# Panel Discussion Monetary policy in the new polycrisis normal

Frank Smets
European Central Bank

The Central Bank of the Future: Opportunities and Challenges

OeNB/SUERF Annual Economic Conference Vienna, 10-11 June 2024

The views expressed are my own and not necessarily those of the ECB

#### Main messages

- Uncertainty about the natural real rate (r\*) is high
- Secular structural changes (like climate change) are likely to affect r\* in uncertain ways (Sahuc, Smets and Vermandel, 2024)
- Inflation projections depend on market expectations of future interest rates and thus on perceptions of r\*
- Monetary policy should be designed in a way that is robust to r\* uncertainty (Orphanides & Williams, 2005)
- The ECB's reaction function centered around three elements (the inflation outlook, underlying inflation dynamics and the strength of monetary transmission) is a way of robustifying policy.

# Uncertainty about r\* is high

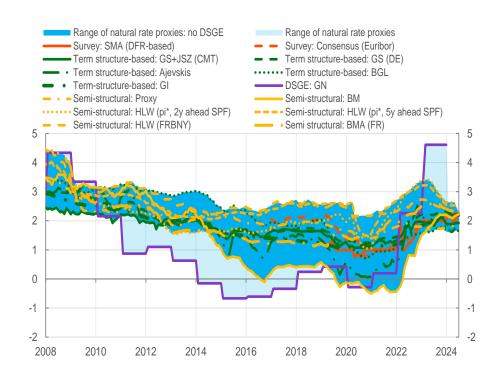
- Maury Obstfeld (Dec 2023): "... the main underlying factors that have pushed real interest rates down since the 1980s and 1990s – notably demographic shifts, lower productivity growth, corporate market power, and safe asset demand relative to supply – do not appear poised to reverse strongly enough to drive a big and durable rise in global real interest rates over the coming years. Low equilibrium interest rates may well continue periodically to bedevil monetary policy and financial stability."
- Bill Dudley (30 May 2024): "There's a strong case that r\* has risen substantially. ... various factors are driving down desired saving and boosting desired investment, ... . On the saving side, high stock prices are making people feel more inclined to spend, baby boomers are tapping their retirement funds and the US government is borrowing vastly ... to fund its budget deficits. On the investment side, the Biden administration has jump-started capital expenditures on everything from chip factories to green technology, and renewable energy (wind and solar) is much more capital-intensive than coal or natural gas. ... Put it all together, and r\* could be as high as 2%."

# The long-term neutral rate in the euro area

#### 5y5y OIS rates: Nominal/real



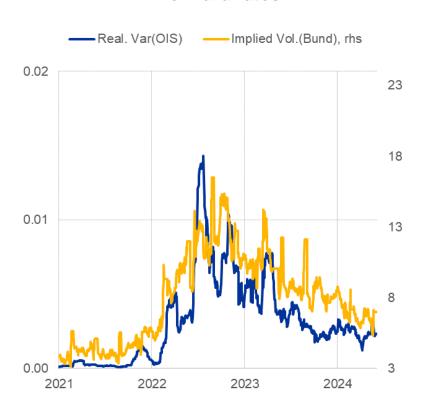
#### Estimated neutral rates in the euro area



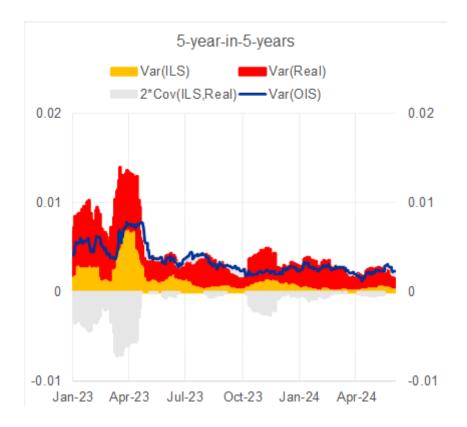
Sources: Eurosystem estimates, ECB calculations

## Uncertainty high

# Implied volatility of long-term Bund yields vs. realised variance of long-term OIS forward rates

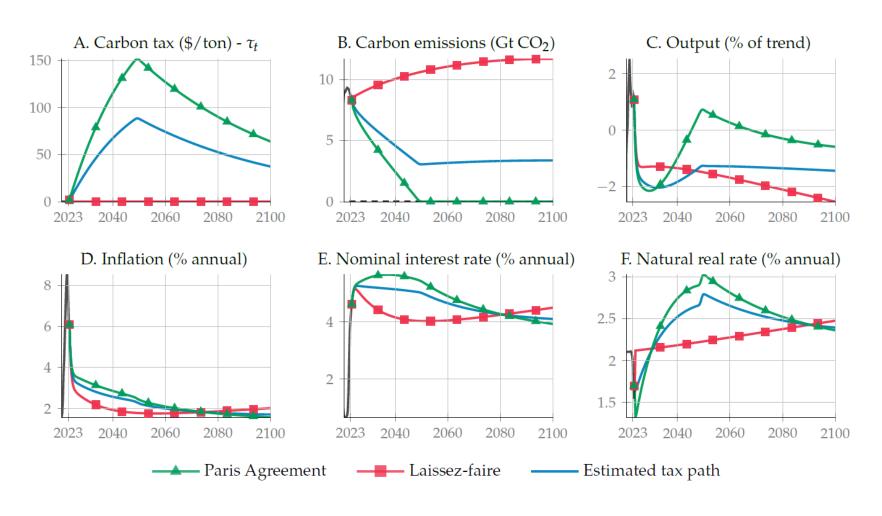


#### Variance Decomposition of nominal 5y5y OIS forward rate



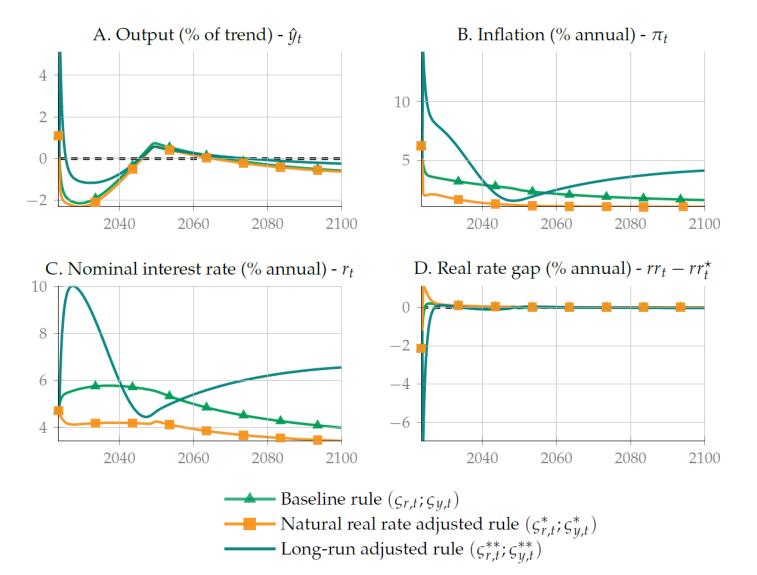
# Impact of climate change scenarios

(Sahuc, Smets and Vermandel, 2024)



## Alternative monetary policy rules

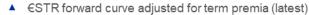
(Sahuc, Smets and Vermandel, 2024)



## Expected nominal & real rate gaps

#### **€STR** forward curve and survey expectations on the deposit facility rate

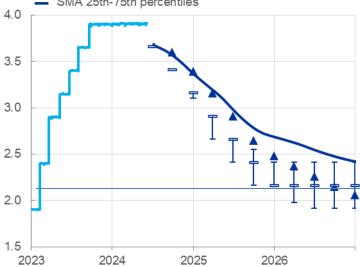
(percentages per annum)



——€STR forward curve (latest)

—Realised €STR

SMA 25th-75th percentiles

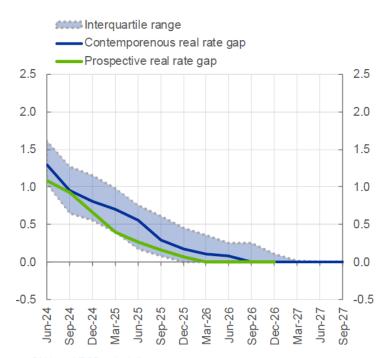


#### Sources: Bloomberg and ECB calculations.

Notes: The bars depict the median of responses to the May Bloomberg survey on expectations of future deposit facility rates. Surveys are adjusted for an €STR vs. DFR spread. Model estimates are based on two affine term structure models, one with and one without survey information on interest rate expectations (both variations of Joslin, Singleton and Zhu (2011)), and a lower bound term structure model following Geiger and Schupp (2018) incorporating survey information on interest rates expectations. The range for the (nominal) neutral rate i\* is based on ESCB estimates. Latest observation: 27 May 2024.

#### **Evolution of expected real rate gap paths**

(percentages per annum)



Sources: SMA and ECB calculations.

Notes: Real rate gaps are defined as the difference between the ex-ante real rate and the natural rate of each respondent. The contemporaneous rate gap calculates the ex-ante real rate as the difference between the current DFR and 1 quarter ahead y-o-y inflation. The prospective rate gap calculates the ex-ante real rate as the difference between the average of DFR expectations for the current and 3 following periods and 1 year ahead y-o-y inflation.

#### Main messages

- Uncertainty about the natural real rate (r\*) is high
- Secular structural changes (like climate change) are likely to affect r\* in uncertain ways (Sahuc, Smets and Vermandel, 2024)
- Inflation projections depend on market expectations of future interest rates and thus on perceptions of r\*
- Monetary policy should be designed in a way that is robust to r\* uncertainty (Orphanides & Williams, 2005)
- The ECB's reaction function centered around three elements (the inflation outlook, underlying inflation dynamics and the strength of monetary transmission) is a way of robustifying policy.