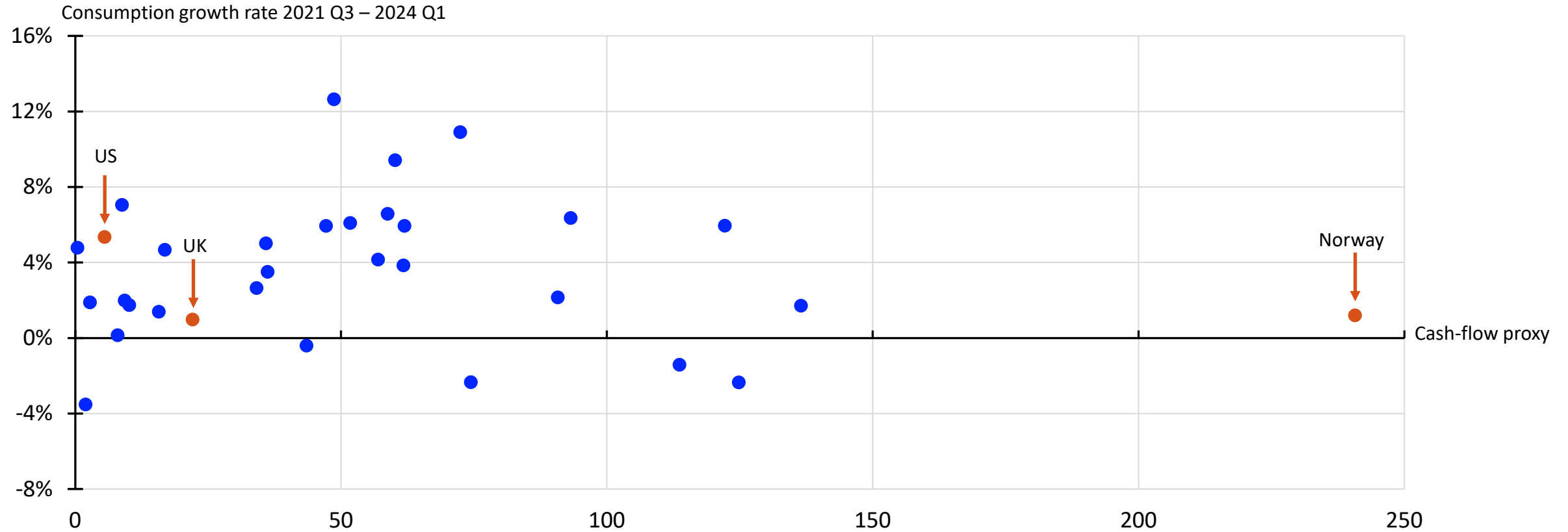
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# Chart 7: Not weaker consumption growth in countries where the cash-flow channel is expected to be strong

Sources: Eurostat, Federal Reserve, FRED, IMF, OECD and national statistical agencies

Change in real private consumption (percent) 2021 Q3 – 2024 Q1 and proxy for strength of cash-flow channel



Cash-flow proxy = (fraction adjustable-rate mortgages) x (debt/disposable income for household sector). Selected countries based on data availability, mostly OECD members. Data from 2022 and 2023 for DTI and fraction ARM mortgages.

