

**Corrigendum: Local stability analysis of a stochastic evolutionary financial market model with a risk-free asset**, *Mathematics and Financial Economics*, Vol. 5, p. 185-202 (2011), Igor V. Evstigneev, Thorsten Hens, Klaus Reiner Schenk-Hoppé, January 31, 2014.

Equation (12) in the paper misses a factor  $\alpha_{t,0}$  in the right-most term. Therefore all subsequent results apply to the system (12) but not the original model (11).

To correct this mistake, one has to replace  $1 + \beta_{t+1}$  by  $(1 + \beta_{t+1})\alpha_{t,0}$  throughout the paper, starting from equation (12) on page 192. Note that from page 194 onwards  $\alpha_{t,0} = \alpha$  due to assumption (C).

Proposition 2 holds for the corrected model (12). The proof on page 197/198 is corrected by observing that

$$\frac{f(s^t, z_t)}{z_t} \leq 2 \frac{M(s^t)\bar{d}_{t+1} + (1 + \beta_{t+1})\alpha}{(1 - \alpha)\alpha\lambda_{t,0}^2} + \frac{\alpha M(s^t)}{1 - \alpha}$$

and the integrability condition  $E \ln \left| \frac{f(s^t, z)}{z} \right| < \infty$  is satisfied if

$$E \ln^+ \left[ 2 \frac{M(s^t)\bar{d}_{t+1} + (1 + \beta_{t+1})\alpha}{(1 - \alpha)\alpha\lambda_{t,0}^2} + \frac{\alpha M(s^t)}{1 - \alpha} \right] < \infty$$

which holds thanks to assumptions (18) and (19).

Finally, note that equation (15) should read

$$w_{t+1}^1 = \frac{\bar{d}_{t+1} + (1 + \beta_{t+1})\alpha_{t,0}\lambda_{t,0}^1}{1 - \sum_{k=1}^K \rho_{t+1,k}\lambda_{t+1,k}^1} w_t^1$$

and the displayed equation on the middle of page 200 should read

$$\lambda_{t,k}^* - \alpha E_{s_t} \lambda_{t+1,k}^* = E_{s_t} \left( (1 - \alpha(1 - \lambda_0^*)) \frac{d_{t+1,k}}{\bar{d} + (1 + \beta)\alpha\lambda_0^*} \right).$$

The locally stable investment strategy in Section 4.4 (page 200) for the corrected model (12) is given by

$$\lambda_0^* = 1 - \frac{\bar{d}}{(1 + \beta)(1 - \alpha)\alpha}$$

$$\lambda_{t,k}^* = \frac{1}{(1 + \beta)\alpha} \sum_{m=1}^{\infty} \alpha^{m-1} E_{s_t} d_{t+m,k}$$

for  $k = 1, \dots, K$  under the assumption that  $\bar{d} < (1 + \beta)(1 - \alpha)\alpha$ .