Corrections and comments for *Loss Models: From Data to Decisions*, 3rd edition

Text

Page 48, Example 3.17 – The correct parameters for the Pareto model are 150 and 2.5. The Pareto numbers in Table 3.1 are 226.78, 796.44, and 2,227.34.

Page 49, Example 3.18 – Making the same adjustments as for the previous example:

$$\pi_p = VaR_p(X) = \theta\left[(1-p)^{-1/\alpha} - 1\right] = 150\left[(1-0.999)^{-1/2.5} - 1\right] = 2,227.34$$

$$E(X) = \frac{\theta}{\alpha - 1} = \frac{150}{1.5} = 100$$

$$E(X \wedge \pi_p) = \frac{\theta}{\alpha - 1}\left[1 - \left(\frac{\theta}{\pi_p + \theta}\right)^{\alpha - 1}\right] = \frac{150}{1.5}\left[1 - \left(\frac{150}{2,227.34 + 150}\right)^{1.5}\right] = 98.4151$$

$$TVaR_p(X) = \pi_p + \frac{E(X) - E(X \wedge \pi_p)}{1 - p} = 2,227.34 + \frac{100 - 98.4151}{0.001} = 3,812.24$$

Page 83, third line from bottom – The derivative should be with respect to θ, that is $\frac{\partial}{\partial \theta} S(x;\theta)$

Page 98, Balkema – de Haan – Pickands Theorem – The Theorem refers to distribution function W_{2,α,θ_d} but that function was not defined. It is

$$W_{2,\alpha,\theta_d} = 1 - \left(-\frac{x - \theta_d}{\theta_d}\right)^{-\alpha}, 0 \le x \le \theta_d, \alpha < 0, \theta_d > 0.$$

Page 301, Exercise 11.21 – The lower limit on the inner integral should be *t* and not *y*. The correct formula is

$$C(y) = \frac{\mu\kappa \int_0^\infty e^{\kappa t} \int_t^{t+y} f_e(x)\,dx\,dt}{M_X'(\kappa) - \mu(1+\theta)}$$

Pages 562 and 563 – There is an inconsistency between Example 20.5 on page 563 and Exercise 20.3 on page 562. In the former, when setting the standard for full credibility the sample mean is used to estimate the population mean. In the latter, *M* is used. Limited fluctuation credibility theory does not indicate which approach is preferred, so both are reasonable approaches.

Page 659, Exercise 21.10 – Change θ = 2 to θ = ½ for the exponential distribution.

Solutions Manual

Page 21, Exercise 3.31 – In the final paragraph the standard deviation of *X* should be $\sigma_X = \sqrt{3}$ and the risk measure should be $\rho(X) = 3 + \sqrt{3} = 4.732$.

Page 22, Exercise 3.36 – The correct formula for TVaR is $1,714.42 + \frac{500 - 432.140}{0.05} = 3,071.63$.

Page 104, Exercise 9.29 – The answer is 3,000,000.

Page 105, Exercise 9.32 – The answer is 1.22952.

Page 109, Exercise 9.41(b) – In line 4, at the end $d\theta$ should be dy. In line 5, the θ immediately after the equals sign should be removed.

Page 179, Exercise 14.35 – The *u*-values should be 0, 1, 1, 1, 0, 0, 0 making the *r*-values 6, 11, 15, 10, 2, 1, 0. Then, the estimate at 6,000 becomes (5/6)(9/11)(11/15)(3/10)(1/2) = 3/40 and the answer is (3/40)/(5/6) = 9/100 = 0.09.

Page 311, Exercise 21.10 – Change $1 - \exp(-x/2)$ to $1 - \exp(-2x)$. The subsequent formulas are correct as are the answers.