The interest rate conditioning assumption and monetary policy communication

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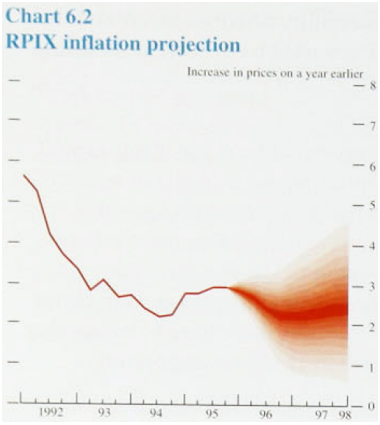
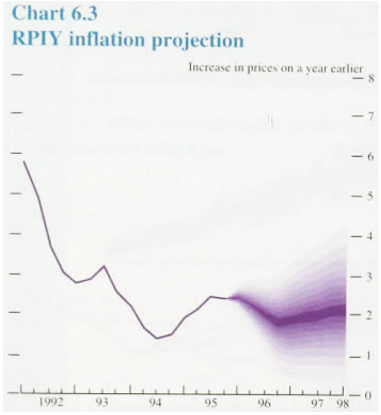
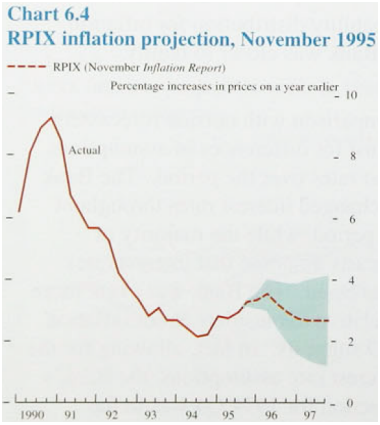
Transforming monetary policy:
How should we think about uncertainty and risks?
Bank of England, London, 26 June 2025

The Bank of England's "rivers of blood": February 1996

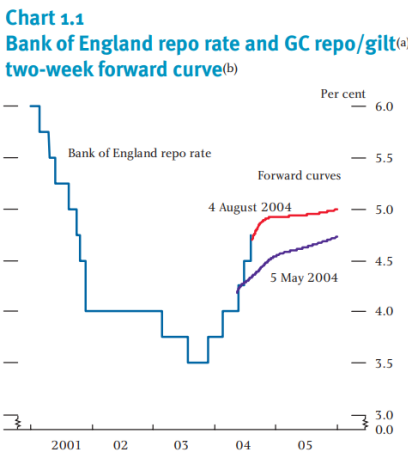


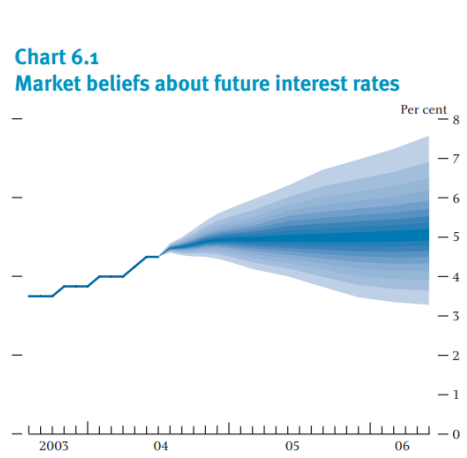




"The old style of chart ... focused too much attention on the central projection, whereas, ... any coherent projection is a probability distribution and not a point estimate." (p. 48)

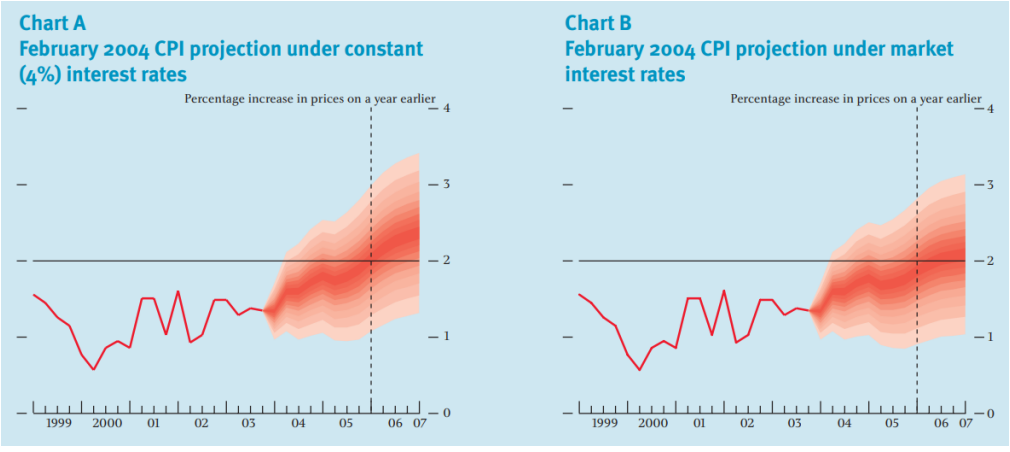
The interest rate conditioning assumption: August 2004





"... the MPC has published a projection in the Inflation Report based on unchanged official rates. ... there are many circumstances in which the projection under market rates provides a more helpful picture of the outlook." (p. 40.)

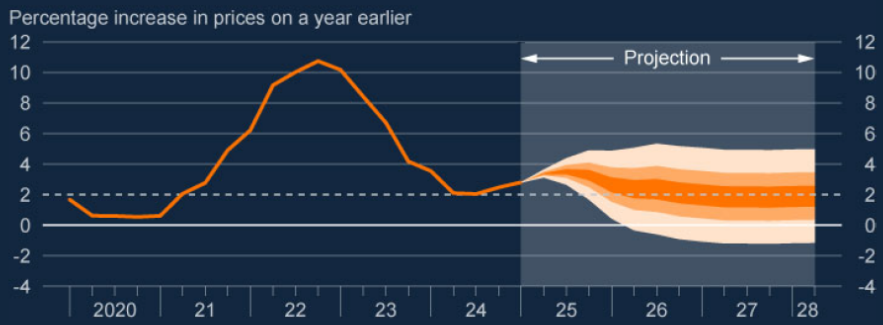
The interest rate conditioning assumption: August 2004 box



"It should also be stressed that the profile for official interest rates derived from the market yield curve merely offers a convenient benchmark assumption." (p. 42, Box in Inflation Report, August 2004.)

BOE: May 2025

Chart 1.4: CPI inflation projection based on market interest rate expectations, other policy measures as announced



BOE: May 2025—alternative scenarios

"In the first scenario, UK demand is weaker and domestic inflationary pressures fade more quickly than in the baseline projections, driven by elevated uncertainty." (p. 25.)

"In the second scenario, the upcoming rise in headline inflation leads to additional second round effects in domestic price and wage-setting that are amplified by weak potential productivity growth." (p. 28.)

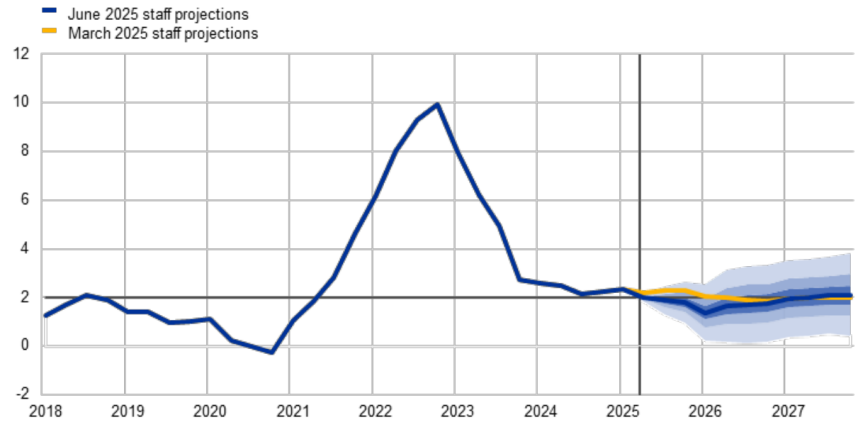
"Monetary policy would be required to respond if either scenario were to materialise, to ensure that inflation returns to the 2% target in the medium term." (p. 31)

"In the construction of these scenarios, Bank staff have assumed that Bank Rate mechanically follows the same market-implied path as in the baseline projection." (p. 31.)

ECB: June 2025

Euro area HICP inflation

(annual percentage changes)

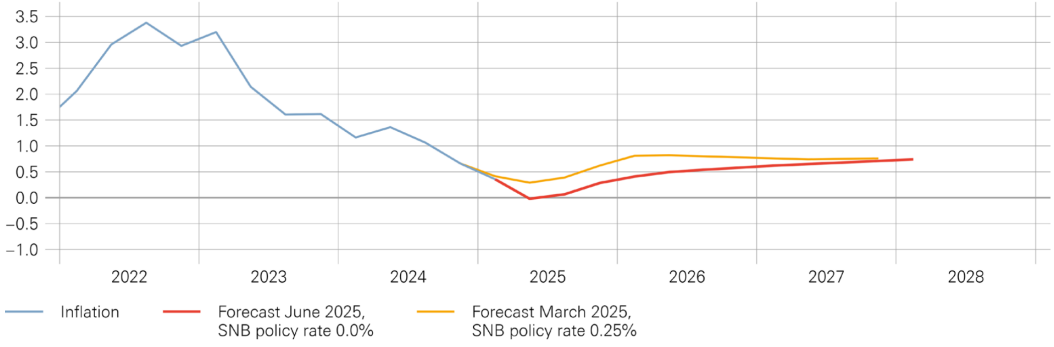


Staff projection, conditioned on market-implied path 3 weeks before meeting.

SNB: June 2025

CONDITIONAL INFLATION FORECAST OF JUNE 2025

Year-on-year change in Swiss consumer price index in percent

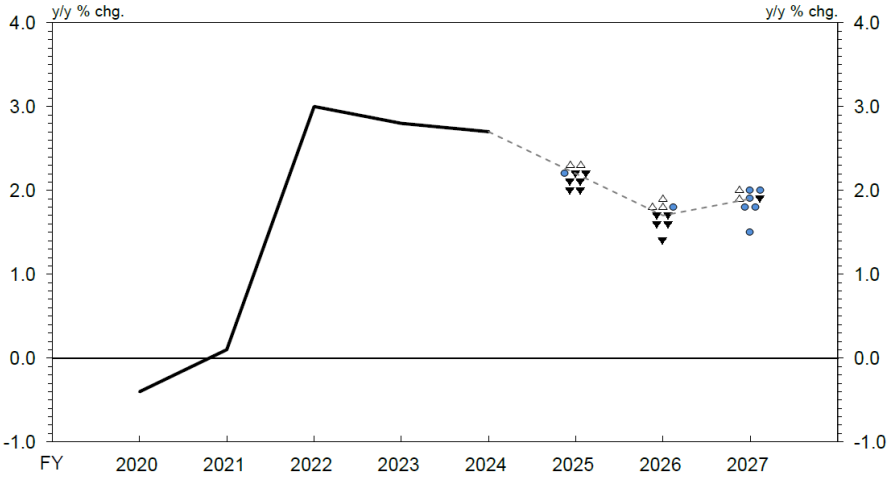


"Our forecast is based on the assumption that the SNB policy rate is 0% over the entire forecast horizon. Without today's rate cut, the forecast would have been lower."

BOJ: May 2025

Policy Board Members' Forecasts and Risk Assessments

(2) CPI (All Items Less Fresh Food)



BOJ: May 2025

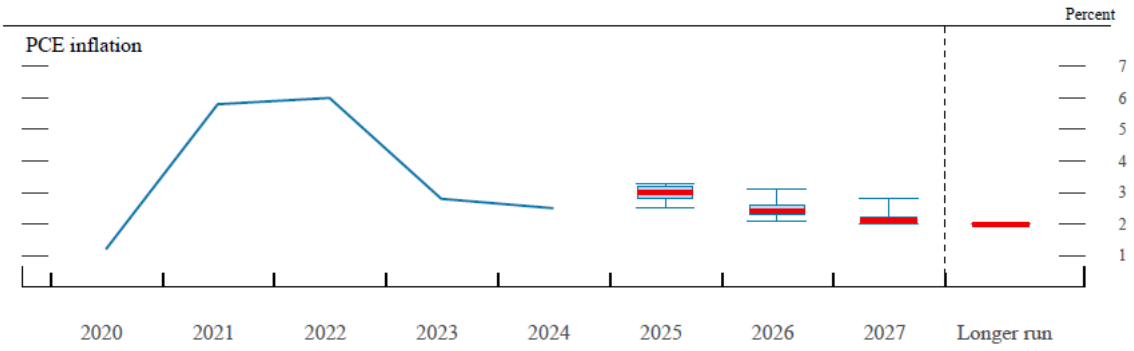
Notes: 1. The solid lines show actual figures, while the dotted lines show the medians of the Policy Board members' forecasts (point estimates).

2. The locations of ●, △, and ▼ in the charts indicate the figures for each Policy Board member's forecasts to which they attach the highest probability. The risk balance assessed by each Policy Board member is shown by the following shapes: ● indicates that a member assesses "upside and downside risks as being generally balanced," △ indicates that a member assesses "risks are skewed to the upside," and ▼ indicates that a member assesses "risks are skewed to the downside."

"Each Policy Board member makes their forecasts taking into account the effects of past policy decisions and with reference to views incorporated in financial markets regarding the future conduct of policy." (footnote 3, page 2)

Fed: June 2025 Summary of Economic Projections (SEP)

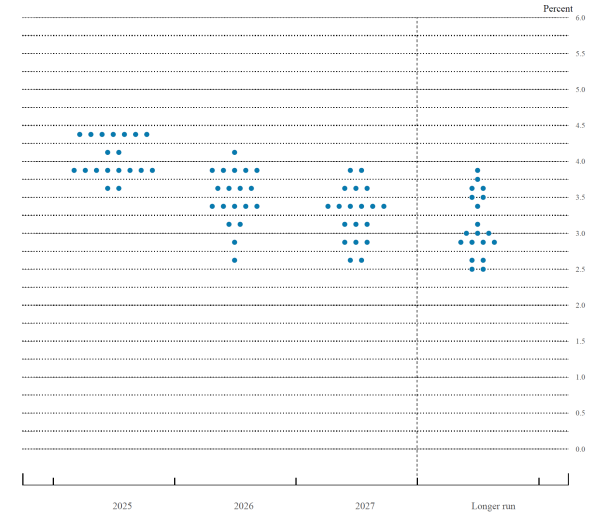
Medians, central tendencies, and ranges of FOMC participants' projections.



Conditioning assumption: FOMC participants' assessments of the projected appropriate target range (or level) for the federal funds rate.

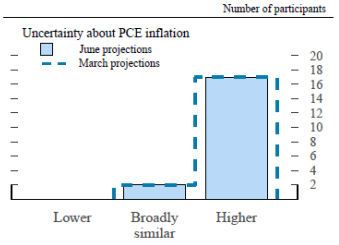
Fed: June 2025 "dot plot"

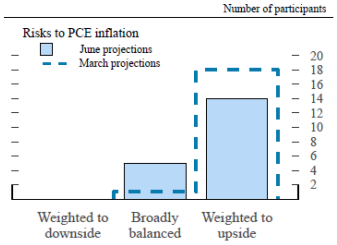
Figure 2. FOMC participants' assessments of appropriate monetary policy: Midpoint of target range or target level for the federal funds rate

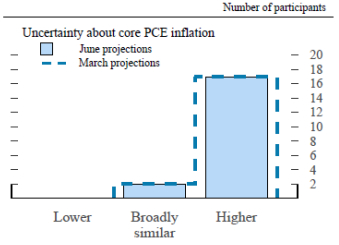


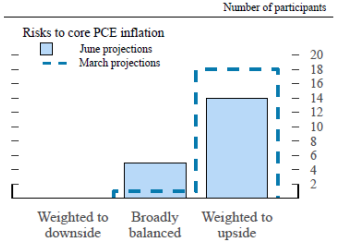
Fed: June 2025 SEP—Uncertainty and risks

FOMC participants' assessments of uncertainty and risks around their economic projections



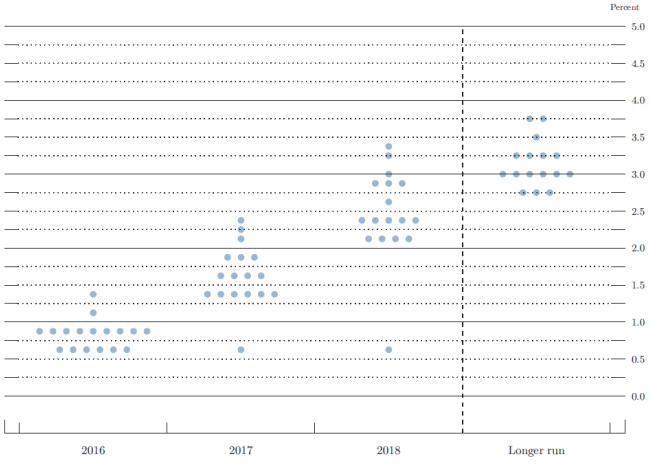






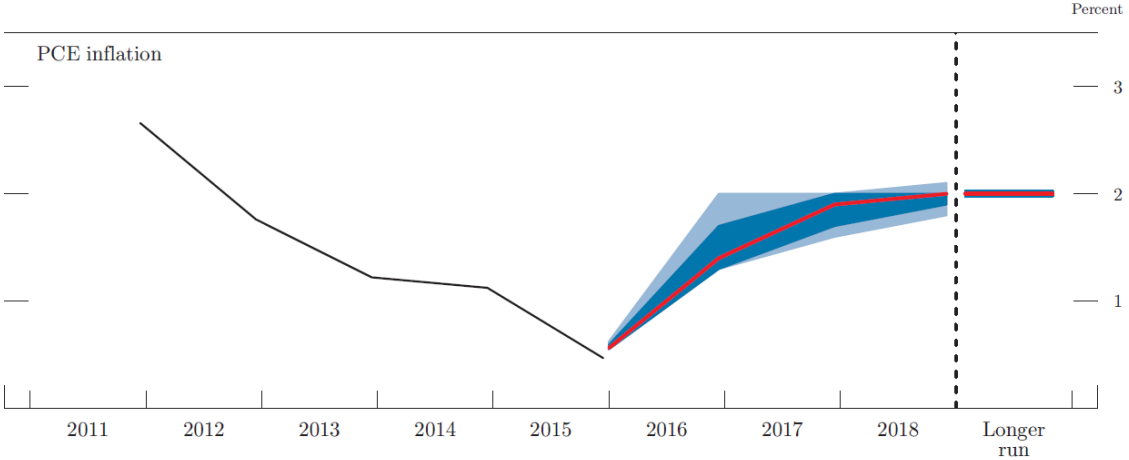
Fed: June 2016 SEP

Figure 2. FOMC participants' assessments of appropriate monetary policy: Midpoint of target range or target level for the federal funds rate



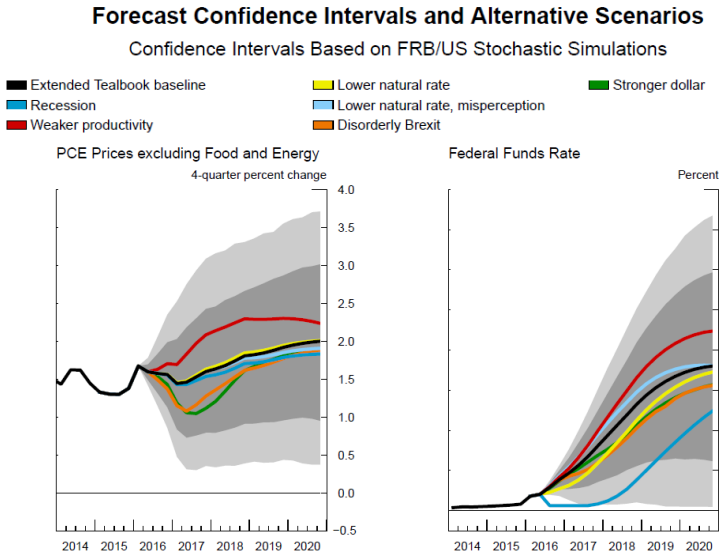
Fed: June 2016 SEP

Medians, central tendencies, and ranges of FOMC participants' projections.



Conditioning assumption: FOMC participants' assessments of the projected appropriate target range (or level) for the federal funds rate.

Fed: June 2016—Alternative scenarios in Tealbook

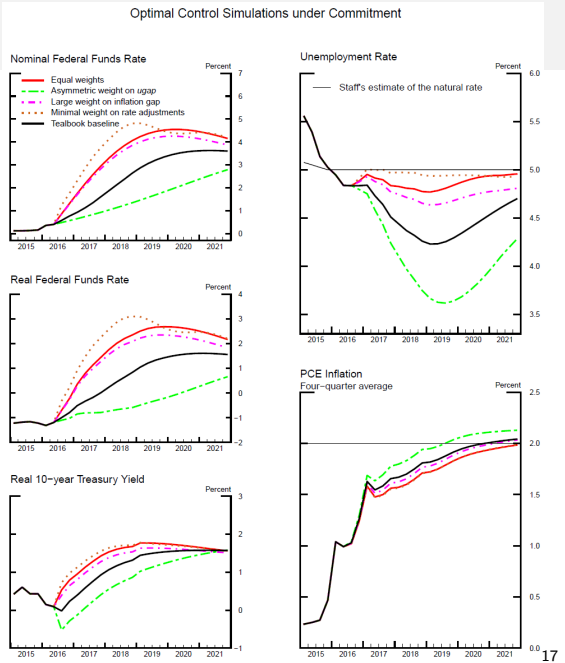


Conditioning assumption: Simple rule, as specified by staff in main macro model.

Fed: June 2016—Optimal control

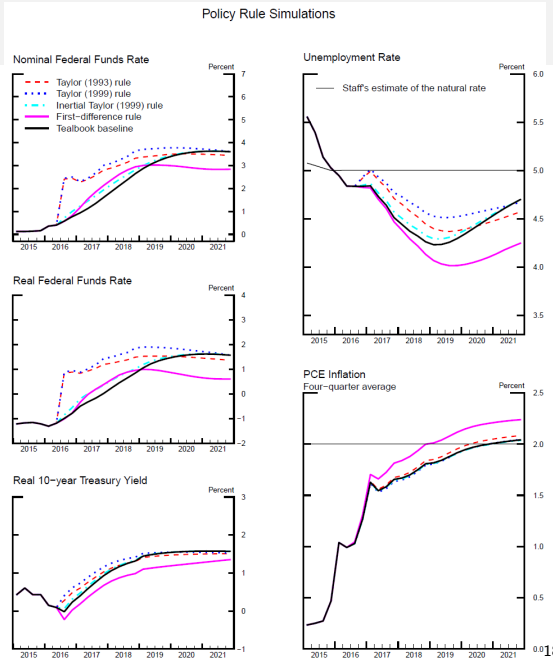
Weights on the components in the loss function

	Inflation gap	Unemployment gap		Changes in the federal funds rate
		ugap<0	*ugap*≥0	
Equal weights	1	1	1	1
Asymmetric weight on *ugap*	1	0	1	1
Large weight on inflation gap	5	1	1	1
Minimal weight on rate adjustment	1	1	1	0.01



Fed: June 2016—Simple rules

Taylor (1993) rule	$R_t = r^{LR} + \pi_t + 0.5(\pi_t - \pi^{LR}) + 0.5ygap_t$
Taylor (1999) rule	$R_t = r^{LR} + \pi_t + 0.5(\pi_t - \pi^{LR}) + ygap_t$
Inertial Taylor (1999) rule	$R_t = 0.85R_{t-1} + 0.15(r^{LR} + \pi_t + 0.5(\pi_t - \pi^{LR}) + ygap_t)$
First-difference rule	$R_t = R_{t-1} + 0.5(\pi_{t+3\|t} - \pi^{LR}) + 0.5\Delta^4 ygap_{t+3\|t}$



Two simple rules from the Fed's Bluebook/Tealbook

- Level rule: Classic Taylor rule (current quarter projections)

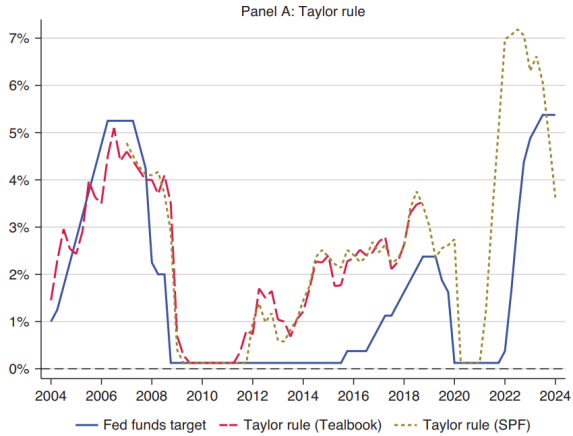
  $$i = r^* + \pi + \theta(\pi - \pi^*) + \theta y$$

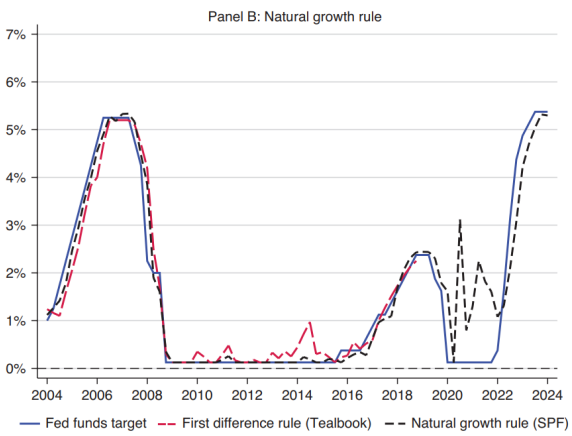
- Difference rule: Natural Growth targeting (3-q ahead projections)

  $$\Delta i = \theta(n - n^*)$$

- Variants of these (with $\theta = 0.5$) presented in Bluebook/Tealbook starting with January 2004 FOMC meeting (with $\theta = 0.5$).
  Note: $(n - n^*) \approx (\pi - \pi^*) + (g - g^*) \approx (\pi - \pi^*) + \Delta y$

Two simple rules





Enhancing Resilience with Monetary Policy Rules. 2024 Hoover monetary conference: Figure 17.4. https://www.hoover.org/sites/default/files/research/docs/9_GlobalMonetaryPolicy_NextStrategyReviews.pdf

The interest rate conditioning assumption

- Constant rate
- Market path
- Optimal control
- Estimated policy rule
- Robust policy rule

Communicating uncertainty and risks

- What is most useful to communicate? (Information vs distraction.)
- No single solution can address all practical challenges.
- Individual MPC projections essential for highlighting different perspectives.
- Consensus projection, under market path, useful aggregation approach.
- Fan chart around consensus provides visual summary of average uncertainty.
- Alternative scenarios useful for drawing attention to particular risks.
- Most important is to outline the systematic nature of the reaction to potential risks with a benchmark policy rule.