

Errata in Term-Structure Models. A Graduate Course*

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- page 1, line 17: replace investment strategy by investment strategy with zero initial cost
- page 5, line 3: replace basis by basic
- page 8, line -5: replace $e^{0.04} - 1.04081$ by $e^{0.04} - 1.04$
- page 17, line -1: replace $\frac{(m_2 - m_1 - 1)^+}{12}$ by $\frac{m_2 - m_1 - 1}{12}$
- page 37, line 7: replace 19×47 by 19×43
- page 38, line 4: replace linear optimization by least-squares
- page 39, line -6: replace linear optimization by least-squares
- page 47, line 8: replace α_k by a_k
- page 49, line 15: replace optimization by least-squares
- page 50, Table 3.4, third row: replace sp by wp
- page 52, line -3: replace Principle by Principal
- page 57, line 2: replace www.snb.ch/ext/stats/statmon/xls/en/statmon_E3_M1_M.xls by www.snb.ch/ext/stats/statmon/xls/en/statmon_E4_M1_M.xls
- page 61, line 8: replace $\int_0^t \rho'(s) ds$ by $\int_0^t \rho'(s) dW(s)$
- page 81, line 2: replace $(t_0, r_0) \in \mathcal{Z}$ by $(t_0, r_0) \in \mathbb{R}_+ \times \mathcal{Z}$
- page 84, Proposition 5.2: insert the initial sentence “Assume M given in Lemma 5.1 is a true martingale.”

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- page 91, line -6: replace $\sum_{i=1}^n$ by $\sum_{i=1}^d$
- page 108, line 15: replace $P(t, T)$ by $P(u, T)$
- page 102, line -7: replace $dW(t)$ by $dW^*(t)$
- page 118, line 8: replace $F(t; T, \mathcal{Y}) - F(t + \Delta t; T, \mathcal{Y})$ by $F(t + \Delta t; T, \mathcal{Y}) - F(t; T, \mathcal{Y})$
- page 121, lines 6 and 7: replace $\mathcal{E}_t(\mu \bullet W^*)$ by $\mathcal{E}_t(-\mu \bullet W^*)$
- page 126, line -7: replace “one and only” by “at most”
- page 127, line -3: replace is by in
- page 144, line -4: replace $dM(t)$ by $\frac{dM(t)}{M(t)}$
- page 145, line 23: replace $K \times K^d$ by K^d
- page 147, line -1, and page 148, line 2: replace $\alpha(x)$ by $a(x)$
- page 153, line -12: replace (10.12) by (10.14)
- page 156, line -8: replace \mathbb{E} by $\mathbb{E}_{\mathbb{Q}^T}$
- page 161, line 7: replace

$$\left(e^{-A(S-T) - B(S-t)^\top x} - K \right)^+ = \frac{1}{2\pi} \int_{\mathbb{R}} e^{-(w+i\lambda)B(S-t)^\top x} \tilde{f}(w, \lambda) d\lambda$$

by

$$\left(e^{-A(S-T) - B(S-T)^\top x} - K \right)^+ = \int_{\mathbb{R}} e^{-(w+i\lambda)B(S-T)^\top x} \tilde{f}(w, \lambda) d\lambda$$

- page 162, line -3: replace $-\frac{u}{\beta^2}(e^{2\beta t} - 2e^{\beta t} + 2\beta)$ by $-\frac{u}{\beta^2}(e^{2\beta t} - 2e^{\beta t} + 1)$
- page 165, line -11: replace $w \rightarrow +\infty$ by $w \rightarrow -\infty$
- page 167, line 13: in view of Theorem 10.3(a) and Lemma 10.12(b)
- page 167, line -10: replace S by S after discounting
- page 170, line -11: replace D by Λ
- page 180, line 14: replace “for $C(t) \equiv 0$ ” by “for $B(t) \equiv B$ and $C(t) \equiv 0$ ”
- page 181, line 18: delete below
- page 182, line 1: replace (10.50) by (10.49)
- page 189, line 7: replace $X(T)$ by $\frac{X(T)}{T-t}$

- page 190, line 10: replace $e^{-\frac{2\beta}{\sigma^2}}$ by $e^{-\frac{2\beta x}{\sigma^2}}$
- page 203, line -9: replace T_m -bond discounted T_m -contingent claim by T_m -forward
- page 211, line -8: replace $\sqrt{\frac{\sum_{j=1}^K (\Pi^{(j)} - \bar{\Pi})}{K(K-1)}}$ by $\sqrt{\frac{\sum_{j=1}^K (\Pi^{(j)} - \bar{\Pi})^2}{K(K-1)}}$
- page 218: replace Figure 11.3 by Figure 1

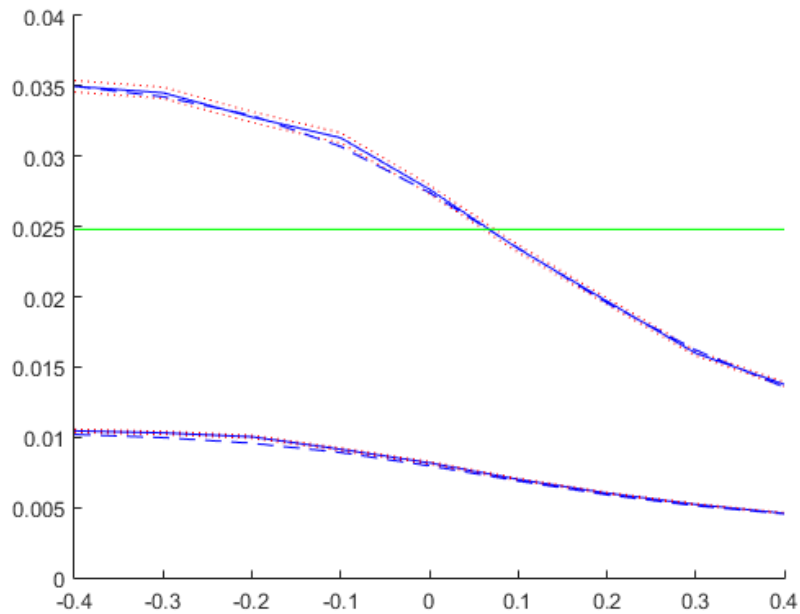


Figure 1: Revised Figure 11.3: the dashed lines are new.

- page 218, line 6 (below Figure 11.3): add to “based on the analytic approximation formula (11.14) for the implied swaption volatility” the sentences “computed as if the underlying swap had semiannual coupon payments at $T_9 = 4.5, \dots, T_{20} = 10$ and for the respective at-the-money strike rate. Alternative adjustments of the analytic approximation for swaptions with annual coupon payments are given in Brigo and Mercurio [27, Sect. 6.20].”
- page 218, line 14 (below Figure 11.3): replace “We also see that the approximation differs from the true values by [...], respectively.” by “We also see that the approximation differs from the true values by order of less than 10 bp.”

- page 222, Exercise 11.7 (d): add to “Compute this swaption price using [...] Black’s swaption pricing formula” the sentence “computed as if the underlying swap had semiannual coupon payments at $T_9 = 4.5, \dots, T_{20} = 10$ and for the respective at-the-money strike rate.”