

## Corrigendum

Corrigendum to “Estimating stochastic  
diffusion processes using optimal  
filtering” [Journal of Econometrics 109 (2002) 119–150]

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Eq. (B.10) in Appendix B.2 on page 61 should be

$$E(p_T V_T | \mathcal{F}_t) = p_t V_t e^{-\kappa(T-t)} + \frac{\theta}{\kappa} (p_t \kappa + \rho \sigma) (1 - e^{-\kappa(T-t)}) \\ + \rho \sigma (V_t - \theta) (T - t) e^{-\kappa(T-t)}.$$

Similar changes apply to Eq. (B.11) and the interim result before that equation. Also, the second part of Eq. (B.13) in Appendix B.3 on page 62 should be

$$E(p_T^2 | \mathcal{G}_t) = p_t^2 + 2\lambda\mu_j(T-t)p_t + \lambda^2\mu_j^2(T-t)^2 \\ + \lambda(\sigma_j^2 + \mu_j^2)(T-t) + E(\mathcal{V}_{t,T} | \mathcal{G}_t).$$

These corrections result in minor changes in the numerical values reported in columns three, four, and six in Tables 4 and 5, but the qualitative implications of all the model estimates remain unaltered.

\* Full of the original article.

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Table 4  
Stochastic volatility model estimates

	1FSV	1FSVJ	1FSVL	2FSV	2FSVJ
$\kappa_1$	0.1464(0.0387)	0.1347(0.0517)	0.1465(0.0412)	0.5708(0.0031)	0.5795(0.0217)
$\theta_1$	0.5172(0.0342)	0.5113(0.0560)	0.5172(0.0355)	0.3257(0.0398)	0.3318(0.2885)
$\sigma_1$	0.5789(0.0580)	0.6161(0.1311)	0.5786(0.0580)	0.2286(0.0006)	0.5447(0.0001)
$\lambda$		0.0048(0.0048)			4.6134(1.3912)
$\mu_J$		-2.2801(0.7985)			-0.0003(0.0030)
$\sigma_J$		1.2408(1.1616)			0.0896(0.0158)
$\rho$			-0.0070(0.0348)		
$\kappa_2$				0.0757(0.8984)	0.0742(0.0329)
$\theta_2$				0.1786(0.0345)	0.1348(0.3351)
$\sigma_2$				0.1096(0.0063)	0.1733(0.0001)
GMM test of overidentifying restrictions					
$\chi^2$	12.1476	18.4342	12.1526	6.0992	6.1988
d.o.f.	(2)	(1)	(2)	(3)	(2)
<i>p</i> -value	0.0023	0.0000	0.0023	0.1069	0.0451

Table 5  
Moment condition tests

Moment condition	1FSV	1FSVJ	1FSVL	2FSV	2FSVJ
$E[\hat{\mathcal{Y}}_{t+1,t+2} \mathcal{G}_t] - \hat{\mathcal{Y}}_{t+1,t+2}$	0.0071	-0.0119	0.0071		
$E[\hat{\mathcal{Y}}_{t+1,t+2}^2 \mathcal{G}_t] - \hat{\mathcal{Y}}_{t+1,t+2}^2$	-0.0162	-0.0225	-0.0162		
$E[\hat{\mathcal{Y}}_{t+1,t+2}\hat{\mathcal{Y}}_{t-1,t} \mathcal{G}_t] - \hat{\mathcal{Y}}_{t+1,t+2}\hat{\mathcal{Y}}_{t-1,t}$	-0.2288	-0.2643	-0.2283		
$E[\hat{\mathcal{Y}}_{t+1,t+2}^2\hat{\mathcal{Y}}_{t-1,t} \mathcal{G}_t] - \hat{\mathcal{Y}}_{t+1,t+2}^2\hat{\mathcal{Y}}_{t-1,t}$	-0.0049	-0.3779	-0.0048		
$E[\hat{\mathcal{Y}}_{t+1,t+2}\hat{\mathcal{Y}}_{t-1,t}^2 \mathcal{G}_t] - \hat{\mathcal{Y}}_{t+1,t+2}\hat{\mathcal{Y}}_{t-1,t}^2$	-0.3301	-0.5140	-0.3309		
$E[\hat{\mathcal{Y}}_{t+1,t+2}^2\hat{\mathcal{Y}}_{t-1,t}^2 \mathcal{G}_t] - \hat{\mathcal{Y}}_{t+1,t+2}^2\hat{\mathcal{Y}}_{t-1,t}^2$	-4.4594	-5.7841	-4.4144		
$E[p_{t+1} \mathcal{G}_t] - p_{t+1}$		0.1071			-0.0765
$E[p_{t+1}^2 \mathcal{G}_t] - p_{t+1}^2$		-2.1796			-0.4901
$E[p_{t+1}(\hat{\mathcal{Y}}_{t+1,t+2} - b)/a \mathcal{G}_t] - p_{t+1}(\hat{\mathcal{Y}}_{t+1,t+2} - b)/a$			0.8421		
$E[\hat{\mathcal{Y}}_{t+5,t+6} \mathcal{G}_t] - \hat{\mathcal{Y}}_{t+5,t+6}$				0.0024	0.0041
$E[\hat{\mathcal{Y}}_{t+5,t+6}\hat{\mathcal{Y}}_{t-1,t} \mathcal{G}_t] - \hat{\mathcal{Y}}_{t+5,t+6}\hat{\mathcal{Y}}_{t-1,t}$				-0.0053	-0.0054
$E[\hat{\mathcal{Y}}_{t+5,t+6}\hat{\mathcal{Y}}_{t-7,t-6} \mathcal{G}_t] - \hat{\mathcal{Y}}_{t+5,t+6}\hat{\mathcal{Y}}_{t-7,t-6}$				0.0187	0.0187
$E[\hat{\mathcal{Y}}_{t+5,t+6}^2\hat{\mathcal{Y}}_{t-1,t} \mathcal{G}_t] - \hat{\mathcal{Y}}_{t+5,t+6}^2\hat{\mathcal{Y}}_{t-1,t}$				0.0362	0.0361
$E[\hat{\mathcal{Y}}_{t+5,t+6}^2\hat{\mathcal{Y}}_{t-7,t-6} \mathcal{G}_t] - \hat{\mathcal{Y}}_{t+5,t+6}^2\hat{\mathcal{Y}}_{t-7,t-6}$				0.2242	0.2115
$E[\hat{\mathcal{Y}}_{t+5,t+6}^2 \mathcal{G}_t] - \hat{\mathcal{Y}}_{t+5,t+6}^2$				0.0170	0.0198
$E[\hat{\mathcal{Y}}_{t+5,t+6}^2\hat{\mathcal{Y}}_{t-1,t} \mathcal{G}_t] - \hat{\mathcal{Y}}_{t+5,t+6}^2\hat{\mathcal{Y}}_{t-1,t}$				0.0654	0.0607
$E[\hat{\mathcal{Y}}_{t+5,t+6}^2\hat{\mathcal{Y}}_{t-7,t-6} \mathcal{G}_t] - \hat{\mathcal{Y}}_{t+5,t+6}^2\hat{\mathcal{Y}}_{t-7,t-6}$				1.0436	1.1501
$E[\hat{\mathcal{Y}}_{t+5,t+6}^2\hat{\mathcal{Y}}_{t-1,t}^2 \mathcal{G}_t] - \hat{\mathcal{Y}}_{t+5,t+6}^2\hat{\mathcal{Y}}_{t-1,t}^2$				7.6160	3.3710
$E[\hat{\mathcal{Y}}_{t+5,t+6}^2\hat{\mathcal{Y}}_{t-7,t-6}^2 \mathcal{G}_t] - \hat{\mathcal{Y}}_{t+5,t+6}^2\hat{\mathcal{Y}}_{t-7,t-6}^2$				4.5445	11.4935