



A FLEXIBLE INFLATION TARGETING REGIME

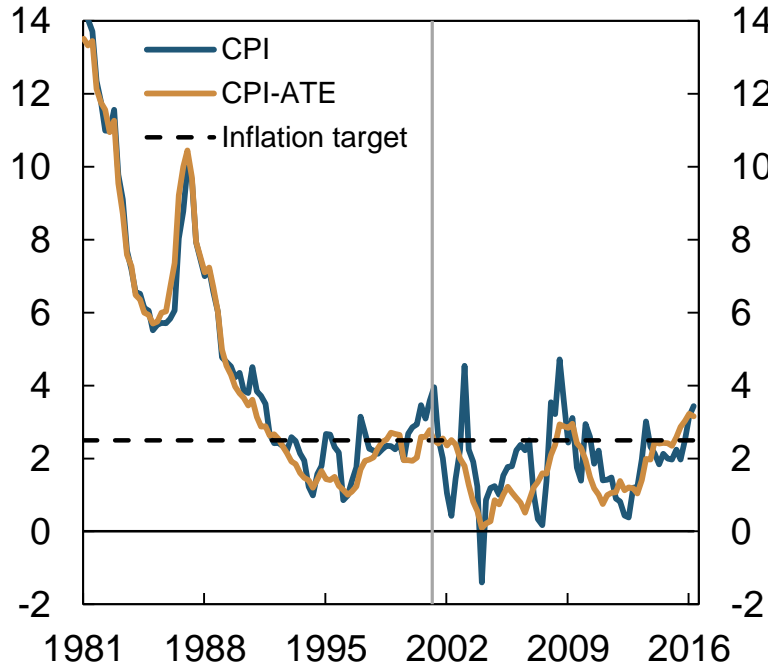
GOVERNOR ØYSTEIN OLSEN, CME, 11 OCTOBER 2016



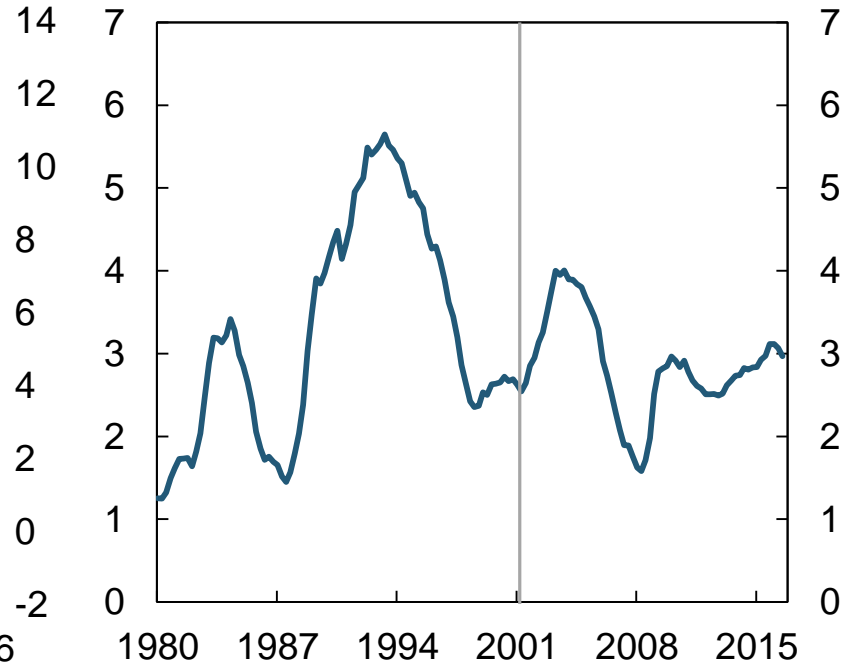
NORGES BANK
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Performance

Inflation. Percent

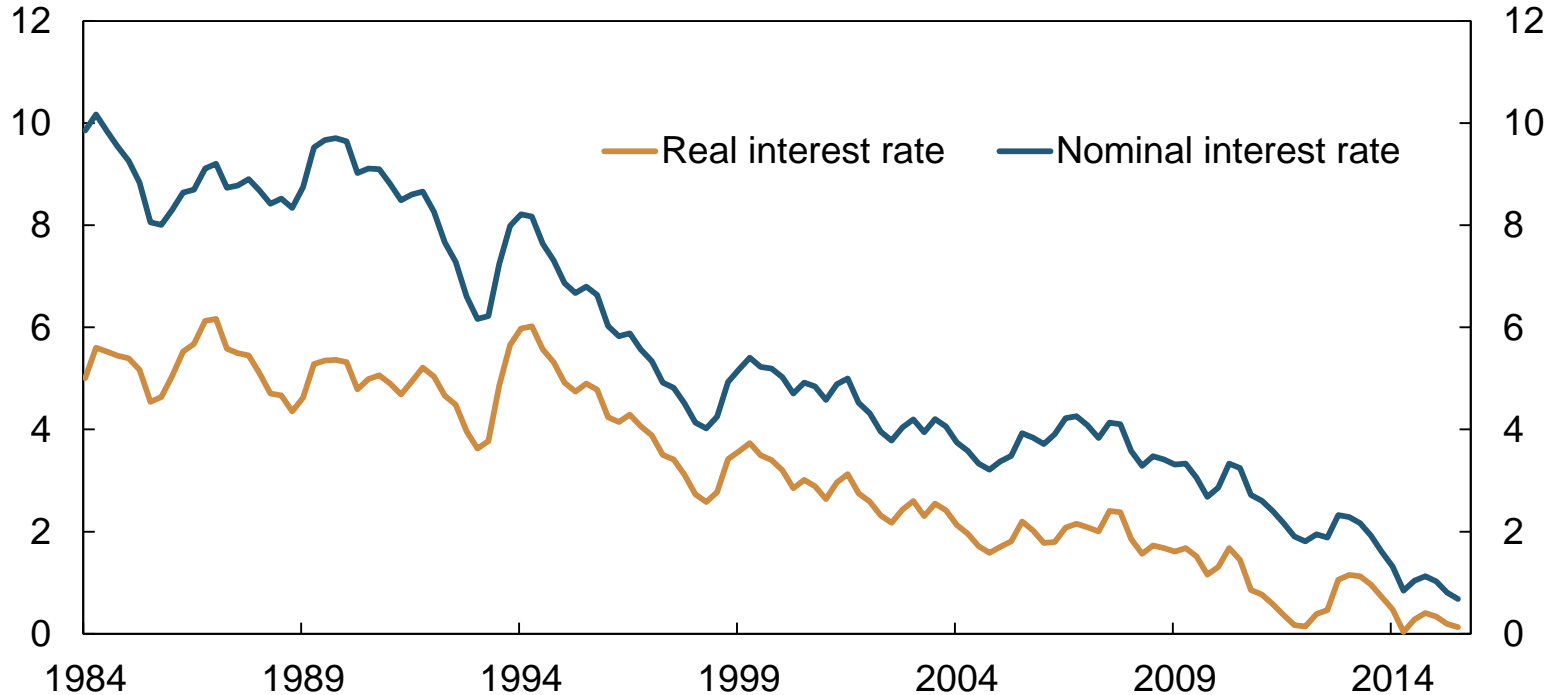


Unemployment. Percent



International interest rates

Long-term interest rates. 14 OECD countries¹⁾. Percent



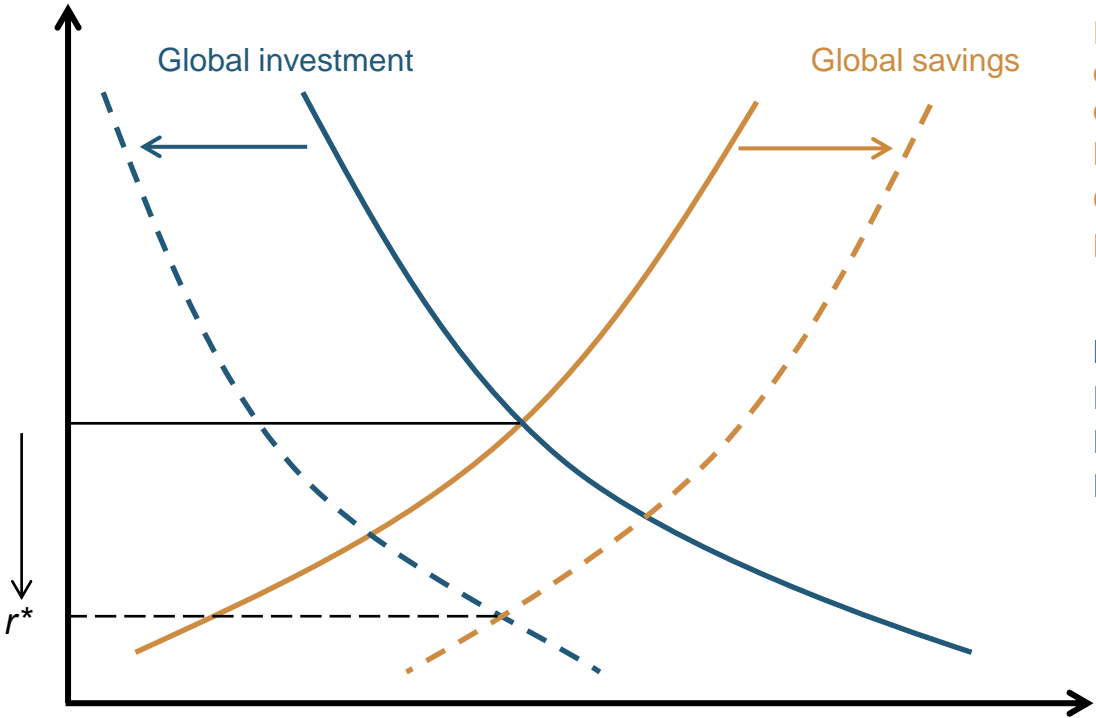
1) US, Germany, France, Italy, UK, Japan, Netherlands, Austria, Belgium, Sweden, Denmark, Canada, Switzerland and Norway. Unweighted average.

Source: OECD



Forces driving the fall in the global real interest rate

Global real interest rate



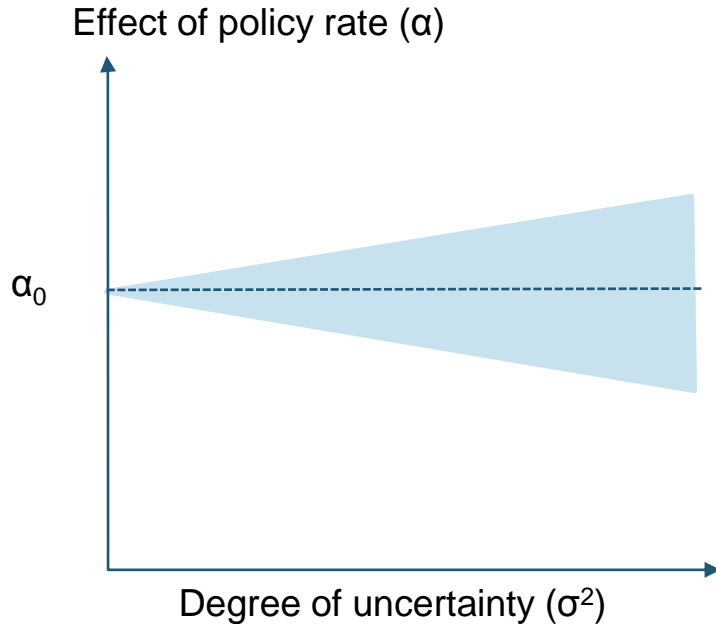
Increased savings in emerging economies and oil-producing countries
Demographic trends
Greater income inequality
Deleveraging

Lower growth prospects
Relative price of capital
Public investment
Persistent uncertainty

Global savings and investment



Uncertain effect of policy rate



Target:

$$\text{Minimise } L_t = E_t (y_t - y^*)^2 = (E_t(y_t) - y^*)^2 + \text{var}_t(y_t)$$

Effect of policy rate on economy:

$$y_t = y^* - \alpha_t r_t + x_t$$

$$\alpha_t = \alpha_0 + \varepsilon_t, \varepsilon_t \sim N(0, \sigma^2)$$

Monetary policy response when x_t changes:

a) Uncertainty about effect of policy rate

$$\sigma^2 > 0, \quad r_t = \frac{1}{\alpha_0 + \frac{\sigma^2}{\alpha_0}} x_t$$

b) No uncertainty about effect of policy rate

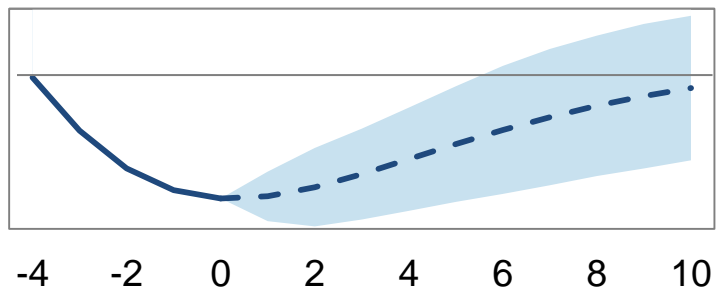
$$\sigma^2 = 0, \quad r_t = \frac{1}{\alpha_0} x_t$$



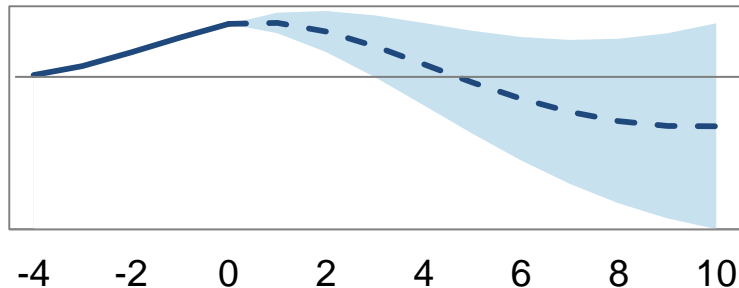
Monetary policy and uncertainty

Active monetary policy to counteract shocks

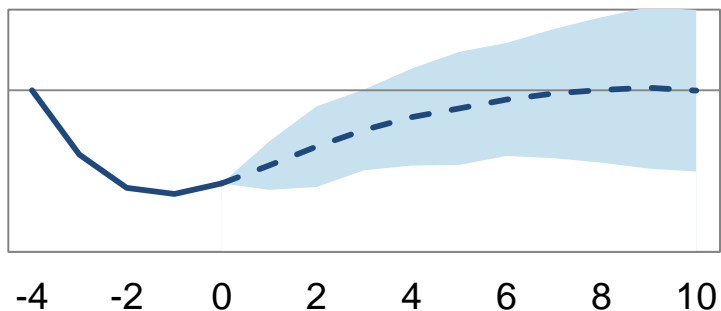
Policy rate



Inflation



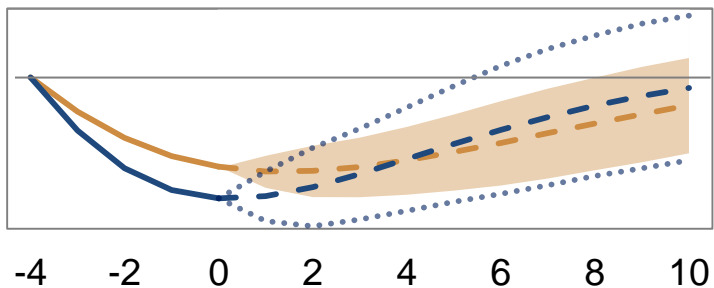
Output gap



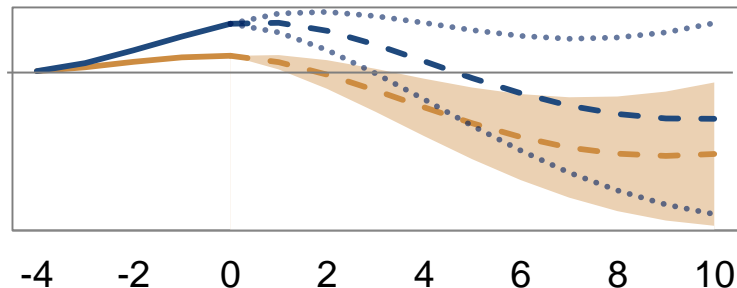
Monetary policy and uncertainty

A more cautious policy response reduces uncertainty

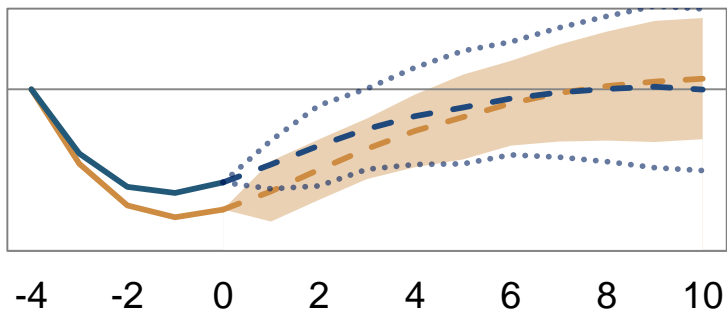
Policy rate



Inflation

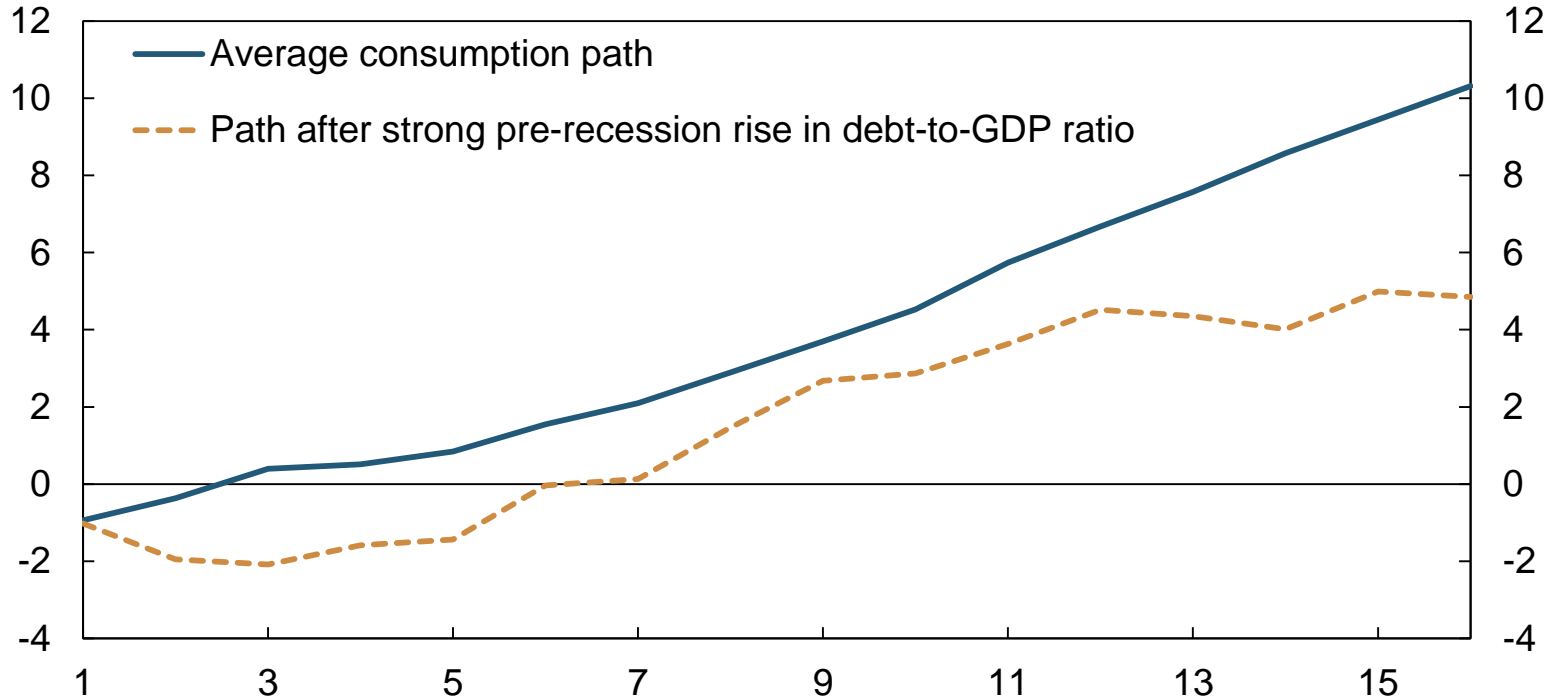


Output gap



Estimated path for total consumption during recessions

Number of quarters from start of recession. Percent



1) Strong growth is defined as a rise of more than one standard deviation above the average. The rise is the average rise in the five years preceding the start of the recession.

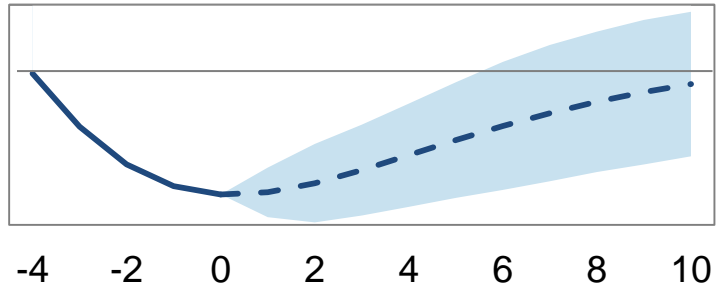
Sources: BIS, Federal Reserve Bank of Dallas, OECD, Statistics Norway and Norges Bank



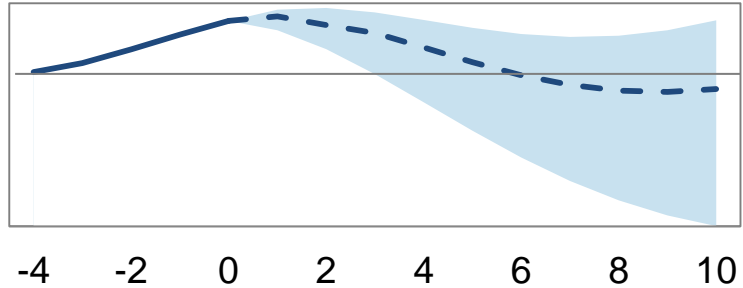
Monetary policy and financial stability

Financial imbalances give rise to tail risk

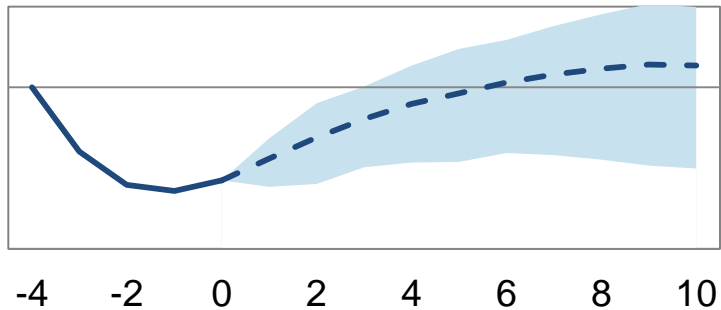
Policy rate



Inflation



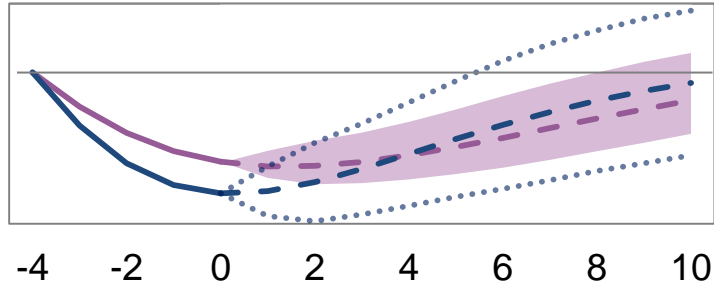
Output gap



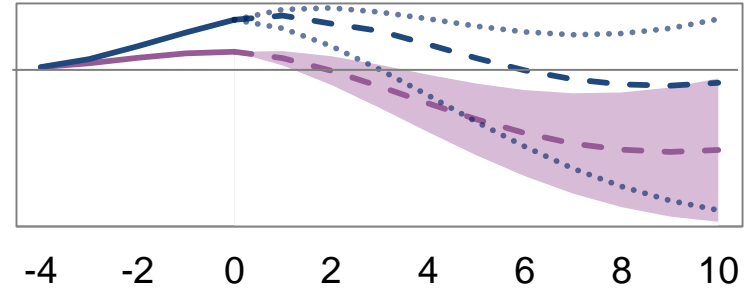
Monetary policy and financial stability

Consideration of financial imbalances reduces tail risk

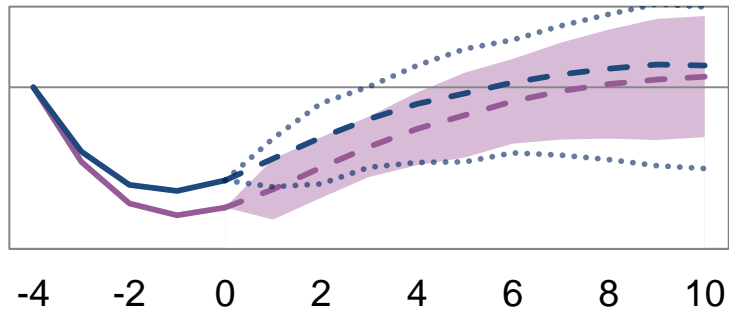
Policy rate



Inflation



Output gap





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