

**Erratum: Stochastic cellular automata model for stock market dynamics  
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The definition of diffusion probability,  $p_d$ , for the cluster formation algorithm as reported in the paper was not sufficiently clear. A more exhaustive definition is the following:

$p_d$  is the probability, for *each* of its inactive neighbours, that an active trader *diffuses* and so becomes inactive,  $\sigma_i(t) = \pm 1 \rightarrow \sigma_i(t+1) = 0$ . Formally, the “switching-off” probability is  $1 - (1 - p_d)^n$  where  $n$  is the number of inactive neighbours. Since  $p_d \ll 1$ , the former expression can be approximated as  $\approx np_d$ .

Moreover, the autocorrelation function used for the plot in Fig. 5 is not the one reported in Eq. (8),  $c(\tau) = \sum_{t=1}^{T-\tau} x(t+\tau)x(t)$ , but instead  $\xi(\tau) = c(\tau)/c(0)$  where the variable  $x(t)$  is *not* normalized.

In addition, there were two misprints:

- (1) In the caption of Fig. 1,  $H$  must be substituted with  $p_h$ .
- (2) The exponent  $q$  in the left hand side of Eq. (16) is missing. Therefore, the correct expression is  $\langle \epsilon(\delta, l)^q \rangle \propto \delta^{-K_q}$ .