

Online Correction to

“A Preferred-Habitat Model of the Term Structure of Interest Rates”

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This document contains a list of one typo in the main text and six typos in the online appendix of the article. Each typo is followed by an explanation of why it is only a typo and does not affect the analysis in the article. The main text and online appendix refer to the documents in the journal’s website <https://www.econometricsociety.org/publications/econometrica/2021/01/01/preferred-habitat-model-term-structure-interest-rates>

1 Main Text

Page 83, second full paragraph, line 5 from the end: “*We assume that the eigenvalues of Γ have negative real parts.*” should be replaced by “*We assume that the eigenvalues of Γ have positive real parts.*”

This is a typo, as all the analysis in the paper assumes that the eigenvalues of Γ have positive real parts. For example, the next sentence begins with “*Hence, q_t is stationary...*”, which follows if and only if the eigenvalues of Γ have positive real parts. Likewise, in page 86 in the line just after Equation (8), where the model is specialized to the case of no demand risk and the matrix Γ becomes a scalar, it is stated “... *where $\kappa_r = \Gamma_{1,1} > 0$* ”.

2 Online Appendix

- (i) Page 1, first paragraph of the proof of Proposition 1, line 2 from the end: “... *and converges to κ_r when κ_r^* goes to zero.*” should be replaced by “... *and converges to κ_r when κ_r^* goes to infinity.*”

This is a typo. Inspection of Equation (25) in the main text shows that its right-hand side converges to κ_r when κ_r^* goes to infinity. The behavior of the right-hand side of Equation (25) when $\kappa_r^* = 0$ is mentioned earlier in the same sentence. The last sentence of the first paragraph of the proof of Proposition 1 is implied by the correct statement.

(ii) Page 6, Equation (A.14): The integral sign \int_0^∞ should be deleted.

This is a typo. There is no integration in this equation. Equation (A.14) is subsequently used in Equation (A.26), which correctly has no integral sign.

(iii) Page 8, first paragraph of the proof of Theorem 1, line 2: $\Sigma = \text{Diag}(\sigma_r^2, \sigma_\beta^2)$ should be replaced by $\Sigma = \text{Diag}(\sigma_r, \sigma_\beta)$.

This is a typo. It is through the correct definition of Σ (i.e., without the squares) that Equation (A.14) implies Equation (A.26). Also, the correct definition of Σ is consistent with Equation (7) in the main text and with the statement in page 86 in the line just after Equation (8) that “... $\sigma_r = \Sigma_{1,1}$ ”.

(iv) Pages 26-27: The wealth $\hat{W}_{n,t}$, the consumption $\hat{c}_{n,t}$, and the return $\hat{\beta}_{n,t}^{(T-t)}$ are defined with the subscript n in page 25, but the use of the subscript is not consistent in pages 26-27.

- $\hat{c}_{n,t}$ is sometimes referred without the subscript n as \hat{c}_t , e.g., in the line just after Equation (B.5). The correct notation should be $\hat{c}_{n,t}$ rather than \hat{c}_t .
- $\Delta\hat{c}_{n,0}$ is sometimes referred without the subscript n as $\Delta\hat{c}_0$, e.g., in the fourth line after Equation (B.5), or with the subscripts 0 and n inverted, e.g., in Equation (B.5). The correct notation should be $\Delta\hat{c}_{n,0}$ rather than $\Delta\hat{c}_0$ or $\Delta\hat{c}_{0,n}$.
- $\hat{W}_{n,0}$ is referred without the subscript n as \hat{W}_0 , e.g., in Equation (B.5). The correct notation should be $\hat{W}_{n,0}$ rather than \hat{W}_0 . Same for $\hat{W}_{n,T}$, e.g., in the line just after Equation (B.4).
- $\hat{\beta}_{n,0}^{(T)}$ is referred with the subscripts 0 and n inverted, e.g., in Equation (B.5). The correct notation should be $\hat{\beta}_{n,0}^{(T)}$ rather than $\hat{\beta}_{0,n}^{(T)}$.

(v) Pages 25-29: For consistency, a subscript n should be added to C_T (since such a subscript has been added to $\hat{c}_{n,t}$). That is, it should be $C_{n,T}$ rather than C_T . Same for C_{t+T} .

(vi) The phrase “an invertible function” should be replaced by “a function” in the statement of Proposition B.1 and in the third line after Equation (B.5).

This is a typo. Since $q_t = (r_t, \beta_{1,t}, \dots, \beta_{K,t})^\top$, the statement in the third line after Equation (B.5) (... sample paths of q_t and $\hat{\beta}_{n,t}^{(T-t)}$ exist such that ...) holds provided that r_t is not perfectly correlated with $(\beta_{1,t}, \dots, \beta_{K,t})$, and that $\hat{\beta}_{n,t}^{(T-t)}$ is a function of $(\beta_{1,t}, \dots, \beta_{K,t})$.