

# “Statistical Analysis of Financial Data in R”

## Errata and Typos

- p. 7 line 14↑ no "s" at the end of the command
- p. 27 line 18↓ "quanrile" should read "quantile"
- p. 37 line 13↓ "between  $\pi_p$  and 1" should read "between  $\pi_p$  and  $\pi_1$ " or equivalently "greater than  $\pi_p$ "
- p. 54 line 2↓ and line 5↓,  $\mathbb{P}\{\psi(X) \leq \alpha\}$  should read  $\mathbb{P}\{\psi(X) \geq \alpha\}$
- p. 62 line 16↓ the formula should read  $F_{m,\lambda}(x) = \frac{1}{\pi} \tan^{-1} \frac{x-m}{\lambda} - \frac{1}{2}$ , i.e. remove the square brackets
- p. 62 line 11↑ "PI" should be lower case
- p. 66 in the 3rd line of the statement of Problem 1.8, "oft the" should read "of the"
- p. 73 line 8↑ "eocnphysics" should read "econophysics"
- p. 86 line 10↓ the outputs of the function `sample.LMOM` are now called `e11_1`, `e11_2`, `tau_3`, `tau_4` in the more recent version of the library `Rsafd`
- p. 90 formulas (2.19) and (2.20), the  $x_1$  appearing in the right hand side should be a  $x_i$
- p. 93 lines 9-10↓ the numerical output of the command `PCS.lmom` may be different with a recent version of the library
- p. 94 lines 1-2↓ the numerical output of the command `PCS.lm` may be different with a recent version of the library
- p.97 line 3↑ the formula should read

$$F_\ell(x) = \mathbb{P}\{X - \ell \leq x \mid X > \ell\} = \frac{F(x + \ell) - F(\ell)}{1 - F(\ell)}, \quad x \geq 0.$$

- p. 105 Figure 2.10, the tick labels on the top of the plot produced by `shape.plot` may b different in the more recent version of the library `Rsafd`
- p. 107-108 The numerical results for `xi` shown in Figure 2.13 and discussed in the last paragraph of p. 107 are erroneous. The new version of the library `Rsafd` will provide the exact values tailplot
- p.114 in formulas (2.36) and (2.37),  $q$  should be replaced by  $p$
- p. 128 line 9↓  $\rho\{X, Y\}$  should read  $\rho\{X, Y\}^2$
- p. 135 The command `par(mfrow=c(2,1))` in the middle of the page should read `par(mfrow=c(2,1))` in order to produce the plot in Figure 3.6 p. 136.
- p. 137 line 10↑ "`shape.plot(BLRet, tail=two)` " should read "`shape.plot(BLRet, tail="two")` "
- p. 139 The estimates of `xi` appearing in Figure 3.9 are not correct
- p. 142 line 4↑ "`method = k` " should read "`method = "k"`" or "`method = "kendall"`"
- p. 143 line 15↓ the formula in the middle of the page should read

$$\rho_S(g(X), h(Y)) = \rho_S(X, Y),$$

in other words, the subscript  $K$  in the right hand side should be a  $S$ .

- p. 144 line 2↑ "first argument" should read "second argument"

- p. 147 line 3↑ the formula giving the Gumbel copula should read

$$C_\delta(u, v) = e^{-[(-\log u)^\delta + (-\log v)^\delta]^{1/\delta}}$$

- p. 147 line 16↓ In the last occurrence of the function  $C$ ,  $C(u - 1, v_1)$  should read  $C(u_1, v_1)$
- p. 221 line 4↑ "plot(EDL2\$residuals" should read "plot(UE12\$residuals"
- p. 257 line 3↑ there is no "-" sign in formula (4.40)
- p. 259 line 12↑ formula (4.43) should read

$$Y_{NS}(x, \boldsymbol{\theta}) = \theta_1 + \theta_2 \frac{1 - e^{-x/\theta_4}}{x/\theta_4} + \theta_3 \theta_4 \left( \frac{1 - e^{-x/\theta_4}}{x/\theta_4} - e^{-x/\theta_4} \right)$$

- p. 260 line 3↓ " $Y_S(x, \boldsymbol{\theta}) = \theta_1 - \frac{\theta_2 \theta_4}{x}(\dots$ " should read " $Y_S(x, \boldsymbol{\theta}) = \theta_1 + \frac{\theta_2 \theta_4}{x}(\dots$ "
- p. 262 line 12↑ the output of the optimization should read (the plots are correct):

```
> GB.fit
$par
[1] 0.01782828 0.01941745 0.01311990 7.72833219

$value
[1] 221.3677

$counts
function gradient
      86          86

$convergence
[1] 0

$message
[1] "CONVERGENCE: REL_REDUCTION_OF_F <= FACTR*EPSMCH"
```

- p. 296 line 1↑ & p. 297 line 1↓ the name of the kernel should be in quotes `kernel="triangle"`
- p. 315 line 11↓ "`kernel=gaussian, b=0.05`" should read "`kernel="gaussian", b=0.5`"
- p. 318 line 4↑ "`kernel=7, b=.0032`" should read "`kernel="gaussian", b=0.15`"
- p. 321 line 7↑ "`kernel=gaussian, b=0.033`" should read "`kernel="gaussian", b=0.15`"
- p. 328 line 14↓ "`ppt`" should read "`ppr`"
- p. 418 line 2↓ "*...introduced in Sect. 5.4.2 of the text*" should read "*...introduced in Sect. 6.3.2 of the text*"
- p. 425 line 16↓ " $\gamma = [\gamma_{i,j}]_{i,j=1,\dots,k}$ " should read " $\gamma = [\gamma_{i,j}]_{i,j=1,\dots,d}$ "
- p. 432 line 3↑ "compute" should read "computes"
- p. 452 line 19↑ "NY" should read "N"
- p. 555 line 11↓ " $y = z + \sigma\sqrt{T - t}$ " should read " $y = z - \sigma\sqrt{T - t}$ "