Erratum to: 'Applied Quantitative Finance for Equity Derivatives'

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Abstract. This document reflects errors that were found in the second edition of the book 'Applied Quantitative Finance for Equity Derivatives'. If you found an error that is not listed here, please send me a note at jherekhealy@protonmail.com. Special thanks to the readers that reported these errors.

1. Etore and Gobet approximation - p. 31. The last two terms of second line in equation (2.66) invert d_1 and d_2. The equation (2.66) should read

Those two terms correspond to the near and far parts of the dividends in the Lehman model.

$$
\begin{aligned}
V(S,K) =& \eta B\left[\bar{f}\Phi(\eta d_1) - \bar{k}\Phi(\eta d_2)\right] \\
&- \eta B\sum_{i=1}^{n}\hat{\alpha}_i\left(\Phi(\eta d_1 - \eta\frac{v_{t_i}^2}{v_T}) - \frac{T-t_i}{T}\Phi(\eta d_1) - \frac{t_i}{T}\Phi(\eta d_2)\right) \\
&+ \frac{1}{2}B\sum_{1\le i,j\le n}\hat{\alpha}_i\hat{\alpha}_j\frac{T+t_j-t_i}{T}\frac{\phi(d_1+v_T-\frac{v_{t_i}^2+v_{t_j}^2}{v_T})}{kv_T}e^{v_T^2-v_{\max(t_i,t_j)}^2} \\
&- B\left(\sum_{j=1}^{n}\frac{T-t_j}{T}\hat{\alpha}_j\right)\sum_{i=1}^{n}\hat{\alpha}_i\frac{\phi(d_1-\frac{v_{t_i}^2}{v_T})}{fv_T} - B\left(\sum_{j=1}^{n}\frac{t_j}{T}\hat{\alpha}_j\right)\sum_{i=1}^{n}\hat{\alpha}_i\frac{\phi(d_1-\frac{v_{t_i}^2}{v_T})}{kv_T} \\
&+ \frac{1}{2}Bv_T\left[\left(\sum_{j=1}^{n}\frac{T-t_j}{T}\hat{\alpha}_j\right)^2\frac{\phi(d_1)}{fv_T} + \left(\sum_{j=1}^{n}\frac{t_j}{T}\hat{\alpha}_j\right)^2\frac{\phi(d_2)}{kv_T}\right] \\
&+ B\left(\sum_{j=1}^{n}\frac{T-t_j}{T}\hat{\alpha}_j\right)\left(\sum_{j=1}^{n}\frac{t_j}{T}\hat{\alpha}_j\right)\frac{\phi(d_1)}{kv_T}
\end{aligned}
\tag{1.1}
$$

2. Acknowledgements. The author thanks Liam Henry and Ingo Schneider for kindly reporting errors present in the first edition of the book [1].

REFERENCES

[1] J. Healy, *Applied Quantitative Finance for Equity Derivatives*, available from Amazon.com and other online stores, 2017. ISBN: 1977557872.

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