ERRATA

Interest and Prices, Princeton University Press, 2003

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Chapter 1:

- page 26, line 4 from bottom; page 27, line 12 from bottom; and p. 28, footnote 17: Woodford (2001c) should be (2001b).

Chapter 2:

- pages 65, 66, 70, and 72: (2.2) should be replaced by (1.2).
- page 68: $y$ should be $Y$ in equation (1.10).
- page 70: there is an extra comma after $C_t$ in equation (1.17).
- page 72: in the Definition, condition (1.22) is redundant, as it is implied by (1.24).
- page 78: last unnumbered equation: $\bar{\pi}$ should be $\bar{\Pi}$.
- page 107: in the definition of $\eta_y$, the $\partial y$ should be $\partial Y$.
- page 115: unnumbered equation below (3.14): this should be numbered (3.15).
- page 124, second line below equation (4.2): (1.7) should be replaced by (1.25).

Chapter 3:

- page 160: equation (1.33) should instead read

$$\log Y_t = \frac{1}{1+\kappa} (E_{t-1} \log Y_t^n + \kappa Y_t^n) + \frac{1}{1+\kappa} (\log \mathcal{Y}_t - E_{t-1} \mathcal{Y}_t)$$
Correspondingly, next equation should be
\[ \log P_t = E_{t-1}(\log Y_t - \log Y^n_t) + \frac{\kappa}{1 + \kappa} \left[ \log Y_t - \log Y^n_t - E_{t-1}(\log Y_t - \log Y^n_t) \right]. \]

- page 165, fourth equation on page: \( \psi(X/A) \) should instead be \( \Psi(X/A) \), and on the line below this equation, the reference should be to (1.18) rather than to (1.17).

- page 181, bottom: definition of \( \tilde{\omega} \) should be
\[ \tilde{\omega} \equiv \epsilon\mu + s_y. \]

- page 182: statement of Prop. 3.4, line between equations (2.9) and (2.10): the \( \beta^1 \) should instead be \( \beta^{-1} \).

- page 192, line 1: \( P(\lambda) \) should be \( \mathcal{P}(\lambda) \), and this polynomial should be defined as the left-hand side of (2.19). On the line below the equation at top of p. 193, the explanation should read “where \( \mathcal{P}(\lambda) \) is again the characteristic polynomial defined by the left-hand side of (2.19),” rather than referring to equation (B.20) in the appendix.

- page 201, second equation on page: the \( p_{1t} \) and \( p_{2t} \) in the expression on the right-hand side should instead be \( P_{1t} \) and \( P_{2t} \). On p. 203, line 10, the same correction is needed.

- page 204, third equation on page: reference is made here to coefficients \( \xi_1, \xi_2 \) that are only defined in Appendix B. Instead, the passage should read, “in the case that prices are equally sticky in both sectors (\( \alpha_1 = \alpha_2 \), \( \kappa_1 = \kappa_2 \), and hence
\[ n_1\gamma_1 + n_2\gamma_2 = 0. \]
[The statements in the text as written are also correct, but can only be understood after reading the appendix.]

- page 214, equation at bottom: the correct first-order condition is
\[ E_t \left\{ \sum_{T=t}^{\infty} (\alpha\beta)^{T-t} u_c(Y_T; \xi_T) Y_T P_T^{\theta-1} \left( \frac{P_{T-1}}{P_{t-1}} \right)^{\gamma(1-\theta)} \right. \]
\[ \left. \left[ P_t^* - \mu \left( \frac{P_{T-1}}{P_{t-1}} \right)^{-\gamma} P_T S(Y_T(p_T^*/P_T)^{-\theta}(P_{T-1}/P_{t-1})^{-\gamma\theta}, Y_T; \tilde{\xi}_T) \right] \right\} = 0 \]

- page 223, second equation from bottom: definition of \( \nu \) should be
\[ \nu \equiv \frac{v_{hh}(\bar{h}; 0)\bar{h}}{v_h(h; 0)} > 0. \]
\[ \hat{s}_t = \log W_t - \log P_t - \log \bar{w} + \hat{\psi}_t. \]

Also, in equation (4.10), \( \phi \) should be \( \phi_h \).

- page 230, three lines below (4.18); p. 231, two lines above (4.22); and p. 233, final paragraph: references to (4.19) should instead be references to (4.18)[two such references in final paragraph of p. 233].

- page 277, passage just below (2.33): this makes reference to the notation \( A, a, \) and \( z_t \) defined in the proof of Prop. 4.3, in Appendix C.2. The reference to equation (C.19) is also a reference to that section of the Appendix. [In fact, the entire passage between (2.33) and the end of the paragraph should be added to the proof of Prop. 4.3, and the text on p. 277 should simply refer to that section of the Appendix.] In addition, the right-hand side of equation (2.34) should be preceded by a minus sign.

- page 281, equation (2.35): first pair of parentheses should be deleted, so that the equation reads

\[ \tilde{i}_t = \rho \tilde{i}_{t-1} + \phi_\pi (\tilde{\pi}_t - \ldots) + \ldots \]

Chapter 5:

- page 324: line below (1.5): “optional” should be “optimal”

- page 356: expression given for \( q_t \) at middle of page should instead be replaced by the expression given at middle of p. 358. Footnote 29 on p. 358 is also appropriate at this point in the text.

- page 356, line below the equation for \( q_t \): the reference to (3.4) should instead be to (3.6).

- page 358: in equation (3.11), the final term in square brackets should be replaced by \( \omega q_t \). [The expression given here is also correct, but makes the reference to \( q_t \) three lines below mysterious. And it is the form with \( q_t \) in the equation that is used on p. 360 to derive (3.18).]

- page 358: definition of \( q_t \) again on this page is redundant [but formula here is correct].

- page 359: formulas in Proposition 5.1 are incorrect, as is the inflation equation
(3.17) obtained on the next page. See Woodford, “Inflation and Output Dynamics with Firm-Specific Investment,” May 2004, for a corrected derivation.

- page 360: equation (3.17) should instead have the form

\[ \pi_t = \xi \hat{s}_t + \beta E_t \pi_{t+1}, \]

where the coefficient \( \xi \) is (implicitly) defined, as a function of model parameters, in the note just cited.

- page 362: Figure 5.6 is incorrect, as it is based on the incorrect equation (3.17). When (3.17) is corrected as indicated above, one finds that \( \Psi_j = \xi \beta^j \), as in the model with constant capital. It follows that the coefficients cannot change sign as \( j \) increases, and that they decay exponentially to zero at the relatively gradual rate shown in the figure for the case \( \epsilon_\psi = \infty \).

- page 363: discussion from bottom of this page through middle of p. 364 must be changed, as it is based on the incorrect form of equation (3.17).

- page 368: the coefficients in the calibrated monetary policy rule are \( \phi_\pi = 2, \phi_x = 1 \), which also correspond to the long-run response coefficients \( \Phi_\pi \) and \( \Phi_x \) respectively. [Footnote 35 is correct.]

- page 369: in Figure 5.8, the units on the vertical axes should be divided by 10 in order to correspond to responses in percentage points. For example, the equilibrium nominal interest rate falls by slightly more than 0.1 percentage points (per annum) when the intercept of the monetary policy reaction function is shifted up by one percentage point.

- page 373: in equation at middle of page: \( \hat{K}_{t=1}^{ncc} \) should be \( \hat{K}_{t+1}^{ncc} \). Also, in equation near bottom of the page: \( \hat{I}_t \) should instead be \( \hat{I}_t^{ncc} \).

- page 374: equation (3.28) should instead read

\[
\begin{align*}
\hat{\lambda}_t + \epsilon_\psi \hat{K}_{t+1} & = \beta(1 - \delta)E_t[\hat{\lambda}_{t+1} + \eta_\lambda \hat{K}_{t+1}] \\
& + [1 - \beta(1 - \delta)][\rho_y(E_t \hat{Y}_{t+1} + \eta_y \hat{K}_{t+1}) - \rho_k \hat{K}_{t+1}] \\
& + \beta \epsilon_\psi[\hat{K}_{t+2} + \eta_k \hat{K}_{t+1} - \hat{K}_{t+1}] 
\end{align*}
\]

Also, on the line below this equation: only \( \rho_y \) and \( \rho_k \) are defined in equation (3.7). The coefficients \( \eta_y, \eta_k, \eta_\lambda \) are defined on p. 373.

- page 376: when equation (3.17) is corrected, the vector \( \hat{z}_t \) has only three elements: \( E_t \pi_{t+1} - \bar{\pi} \) should be omitted. The third row of (3.36) is obtained by solving [the corrected] (3.17) for \( E_t \pi_{t+1} \) and then substituting for \( \hat{s}_t \) using (3.27).
Appendix A:

- page 628: equation on the last line, p should be P. Similarly, p should be P on p. 629, first line; p. 629, fourth line; p. 629, ninth line from bottom [two times]; p. 629, fifth line from bottom [two times]; p. 638, first equation; and on p. 645, in equation (A.32).
- page 640, fifth line, and again in ninth line: (2.12) should be (2.11).
- page 642: line of text below (A.23): term in parentheses in equation in text should be \((\hat{i}_t - \hat{i}_{t-1})\), not \((\hat{i}_t - \hat{i}_{t-1})\).

Appendix B:

- page 659: equation between (B.12) and (B.13): minus (-) sign before \(\tilde{\omega}\theta\) should instead be a plus (+) sign.
- page 660: third line from bottom, left-hand side should be \((1 - \lambda_1)(1 - \lambda_2^{-1})\), rather than \((1 - \lambda_1)(1 - \lambda_2)\).
- page 665: the final term in (B.23) should be \(1 - \rho^{k+1}\), rather than \(1 - \rho^k\).

Appendix D:

- Appendix D.3: statement of Proposition 5.2: equation (D.7) should be corrected as in the note for p. 374 above.

Appendix E:

- page 697: equations (E.11), (E.12), and (E.13): in each case, on the right-hand side of the equation, the term \(\beta^t\) should be inserted just before the curly braces.
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