

Gap Model for Closed Economy

Session 2.0

Three-Equation Structure

- Aggregate demand
- Aggregate supply (Phillips curve)
- Monetary policy reaction function

Trend and Gaps

- Exogenous long-term equilibria
- Endogenous medium-term imbalances
- To what do the equations collapse in the long run?

Aggregate Demand

$$\hat{y}_t = \alpha_1 y_{t-1} + \alpha_3 \hat{r} l_t + \epsilon_{\hat{y},t}$$

Aggregate Supply (Phillips Curve)

$$\pi_t = \beta_1 \pi_{t-1} + (1 - \beta_1) \pi_{t+1}^e + \beta_2 \hat{y}_t + \epsilon_{\pi,t}$$

Monetary Policy Reaction Function

$$i_t = \gamma_1 i_{t-1} + (1 - \gamma_1) \left[\bar{i} + \gamma_2 \left(\pi_{t+3}^e - \bar{\pi} \right) \right] + \epsilon_{1,t}$$

Real Rate

$$r i_t = i_t - \pi_{t+1}^e$$

$$\hat{r}_t = r i_t - \bar{r}_l$$

Long-Term Nominal Neutrality

