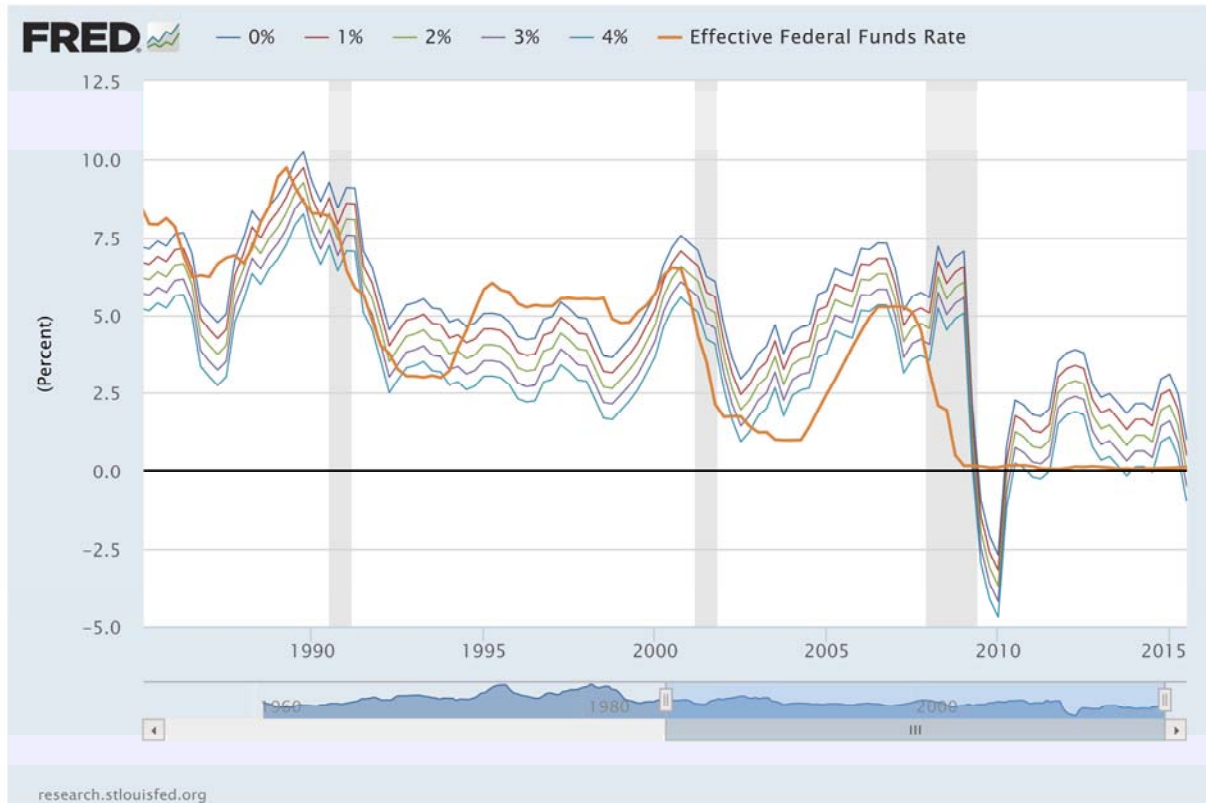**Taylor Rules**

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

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

Federal Funds Rate and Inflation Targets

Source: St. Louis Fed, https://research.stlouisfed.org/datatrends/mt/page10.php

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, π_{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

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

PCE Inflation

Percent change from year ago

Source: US. Bureau of Economic Analysis