

Economic uncertainty and the design and conduct of monetary policy

Athanasios Orphanides

MIT

The SNB and its Watchers 2025

Karl Brunner Institute

Zurich, 21 November 2025



Uncertainty and the design and conduct of monetary policy

- ▶ Karl Brunner's view.
- ▶ A simple and robust policy strategy.
- ▶ The role of well-anchored inflation expectations.



Karl Brunner: Diffuse uncertainty

“We suffer neither under total ignorance nor do we enjoy full knowledge. Our life moves in a grey zone of partial knowledge and partial ignorance. Most particularly, the products emerging from our professional work reveal a wide range of diffuse uncertainty about the detailed response structure of the economy. This fact persists whatever the subjective feelings of any policymaker or academic may suggest.”

Karl Brunner, *The Control of Monetary Aggregates*, 1980, p. 61.



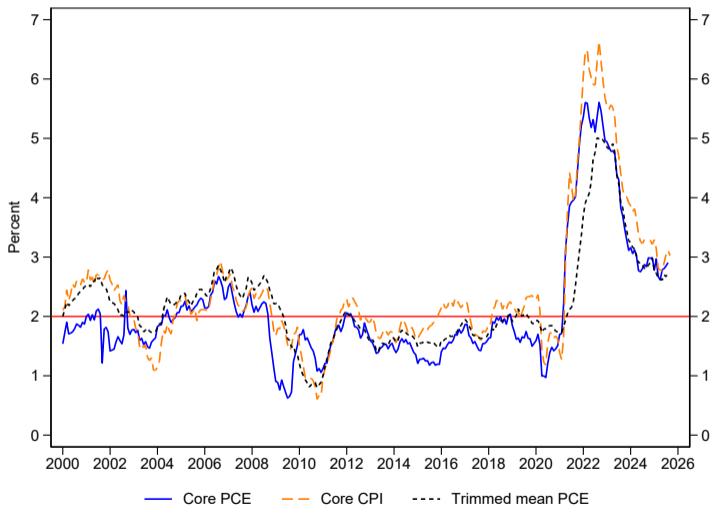
Karl Brunner: The safest strategy

“A nonactivist regime emerges under the circumstances characterized by a diffuse uncertainty as the safest strategy. It does not assure us that economic fluctuations will be avoided. But it will assure us that monetary policymaking does not impose additional uncertainties on the agents operating on the market place. It assures us moreover that monetary policy does not destabilize an economy in the manner observed during the 1930s or over the past 15 years. A neutral regime will effectively avoid any major deflation and inflation.”

Karl Brunner, *The Control of Monetary Aggregates*, 1980, p. 61.



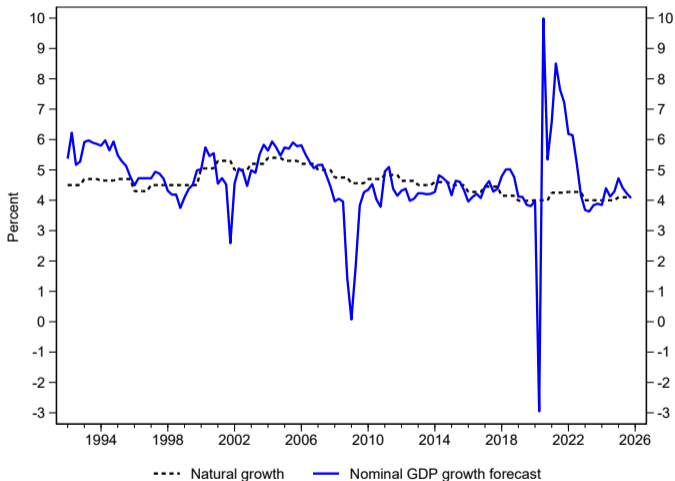
Core inflation: United States



Alternative measures of year-on-year inflation.



Natural growth targeting



$n^* = \pi^* + g^*$, natural growth with 2% inflation target.

n , nominal GDP growth forecast over 4 quarters, 3-Q ahead median SPF.



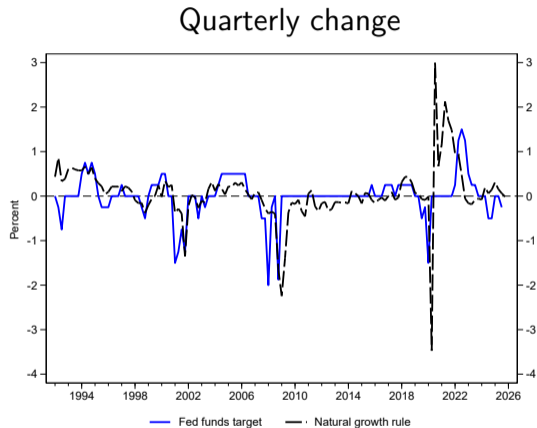
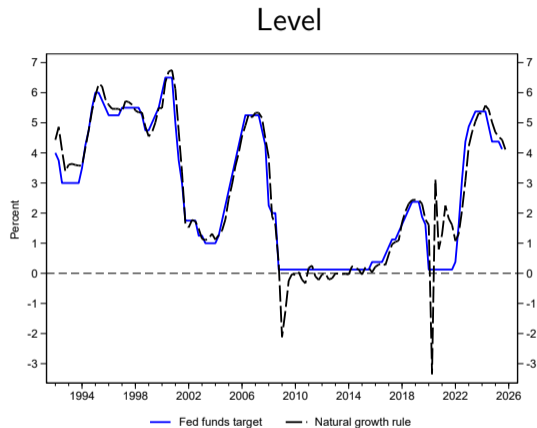
A simple and robust policy strategy

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

- ▶ To benefit from current analysis/capture incipient developments, compare growth projection, 3-Q ahead, year-over-year, n , to normal growth, n^*
- ▶ For consistency with a constant π^* , account for variation of real potential output growth, g^* . Define normal growth: $n^* = \pi^* + g^*$
- ▶ Illustration with median SPF projections with $\theta = \frac{1}{2}$ and $\pi^* = 2$.



Unconstrained Natural Growth Rule



SPF-based implementation, unconstrained rule prescriptions, quarter-end data.

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



Rule in the Fed's Bluebook/Tealbook

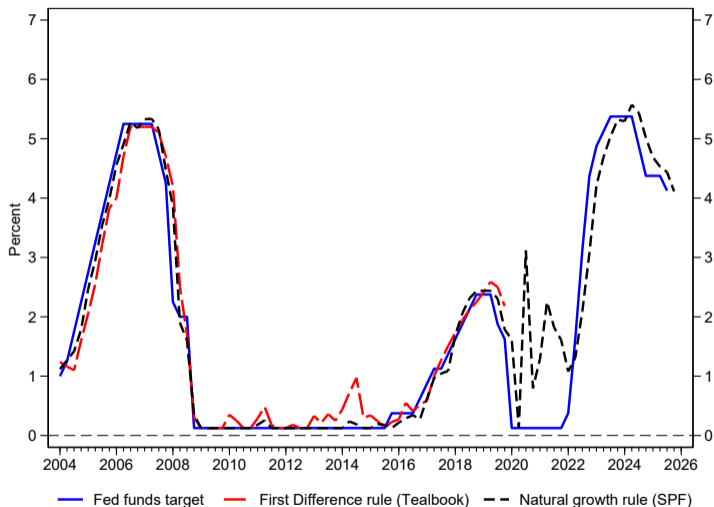
- ▶ Starting in January 2004, Fed staff has included a variant of the natural growth targeting rule in the Bluebook/Tealbook.

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

- ▶ This “first-difference” rule has been implemented using Fed staff projections of core PCE inflation, π , and the output gap, y , with $\theta = \frac{1}{2}$, $\pi^* = 2$.
- ▶ Since $n = \pi + g$ and $\Delta y \approx g - g^*$, this is similar to targeting nominal income growth by tracking core PCE inflation and real GDP growth.



SPF and Bluebook/Tealbook variants of natural growth rule

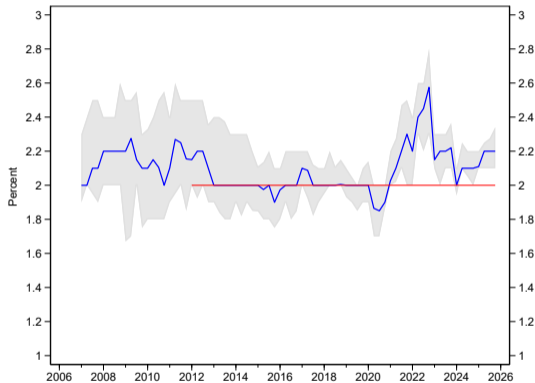


Fed funds target (or midpoint of target range). Rule prescriptions constrained by ZLB. Post-2019 Tealbooks not yet available to the public.

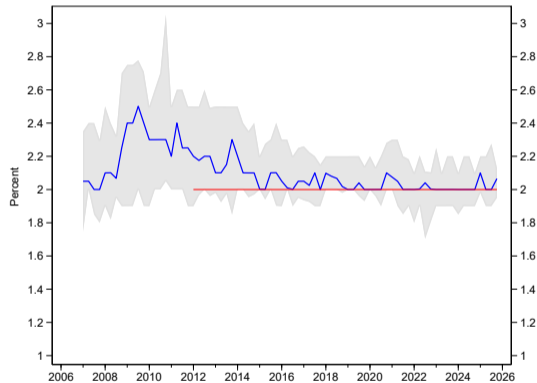


Long-term inflation expectations: United States

10-year average



5-year forward 5-year average



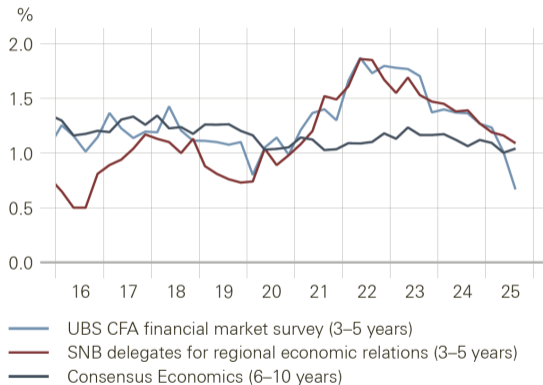
PCE inflation. Median and inter-quartile range. FRB Phil. SPF survey.



Long-term inflation expectations: Switzerland

Survey results on longer-term inflation expectations are thus still within the range consistent with price stability, which the SNB equates to a rise in the CPI of between 0% and 2% per year.

LONGER-TERM INFLATION EXPECTATIONS



SNB Quarterly Bulletin 3/2025 September, p. 21.

