

Erratum to: 'Applied Quantitative Finance for Equity Derivatives'

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Abstract. This document reflects errors that were found in the first 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. Almost Vanilla Options - Barrier p.269. A factor L is missing from equations (6.49) and (6.50) related to C and D . The correct equations are:

$$(1.1) \quad C = \delta B(t, T_d) \left[L \left(\frac{L}{S} \right)^{2a+1} C(t, T) \Phi(\eta y_1) - K \left(\frac{L}{S} \right)^{2a} \Phi(\eta y_1 - \eta \sigma \sqrt{T}) \right],$$

$$(1.2) \quad D = \delta B(t, T_d) \left[L \left(\frac{L}{S} \right)^{2a+1} C(t, T) \Phi(\eta y_2) - K \left(\frac{L}{S} \right)^{2a} \Phi(\eta y_2 - \eta \sigma \sqrt{T}) \right].$$

The sign in equation (6.52) related to F is wrong. The correct equation is

$$(1.3) \quad F = R \left[\left(\frac{L}{S} \right)^{a+\lambda} \Phi(\eta z) + \left(\frac{L}{S} \right)^{a-\lambda} \Phi(\eta z - 2\eta \lambda \sigma \sqrt{T}) \right]$$

For a rebate paid at hit, if there is a delay τ between the rebate payment time and barrier hit time, then the discount factor in λ should be adjusted accordingly. We have then $\lambda = \sqrt{a^2 - 2 \frac{\ln B(t, T+\tau)}{\sigma^2 T}}$.

2. Acknowledgements. The author thanks Liam Henry 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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