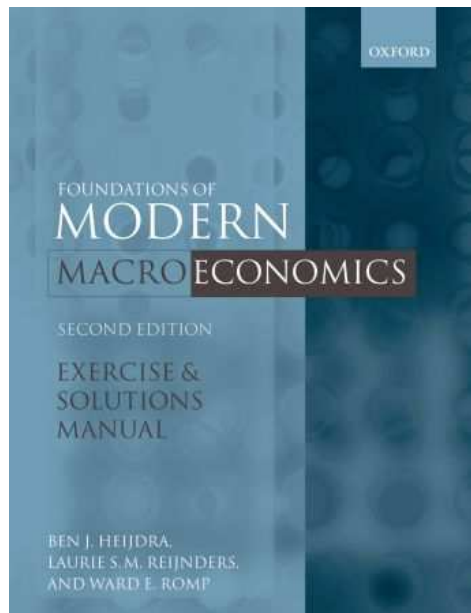


Errata, addenda, and typos

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June 7, 2016

Note: in square brackets I occasionally comment on the particular correction.



- page 3, eqn (Q1.10) should feature F_{NN} and F_{NK}
- page 11, eqn (A1.9) should feature W and Z_0/P . Three more equations are affected. Also, $\partial\hat{U}/\partial N$ should appear twice.
- page 13, unnumbered eqn should feature F_{NN}
- page 14, first eqn $(1 + t_C)PC = WN$
- page 77, first expression for $E_{t-2}p_t$ should have as the final term $-\frac{1}{2}E_{t-2}u_t$
- page 80, first line of eq. (A3.22). Delete the 2 in front of $E_t Y_{t+1}$.

*Please send any errata and typos you may find to: info@heijdra.org. My gratitude will be genuine, profound, and eternal.

- page 120, Figures A4.6 and A4.7 are wrong. They deal with an anticipated and permanent shock. See correct figures.
- page 123, Figure A4.9: delete the dotted lines and references to points C. These are for item (f)
- page 138, directly above item (c): change $\phi(\kappa)$ to $\phi(P)$ [three times]
- page 151, last sentence of item (g). “like to consume at point E_0 ... endowment point E_1 ”
- page 158. Delete Δ in eqn (Q6.7) and change $>$ to \geq
- page 160, below eqn (A6.4): delete second Δ
- page 160, eqn (A6.5) second expression $Z_S F_{SS} / \Delta$
- page 161, eqn (A6.8), numerator $Z_S [F_{SU} F_{SS} - F_{SU} F_{SS}] N_S$
- page 175, formula below item (c) and text: write $AF(L, \bar{K})$ [once] and $AF_L(L, \bar{K})$ [twice]
- page 181, eqns (Q8.2) and (Q8.3): strictly speaking we should write $K(Z_0, r + \delta)$ [twice]
- page 182, Question 2(b) is the same as 2(f).
- page 186, eq. (A8.1) and the third equation: replace a by α .
- page 189, first paragraph “a reduction in the marginal product of labour.” (not capital)
- page 217, Question 2. Set $P = P_0$ and add $k_Y > 0$ and $l_r < 0$ in (Q10.5).
- page 221, eqn (Q10.20) should feature \bar{y}_t
- page 226, just above (A10.10): “by substituting (Q10.8) into (Q10.10)...”
- page 236, first paragraph “in Chapter 10 we show that” (not 11)
- page 251, above eqn (A10.95) “the nominal exchange rate under”
- page 268, eqn (A11.48): replace $C(t)$ by $X(t)$
- page 269, eqn (A11.58): replace τ by t
- page 269, below eqn (A11.58): “Equation (A11.57) is obtained from”
- page 272, above eqn (A11.66): “a time index refer to constants”
- pages 283, 302, and 304: replace β^i by β_G^i where β_G is the policy-maker’s discount factor (such that $0 < \beta_G < 1$). [β in eqn (Q12.18) is an unrelated parameter]

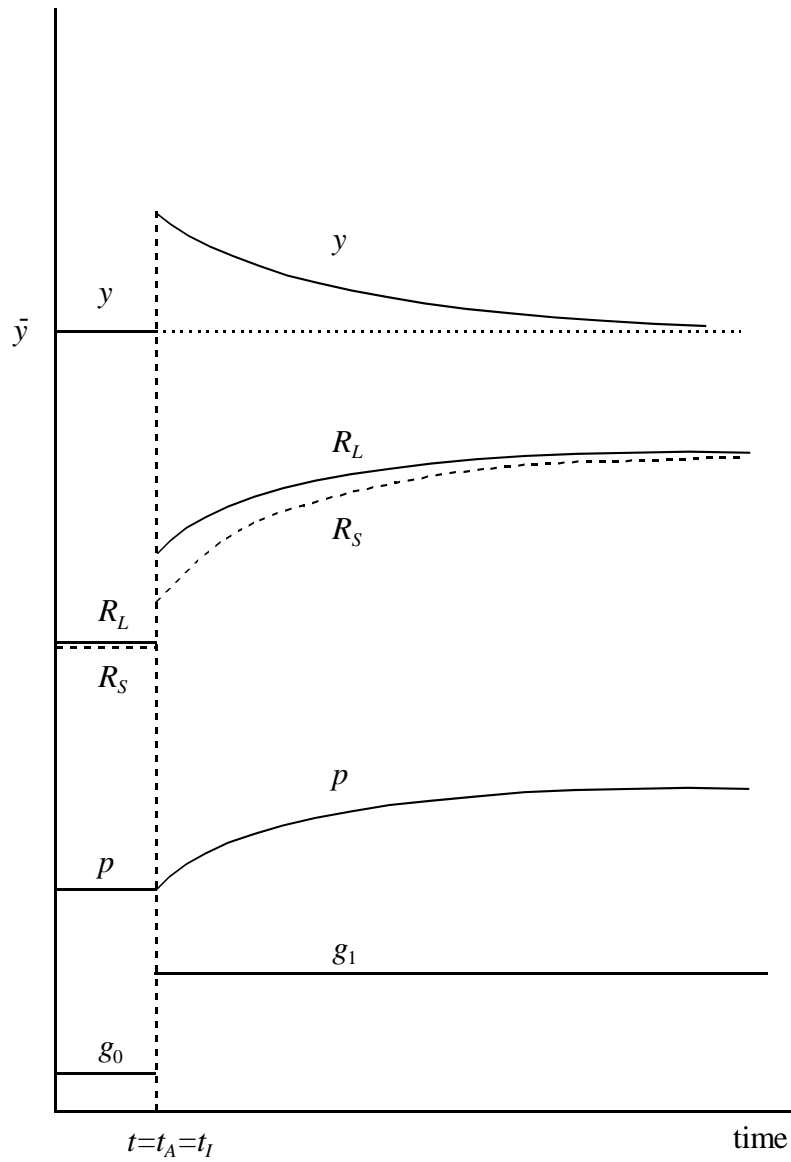


Figure 1: Correct Figure A4.6

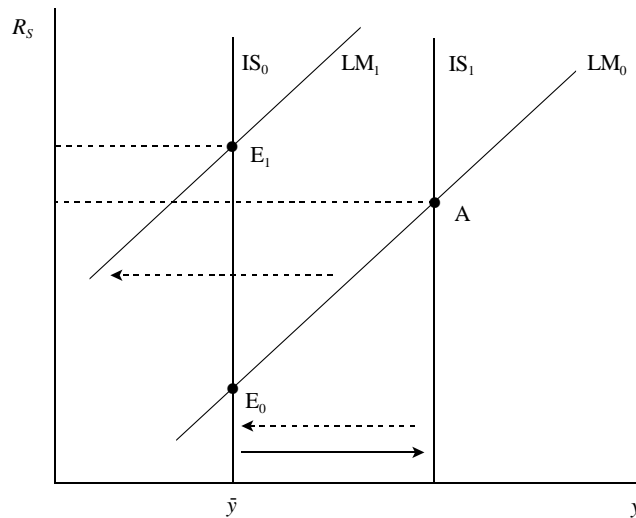


Figure 2: Correct Figure A4.7

- page 313, eqn (Q13.26) should feature $e^{-\rho\tau}$
- page 318, eqn (A13.18): add $(1 - \alpha)$ on the right-hand side
- page 333, penultimate paragraph “According to (A13.117)”
- page 335, below eqn (A13.126) “namely equations (A13.124) and”
- page 337, first line “We use (A13.135) and (A13.136)”
- page 337-8, Cases 1, 2, and 3
- page 343, below (A13.169): “combining (A13.167) and (A13.168)”
- page 352, third line: $\dot{L}(t)/L(t) = n_L > 0$
- page 361, below eqn (A14.23): “we have used (Q14.2) and (Q14.7)”
- page 362, last formula on page should be:

$$\frac{\partial \gamma_k(t)}{\partial g} = -\frac{s}{k(t)} < 0$$

- page 363. Delete $\gamma_k = \dots$ formula. Also $sg/k(t)$ missing from the downward sloping loci
- page 373, eqn (Q15.20) should feature:

$$\ln(C_\tau + \alpha G_\tau)$$

- page 378, halfway on the page: “Substituting these results into (A15.20) we find:”
- pages 379-80: ε_H should be η . η_L should be θ
- page 385, eqn (A15.54) should feature $[\cdot]^{1/(1-\sigma_{CL})}$. Same with formula at bottom of page 384
- page 386, FONC for leisure should feature $[(1 - \varepsilon_C) - \lambda_\tau w_\tau]$
- page 386, eqns (A15.58)-(A15.59): G_t (twice on the LHS) and G_{t+1} (once on the RHS)
- page 386, eqn (A15.65). Delete $= T_\tau$. The GBC is $G_\tau = T_\tau$ (separate formula)
- pages 388-9, stop reading the material on this question after eqn (A15.73). It is wrong. The model should be solved by noting that its fundamental difference equation is:

$$\begin{bmatrix} \tilde{K}_{t+1} \\ E_t \tilde{C}_{t+1} \end{bmatrix} = \Delta \begin{bmatrix} \tilde{K}_t \\ \tilde{C}_t \end{bmatrix} + \Gamma \tilde{G}_t,$$

with:

$$\Delta \equiv \begin{bmatrix} 1 - \delta + \frac{\delta}{\omega_I} & -\frac{\delta}{\omega_I} \frac{(1-\alpha)\theta_C + \alpha\omega_C}{\alpha} \\ 0 & \phi_C \end{bmatrix}, \quad \Gamma \equiv \begin{bmatrix} -\frac{\delta}{\omega_I} \frac{(1-\alpha)(1-\theta_C) + \alpha\omega_C}{\alpha} \\ \phi_C \frac{1-\theta_C}{\theta_C} \left[1 - \xi_G - \xi_G \frac{\rho + \delta}{1+\rho} \frac{1-\alpha}{\alpha} \right] \end{bmatrix}.$$

This model is saddle-point stable with characteristic roots $0 < \lambda_1 < 1$ and $\lambda_2 > 1$. It can be solved easily with the method of undetermined coefficients. Hint: try $\tilde{C}_t = \pi_0 + \pi_K \tilde{K}_t + \pi_G \tilde{G}_t$.

- page 398, item (e) “in terms of efficiency units”
- page 404, above (A16.11): “line is given by:”
- page 404, “reaches a maximum for the golden rule capital stock, k^{GR} , where the interest rate”
- page 408, text below eqn (A16.32). ...leads to a **decrease** in consumption relative to the capital stock which in turn causes an **increase** in the rate of economic growth.
- page 410, item (e): explanation is nonsense.
- page 412, above eqn (A16.61): “is obtained as follows”
- page 433, above eqn (Q17.8). The probability of death is $1 - \pi$
- page 435, eqns (Q17.17)-(Q17.18): add $(1 + t_{Ct})$ and $(1 + t_{Ct+1})$
- page 448, the Lagrangian should feature $\lambda[\Omega - C_t^Y - \frac{C_{t+1}^O}{1+r_{t+1}}]$