ERRATA & CORRIGENDA

Advanced Equity Derivatives: Volatility and Correlation, John Wiley & Sons, 2014

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2-3 p. 22: Replace the last equation by $\sigma^{*2}(k_F, T) \leq \frac{\beta}{T}|\ln k_F|$

3-2 p. 36: Replace "Long zero-coupon bonds in quantity $f(0)e^{-rT}$" with "Long zero-coupon bonds in quantity $f(0)$"

3-2 p.38: Replace "and zero-coupon bonds in quantity $e^{-rT}f(S_-)$" with "and zero-coupon bonds in quantity $f(S_-)$"

4-3.3 p.49: The local volatility model actually produces a *lower* delta than the Black-Scholes delta. Hedge ratios will be addressed at length in a future edition of the book.

Problem 4.3 p. 56: Replace "Assume the implied volatility function is" with: "Assume the local volatility function is". Replace question (a) with "Produce the graph of the local volatility surface for spots 0 to 200 and maturities zero to five years."

5-4 p. 67: Replace the VIX formula by:

$$\left(\frac{\text{VIX}}{100}\right)^2 = \frac{2e^{rT}}{T}\sum_i \frac{\Delta K_i}{K_i^2} Q(K_i) - \frac{1}{T}\left(\frac{F}{K_0} - 1\right)^2$$

6-2 p. 76: Replace the formula for λ_i^{adj} by $\lambda_i^{\text{adj}} = \lambda_i^+ \times \frac{n}{\sum_{j=1}^n \lambda_j^+}$

6-3 p. 77: (a) Replace the second inequality by $\max\left(-1, -\frac{x^T x}{(x^T e)^2 - x^T x}\right) \leq \rho(x) \leq 1$

(b) Add "(Here we assume $w_i > 0$ and $\sum_{i=1}^n w_i = 1$)" after "This is particularly relevant when the n stocks are the constituents of an equity index such as the S&P 500"

Problem 6.1 p. 85: (b) Replace inequality with "$\hat{\rho}_R(x) \geq [n^2 \hat{\rho}_{R^{-1}}(e)]^{-1}$". (c) Replace the definition of d with "$\hat{\rho}_R(e) - [n^2 \hat{\rho}_{R^{-1}}(e)]^{-1}$".

7-1.1 p. 88: Add "where $\bar{\sigma}^* = \sum_{i=1}^n w_i \sigma_i^*$ and $\bar{\sigma}_t^* = \sum_{i=1}^n w_i \sigma_{t,i}^*$" after the last equation.

Solution 4.3 p. 135: Replace Figure S.4 by: