

# ERRATA (second printing)

## Probability and Finance: It's Only a Game!

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This document lists all errors in the second printing of the book that are known to the authors as of October 16, 2016. We will be grateful to readers who bring additional errors to our attention. Please e-mail [gshafer@rutgers.edu](mailto:gshafer@rutgers.edu).

**p. 25, bottom line of the caption to Fig. 1.8:** “if the price has gone up to \$8”  $\mapsto$  “if the price has gone up to \$9” (we are grateful to Rory Kulz for spotting this).

**p. 37:** The caption to the photograph should read “Émile Borel (1871–1956), briefly minister of the French navy.”

**p. 50, line 14 from bottom:** Martin-Löf visited Moscow in 1964–1965.

**p. 85, line 12:** in the second unnumbered displayed equation, add “ $a < b$  &” after the colon.

**p. 87, line 5:** both  $\mathcal{S}_n$  and  $\mathcal{T}_n$  are missing the subtrahend  $-\mathcal{A}_n$ ; replace this line by

$$\mathcal{S}_n := \left( \sum_{i=1}^n \frac{x_i}{i} \right)^2 - \mathcal{A}_n, \quad \mathcal{T}_n := \left( 1 + \sum_{i=1}^n \frac{x_i}{i} \right)^2 - \mathcal{A}_n$$

(we are grateful to Wouter Koolen for spotting this error).

**p. 127, the two lines following Proposition 6.2:** the upper and lower prices coincide exactly for any value of  $N$  (since Reality’s choice in the De Moivre fair-coin protocol is binary).

**p. 196, line 3 of Proposition 8.14:** “nonnegative martingale”  $\mapsto$  “non-negative measure-theoretic martingale”

**p. 218, lines 11–12 from bottom:** “expected values”  $\mapsto$  “approximate expected values at time  $t$ ”

**p. 219, lines 12–13 from bottom:** “slowly varying”  $\mapsto$  “bounded”

**p. 236, the last displayed formula:** the formula is missing two entries of  $\alpha$ ; it should have been

$$\begin{aligned} \sum_k \tilde{p}_k dS_k &\approx \alpha \sum_k p_k \left( 1 - \beta dW_k + \frac{\beta^2 (dW_k)^2}{2} \right) (\mu dt + \sigma dW_k) \\ &\approx \alpha (\mu dt - \beta \sigma dt) \end{aligned}$$

**p. 259, line 4 from bottom:** the reference to p. 249 should have said that  $C$  becomes irrelevant and can be removed

**p. 288, line 12 from bottom:** replace “ $\text{vex } S \in \{1, 2\}$ ” by “ $\text{vex } S \in \{0, 1, 2\}$ ” ( $S$  can be a constant)

**p. 290, line 18:** in the second unnumbered displayed equation, replace “1” by “ $T$ ”.

**p. 306, second full paragraph (beginning with “Proposition 12.1”):** Swap “Dambis (1965) and Dubins and Schwarz (1965)” and “Meyer (1971) and Papangelou (1972)”.

**p. 368, lines 3–4 from bottom:** The first formula is not needed, and the second one depends on the assumption  $r_n > -1$  (which is true for returns). Thanks to Akimichi Takemura for this observation.

**p. 375, the preamble, bottom line:** Khinchine  $\mapsto$  Khintchine

**p. 385, reference 170, line 1:** Khinchine  $\mapsto$  Khintchine

**p. 388, between references 205 and 206:** the references to Lindeberg’s 1920 and 1922 papers should be here (rather than the end of the list)

**p. 389, reference 232, line 1:** Norvaiša  $\mapsto$  Norvaiša

**p. 391, reference 269, line 2:** Bergründung  $\mapsto$  Begründung

**p. 397:** Lindeberg’s two papers (references [357] and [358]) are out of order.

**p. 414+4:** the entry for Jackson’s book still has “Principle” instead of “Principal”.