Computational Econometrics

GAUSS Programming for Econometricians and Financial Analysts
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Errata

Page	Line	Correction
1-25	Chap.2	Revise to reflect changes in GAUSS 5.0
98	17	$\frac{N}{\sqrt{2\pi\sigma^2}} exp\left[\frac{\varepsilon(X,\beta)'\varepsilon(X,\beta)}{2\sigma^2}\right]$ should read as: $\left(\frac{1}{\sqrt{2\pi\sigma^2}}\right)^N exp\left[\frac{\varepsilon(X,\beta)'\varepsilon(X,\beta)}{2\sigma^2}\right]$
101	1-	$Var(b) = S^2\left[½E\left(\frac{\partial^2 S(b)}{\partial\beta\partial\beta'}\right)\right]^{-1} = S^2\left[(\partial\varepsilon/\partial\beta)'(\partial\varepsilon/\partial\beta)\right]^{-1}$ should read as: $Var(b) = s^2\left[½E\left(\frac{\partial^2 S(b)}{\partial\beta\partial\beta'}\right)\right]^{-1} = s^2\left[(\partial\varepsilon/\partial\beta)'(\partial\varepsilon/\partial\beta)\right]^{-1}$
104	8	$Var(b) = \left[-E\left(\frac{\partial^2 ll*(b)}{\partial\beta\partial\beta'}\right)\right]^{-1} = S^2 * \left[(\partial\varepsilon*/\partial\beta)'(\partial\varepsilon*/\partial\beta)\right]^{-1}$ should read as: $Var(b) = \left[-E\left(\frac{\partial^2 ll*(b)}{\partial\beta\partial\beta'}\right)\right]^{-1} = s^2 * \left[(\partial\varepsilon*/\partial\beta)'(\partial\varepsilon*/\partial\beta)\right]^{-1}$
110	11	$= S^2\left[½E(\partial^2 S(b)/\partial\beta'\partial\beta)\right]^{-1}$ should read as: $= s^2\left[½E(\partial^2 S(b)/\partial\beta'\partial\beta)\right]^{-1}$
123	3	$f_i = \frac{\partial F(X_i\beta)}{\partial(X_i\beta)} = \frac{exp(-X_i\beta)}{1+exp(-X_i\beta)} = F_i(1-F_i),$ should read as: $f_i = \frac{\partial F(X_i\beta)}{\partial(X_i\beta)} = \frac{\exp(-X_i\beta)}{[1+\exp(-X_i\beta)]^2} = F_i(1-F_i)$
160	6-	$\varepsilon = 0.62\ \varepsilon_{-1} - 0.67\ \upsilon_{-1}$ should read as: $\varepsilon = 0.62\ \varepsilon_{-1} + 0.67\ \upsilon_{-1}$
239	12	$\Delta P_t = \beta_0 + \beta_1(\Delta M_t - \Delta Y_t) + \varepsilon_t$ should read as: $\Delta P_t = \beta_0 + \beta_1(\Delta M_{t-1} - \Delta Y_{t-1}) + \varepsilon_t$
251	3-	$Y_{it} = (X_{it}\beta_{it} + u_i) + e_{it}$ should read as: $Y_{it} = (X_{it}\beta + u_i) + e_{it}$
252	9	The paragraph: Define $D = [D_1, D_2, ..., D_{N-1}]$ with the element $D_i = [D_{i1}, D_{i2}, \ldots, D_{iT}]'$ and

D_{it} = 1 if $(i-1)\times T+1 \le i\times t \le i\times T$
0 otherwise

Should read as:

For each i, define $NT\times 1$ vector D_i with the element:

D_{it} = 1 if $(i-1)\times T+1 \le i\times t \le i\times T$
0 otherwise

Then $D = [D_1, D_2, ..., D_{N-1}]$ is $NT\times(N-1)$ matrix of N-1 dummy variables. Mathematically, D is the first N-1 columns of the matrix $\mathbf{I}\otimes\boldsymbol{\iota}$ where $\mathbf{I}$ is $N\times N$ identity matrix and $\boldsymbol{\iota}$ is $T\times 1$ column vector of ones.

253 3- The equation:

$$ln(C_{it}) = \alpha_i + \beta_1\, ln(Q_{it}) + \beta_2\, ln(PF_{it}) + \beta_3\, ln(LF_{it}) + \varepsilon_{it}$$

Should read as:

$$ln(C_{it}) = \alpha_i + \beta_1\, ln(Q_{it}) + \beta_2\, ln(PF_{it}) + \beta_3\, LF_{it} + \varepsilon_{it}$$

255 3- The paragraph:

In other words, we fail to reject the null hypothesis that there are *no* fixed effects.

Should read as:

In other words, we reject the null hypothesis that there are *no* fixed effects.

283 Appendix A GPE Global Control Variables has been expanded with the updated version of GPE2. See GPEGuide.pdf for more details.

297 Appendix B GPE Application Modules has been expanded with the updated version of GPE2. See the list of application modules in GPE subdirectory after the installation of GPE2 package.