Econometric Theory

by James Davidson

Text Corrections

Page 8, line 16. For $\mathbf{M}_2 = \mathbf{I} - (\mathbf{X}_2'\mathbf{X}_2)^{-1}\mathbf{X}_2'$ read $\mathbf{M}_2 = \mathbf{I} - \mathbf{X}_2(\mathbf{X}_2'\mathbf{X}_2)^{-1}\mathbf{X}_2'$.
Page 9, second line of equation (1.3.34). For $\ldots(\mathbf{X}_2'\mathbf{y} - \mathbf{X}_1\hat{\boldsymbol{\beta}}_1)$ read $\ldots(\mathbf{X}_2'\mathbf{y} - \mathbf{X}_2'\mathbf{X}_1\hat{\boldsymbol{\beta}}_1)$.
Page 25, line –16. For "is analysed of" read "is analysed in".
Page 37 line –6. For $\sum_{t=1}^{n}\lambda^t$ read $\sum_{t=0}^{n}\lambda^t$.
Page 38, line 14. Delete words "for all $\varepsilon > 0$".
Page 50, line –6. For "must a random matrix" read "must be a random matrix".
Page 51. In equation (3.5.18), for $\chi^2(k)$ read $\chi^2(r)$. In line –4, for $F(k, n-k)$ read $F(r, n-k)$
Page 66. For $\boldsymbol{\mu}_{\mathbf{x}} = \boldsymbol{\delta} + \boldsymbol{\delta}^2 + \cdots$ read $\boldsymbol{\mu}_{\mathbf{x}} = \boldsymbol{\delta} + {}^2\boldsymbol{\delta} + \cdots$
Page 68. In equation (4.3.15) for "x_{t-l}" read "x_{t-1}".
Page 85. Equation (5.1.12) should read $\delta(z) = 1 - \alpha_1 z + \alpha_1^2 z^2 - \alpha_1^3 z^3 + \cdots$
Page 88, line 10. For $(1-\lambda L)x_t = \varepsilon_t$ read $(1-\lambda L)x_t = \mu + \varepsilon_t$.
Page 90, Th 5.2.1. For $\mathrm{Var}(\sum_{j=0}^{\infty}\alpha_j v_t)$ read $\mathrm{Var}(\sum_{j=0}^{\infty}\alpha_j v_{t-j})$.
Page 95, line –4. For $x_t = u_t$ read $x_t = \varepsilon_t$.
Page 105. In equation (5.4.15), for λ^k read λ^j.
Page 108. In equation (5.5.4.), for $x_t = \alpha + \rho x_{t-1} + \varepsilon_t + \gamma\varepsilon_{t-1}$ read $x_t = \alpha + \rho x_{t-1} + \varepsilon_t - \gamma\varepsilon_{t-1}$.
Page 115 equation (5.6.16), also equation (5.6.17) and line following: for $\boldsymbol{A} \otimes \boldsymbol{A}'$ and $\boldsymbol{B} \otimes \boldsymbol{B}'$ read $\boldsymbol{A} \otimes \boldsymbol{A}$ and $\boldsymbol{B} \otimes \boldsymbol{B}$.
Page 122, line 3. For $x_t = s_1$ read $x_1 = s_1$.
Page 125, line 5 for $\{u_t, \mathcal{X}_{t-1}\}$ read $\{u_t, \mathcal{X}_t\}$.
Page 149, line 4. For $\mathrm{Var}(\boldsymbol{\lambda}'\mathbf{x}_t u_t) = O(\boldsymbol{\lambda}'\mathbf{K}_n\boldsymbol{\lambda}/n)$ read $n^{-1}\sum_{t=1}^{n}\mathrm{Var}(\boldsymbol{\lambda}'\mathbf{x}_t u_t) = O(\boldsymbol{\lambda}'\mathbf{K}_n\boldsymbol{\lambda}/n)$
Page 154. In equation (7.4.2), for β_0 read β_k, twice.
Page 161. In equation (7.6.2), for $\hat{\rho}_1$ read $\hat{\rho}$. On lines 10 and 11, for ρ_1 read ρ. On line 11, for $\delta \approx 2$ read $d \approx 2$.
Page 165. Equation (7.6.9) should read

$$\mathrm{JB} = \frac{n}{6}\left(\frac{\hat{\mu}_3}{s^3}\right)^2 + \frac{n}{24}\left(\frac{\hat{\mu}_4 - 3s^4}{s^4}\right)^2 \text{ on } H_0$$

Page 174, equation (8.1.15), denominator should read $\sum_{t=1}^{n} z_t y_t$
Page 178, line 20. For $E(\varepsilon_{1t}|\mathcal{I}_t) = 0$ read $E(v_{1t}|\mathcal{I}_t) = 0$.
Page 192. In line 1, for "$G \times (G+N)$" read "$G \times N$ with $G \leq N$". In line 17, for "G-vector" read "N-vector".
Page 240. In equations (10.2.30) and (10.2.31), for ρ^j read ρ^{j+1}.
Page 262, equation (11.1). For "arg min" read "arg max".
Page 279. In equation (11.2.32), for $\mathrm{Cov}\,\mathbf{t}_n\frac{\partial L_n}{\partial \boldsymbol{\theta}'}$ read $\mathrm{Cov}\,\mathbf{t}_n, \frac{\partial L_n}{\partial \boldsymbol{\theta}'}$
Page 293 In equation (12.3.23), line 2, insert n to read "$= n\dot{\mathbf{q}}_n'\dot{\mathbf{Q}}_n^{-1}\dot{\mathbf{G}}_n'(\ldots$".
Page 306. In line 5, for $C^* = L$ read $C^* = -L/n$.
Page 306. In equation (12.5.29), for $\mathbf{q}_t\mathbf{q}_t' - \mathbf{Q}_t$ read $\mathbf{q}_t\mathbf{q}_t' + \mathbf{Q}_t$.
Page 338. In equation (14.2.1), for $(nr - j - 1)u_j$ read $(nr - j + 1)u_j$
Page 346. In equation (14.3.4), last member, and equation (14.3.6), second and third

members:for σ read σ^2.
Page 350. In equations (14.3.26) and (14.3.27), for $x_{t-1}\hat{u}_t$ read $x_{t-1}\Delta x_t$.
Page 352. In equation (14.4.1), for $[\alpha(1-\lambda)+\gamma]$ read $[\alpha(1-\lambda)+\lambda\gamma]$.
Page 353. In equation (14.4.7), for $\frac{1}{n^2}$ read $\frac{1}{n^3}$.
Page 357 In equation (14.5.10), for $B^*(r)$ read $B^*(r)^2$.
Page 359 In (14.6.2), read $\frac{-1}{zz}\iota\sigma^2\int_0^1 BdB+\psi$ (parentheses inserted).
Page 361. In line 12, for "*n*-vector" read "*m*-vector". In equation (15.1.2), for $C(z)$ read $C(L)$.
Page 367, In (15.2.19), for $\sqrt{n}\,\bar{\mathbf{x}}_2$ read $\frac{1}{\sqrt{n}}\bar{\mathbf{x}}_2$.
Page 373, line 7. For "regression to be considered" read "regression to be considered is".
Page 377. In line –12, for $\hat{\mu}=\hat{x}_1^+-\boldsymbol{\beta}^{+\prime}\bar{\mathbf{x}}_2$ read $\hat{\mu}=\bar{\bar{x}}_1^+-\boldsymbol{\gamma}^{+\prime}\bar{\mathbf{x}}_2$.
Page 380. In equations (15.3.11) and (15.3.17), for $\sum_{t=1}^{n}$ read $\sum_{t=2}^{n}$. In equation (15.3.12), for $\mathbf{L}_{22}^{-1}$ read $(\mathbf{L}_{22}^{-1})'$, and in equations (15.3.13) and (15.3.14), for $(\mathbf{L}_{22}^{-1})'$ read $\mathbf{L}_{22}^{-1}$.
Page 390. In equation (16.1.14), for " $\frac{\mathbf{W}_{[nr]}}{\sqrt{n}}$ " read " $\mathbf{C}\frac{\mathbf{W}_{[nr]}}{\sqrt{n}}$ ".
Page 401, In line –4, for $m(m-s)$ read $s(m-s)$.
Page 438. Lines 19 and 20 (lines 1 and 2 of A.9). For "*n*-vector" read "*p*-vector".
Page 448. last line: For "$r=2$" read "$p=2$".
Page 454. Equation (B.6.5) should read

$$\begin{aligned} E_X[E(Y|X)] &= \int\int yp(y|x)dy+\sum_j y_j p(y_j|x)p_X(x)dx \\ &\quad +\sum_i\int yp(y|x_i)dy+\sum_j y_j p(y_j|x_i)p_X(x_i) \\ &= \int\int yp(x,y)dxdy+\int\sum_j y_j p(x,y_j)dx \\ &\quad +\sum_i\int yp(x_i,y)dy+\sum_k y_k p(x_k,y_k)=E(Y) \end{aligned} \tag{B.6.5}$$