Taylor Rules

\[ i_t^{FedFunds} = \pi_t + \beta(y_t - y_t^*) + \delta (\pi_t - \pi_t^*) + r_t^* \]

\[ i_t^{FedFunds} = (1 + \delta)\pi_t + \beta(y_t - y_t^*) + r_t^* - \delta \pi_t^* \]

Federal Funds Rate and Inflation Targets


Page 10: Federal Funds Rate and Inflation Targets shows the observed federal funds rate, quarterly, and the level of the funds rate implied by applying Taylor’s (1993) equation

\[ f_t^{*} = 2.5 + \pi_{t-1} + (\pi_{t-1} - \pi^*)/2 + 100 \times (y_{t-1} - y_{t-1}^P)/2 \]

to five alternative target inflation rates, \( \pi^* = 0, 1, 2, 3, 4 \) percent, where \( f_t^{*} \) is the implied federal funds rate, \( \pi_{t-1} \) is the previous period’s inflation rate (PCE) measured on a year-over-year basis, \( y_{t-1} \) is the log of the previous period’s level of real gross domestic product (GDP), and \( y_{t-1}^P \) is the log of an estimate of the previous period’s level of potential output. Potential Real GDP is estimated by the Congressional Budget Office (CBO).
Actual and Potential Real GDP
Billions of Chain-Weighted 2009 Dollars

PCE Inflation
Percent change from year ago

Source: US. Bureau of Economic Analysis
research.stlouisfed.org

Potential Real GDP is estimated by the Congressional Budget Office (CBO).