## Fiscal Theory of the Price Level Typos

John H. Cochrane

December 28, 2022

This is a list of known typos in The Fiscal Theory of the Price Level.

p. 63. "The parameter  $\rho$  is a constant of linearization,  $\rho=e^{r-g}$  should read " $\rho=e^{-(r-g)}$ ."

p. 76. (3.41) the final dt should be  $d\tau$ . The equation should read

$$\frac{V_t}{V} = \int_{\tau=0}^{\infty} e^{-r\tau} \frac{s_{t+\tau}}{V} d\tau - \int_{\tau=0}^{\infty} e^{-r\tau} (dR_{t+\tau} - rd\tau).$$

p.77. Below (3.45), dt is missing on the right hand side. The equation should read

 $ds_t = -\eta s_t dt + \sigma d\varepsilon_t,$ 

p. 78. Two equations above (3.48) should read

$$(dR_t^n - rdt) = dq_t - (r+\omega)(q_t - 1)dt,$$

(Sign error.)

p. 122. Strike this:

"As inflation becomes infinitely sticky, as  $\kappa \to 0$ , this model approaches an inflation jump at time 1. That response is not just "Fisherian"—inflation starts at time 2, one period after the interest rate rise—but "super-Fisherian"—inflation starts immediately at time 1, and rises exactly by the amount of the nominal interest rate. With very sticky prices, a nominal interest rate permanently above inflation has a large discount rate effect.

Algebra mistake. Though first period inflation does keep rising for a while as  $\kappa$  declines, it eventually turns around and for  $\beta < 1$ , the  $\kappa = 0$  limit is  $\pi_t = 0$ .

p. 167-168. Both in the preview and (5.98)  $\beta_s d\epsilon_{s,t}$  belongs out of the parentheses. Both should read

$$dv_t^* = (rv_t^* - \tilde{s}_t) dt + \beta_s d\varepsilon_{s,t}.$$

p. 168. Equation (5.99) needs a - sign in front of  $\eta$ , and should read

$$du_{s,t} = -\eta u_{s,t} dt + d\varepsilon_{s,t}.$$

p. 169. All instances of  $u_t$  on this page should be  $u_{s,t}$ . (5.102)-(5.103) should read

$$\tilde{s}_t = \alpha v_t^* + u_{s,t}$$
$$u_{s,t} = \frac{1}{\eta + D} D\varepsilon_{s,t}$$

The expressions below "First eliminate" should read

$$Dv_t^* = -(\alpha - r)v_t^* + \beta_s D\varepsilon_{s,t} - u_{s,t}$$
$$v_t^* = -\frac{1}{D + (\alpha - r)} \left(-\beta_s D\varepsilon_{s,t} + u_{s,t}\right).$$

after "substituting back" should read

$$\tilde{s}_t = \left[1 - \frac{\alpha}{D + (\alpha - r)}\right] u_{s,t} + \frac{\alpha}{D + (\alpha - r)} \beta_s D\varepsilon_{s,t}.$$

p. 170. Strike  $(r + \omega)$  in equation (5.109). The equation should read

$$dv_t^* = (rv_t^* + i_t - \pi_t^* - \tilde{s}_t) dt + d\delta_{q,t}$$

not

$$dv_t^* = (rv_t^* + i_t - \pi_t^* - \tilde{s}_t) dt + (r + \omega) d\delta_{q,t}$$

p. 170 Equations (5.112) and (5.113) should read

$$du_{i,t} = -\eta_i u_{i,t} dt + d\varepsilon_{i,t} \tag{1}$$

$$du_{s,t} = -\eta_s u_{s,t} dt + d\varepsilon_{s,t}.$$
(2)

The dt on the right hand side is missing.

p. 170. (5.114) is missing dt on the right hand side. It should read

$$d\delta_{q,t} \equiv dR_t^n - i_t dt.$$

p. 205. In the last equation,  $\delta(1-\gamma)$  should be  $\delta + (1-\gamma)$ . The equation should read

$$e^{-\delta + (1-\gamma)g + (1-\gamma)^2 \sigma^2/2} < 1 < e^{-\delta + (1-\gamma)g + \gamma^2 \sigma^2/2},$$