

Finance Stoch (2010) 14: 153–155  
DOI 10.1007/s00780-009-0106-z

ERRATUM

## Valuation of default-sensitive claims under imperfect information (Publisher's Erratum)

Delia Coculescu · Hélyette Geman ·  
Monique Jeanblanc

Published online: 28 August 2009  
© Springer-Verlag 2009

**Erratum to: Finance Stoch (2008) 12: 195–218**  
**DOI 10.1007/s00780-007-0060-6**

Due to errors in the typesetting process, some parts of this article were rendered incorrectly in Finance and Stochastics 12(2): 195–218 (2008). The incorrect parts and their correct versions are given here.

(1) On page 199, the formula

$$dY_t = \mu(Y_t, t) dt + \sigma(Y_t, t) dB_t + s(Y_t, t) dB'_t \quad (2.1)$$

$$= \mu(Y_t, t) dt + \sigma_1(Y_t, t) dB_t, \quad (2.2)$$

---

The online version of the original article can be found under doi:[10.1007/s00780-007-0060-6](https://doi.org/10.1007/s00780-007-0060-6).

D. Coculescu (✉)  
Department of Mathematics, ETH, Rämistrasse 101, 8092 Zürich, Switzerland  
e-mail: [Delia.Coculescu@math.ethz.ch](mailto:Delia.Coculescu@math.ethz.ch)

H. Geman  
Birkbeck University of London, Malet Street, London WC1E 7HX, UK  
e-mail: [h.geman@bbk.ac.uk](mailto:h.geman@bbk.ac.uk)

M. Jeanblanc  
Equipe d'Analyse et Probabilités, Université d'Evry Val d'Essonne, rue du Père Jarlan,  
91025 Evry Cedex, France  
e-mail: [monique.jeanblanc@univ-evry.fr](mailto:monique.jeanblanc@univ-evry.fr)

M. Jeanblanc  
Europlace Institute of Finance, Paris, France

should read

$$dY_t = \mu(Y_t, t) dt + \sigma(Y_t, t) dB_t + s(Y_t, t) dB'_t \tag{2.1}$$

$$= \mu(Y_t, t) dt + \sigma_1(Y_t, t) d\beta_t, \tag{2.2}$$

(2) On page 200, after Proposition 3.1, the passage

*Proof* If  $M$  is an  $(\mathcal{F}_t)$ -local martingale, there exist an  $(\mathcal{F}_t)$ -predictable process and a constant  $m$  such that  $M_t = m + \int_0^t h_u dB_u$ . Since the process  $\beta$  is a  $(\mathcal{G}_t)$ -Brownian motion,  $M$  is a  $(\mathcal{G}_t)$ -local martingale.  $\square$

should read

*Proof* If  $M$  is an  $(\mathcal{F}_t)$ -local martingale, there exist an  $(\mathcal{F}_t)$ -predictable process and a constant  $m$  such that  $M_t = m + \int_0^t h_u d\beta_u$ . Since the process  $\beta$  is a  $(\mathcal{G}_t)$ -Brownian motion,  $M$  is a  $(\mathcal{G}_t)$ -local martingale.  $\square$

(3) On page 200, the formula

$$M_t = \int_0^t \frac{\sigma_1(Y_u, u)}{\sigma(Y_u, u) + \eta(Y_u, u)} dB_u, \tag{3.4}$$

$$N_t = \int_0^t \frac{\sigma_1(Y_u, u)}{\sigma(Y_u, u) + \eta(Y_u, u)} dD_u. \tag{3.5}$$

should read

$$M_t = \int_0^t \frac{\sigma_1(Y_u, u)}{\sigma(Y_u, u) + \eta(Y_u, u)} d\beta_u, \tag{3.4}$$

$$N_t = \int_0^t \frac{\sigma_1(Y_u, u)}{\sigma(Y_u, u) + \eta(Y_u, u)} dD_u. \tag{3.5}$$

(4) On page 210, the passage

We choose a constant default barrier  $b \in (0, x_0)$  and suppose for the observation process the form

$$dY_t = rY_t dt + \sigma_1 Y_t dB_t, \quad Y_0 = x_0,$$

where  $\sigma_1 = \sqrt{\sigma^2 + s^2}$  and  $\beta_t = \frac{\sigma B_t + s B'_t}{\sigma_1}$ .

should read

We choose a constant default barrier  $b \in (0, x_0)$  and suppose for the observation process the form

$$dY_t = rY_t dt + \sigma_1 Y_t d\beta_t, \quad Y_0 = x_0,$$

where  $\sigma_1 = \sqrt{\sigma^2 + s^2}$  and  $\beta_t = \frac{\sigma B_t + s B'_t}{\sigma_1}$ .

(5) On page 214, the passage

We choose to define the observation process as

$$dY_t = \lambda(\theta - Y_t)dt + \sigma_1 dB_t, \quad Y_0 = x_0,$$

with  $\sigma_1 = \sqrt{\sigma^2 + s^2}$  and  $\beta_t = (\sigma B_t + s B'_t)/\sigma_1$ . The processes defined in Remark 3.6 take here the particular forms

$$M'_t = \frac{\sigma \sigma_1}{\sigma + \eta} \int_0^t e^{\lambda u} dB_u,$$

$$N'_t = \frac{\sigma \eta}{\sigma + \eta} \int_0^t e^{\lambda u} dB_u + \frac{\sigma s}{\sigma + \eta} \int_0^t e^{\lambda u} dB'_u$$

with  $\eta = s^2/\sigma$ .

should read

We choose to define the observation process as

$$dY_t = \lambda(\theta - Y_t)dt + \sigma_1 d\beta_t, \quad Y_0 = x_0,$$

with  $\sigma_1 = \sqrt{\sigma^2 + s^2}$  and  $\beta_t = (\sigma B_t + s B'_t)/\sigma_1$ . The processes defined in Remark 3.6 take here the particular forms

$$M'_t = \frac{\sigma \sigma_1}{\sigma + \eta} \int_0^t e^{\lambda u} d\beta_u,$$

$$N'_t = \frac{\sigma \eta}{\sigma + \eta} \int_0^t e^{\lambda u} dB_u + \frac{\sigma s}{\sigma + \eta} \int_0^t e^{\lambda u} dB'_u$$

with  $\eta = s^2/\sigma$ .

(6) On page 216, the formula

$$dY_t = \mu dt + \sigma_1 dB_t,$$

should read

$$dY_t = \mu dt + \sigma_1 d\beta_t,$$