

# The Volatility Smile

Errata

## Chapter 24, Page 411

In the paragraph immediately after Equation 24.34, the current text is

Note that in this section  $J$  denotes a jump in  $S$  rather than in  $\ln(S)$ , so that after a jump  $S$  becomes  $S(1 + J)$ .

This sentence should read,

Note that in this section  $J$  denotes a jump in  $S$  rather than in  $\ln(S)$ , so that after a jump  $S$  becomes  $S + J = S(1 + J/S)$ .

## Chapter 24, Page 414

In the paragraph immediately after Equation 24.47, the current text is

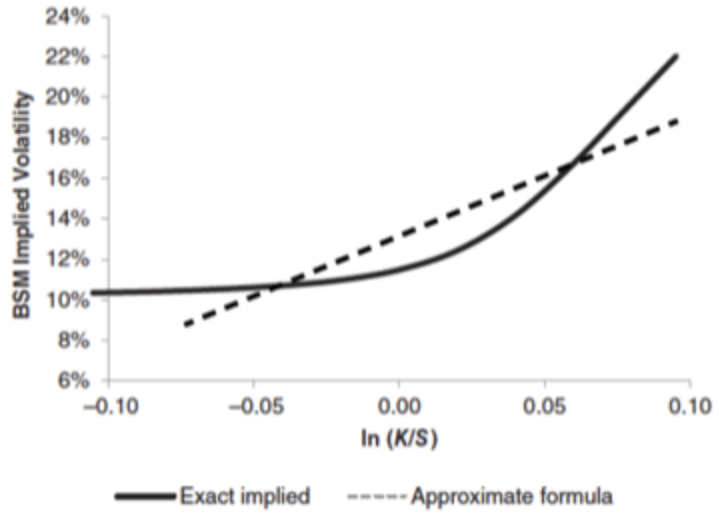
The effective probability of one jump,  $p$  in Equation 24.47, is then  $p = \bar{\lambda}\tau e^{-\bar{\lambda}\tau}$ , where  $\bar{\lambda} = \lambda e^{\ln(1+J)} = \lambda(1 + J)$  in terms of the definition of  $J$  in Equation 24.46, and  $\lambda$  is the probability of a jump per unit of time.

The sentence should be

The effective probability of one jump,  $p$  in Equation 24.47, is then  $p = \bar{\lambda}\tau e^{-\bar{\lambda}\tau}$ , where  $\bar{\lambda} = \lambda e^{\ln(1+J/S)} = \lambda(1 + J/S)$  and  $\lambda$  is the probability of a jump per unit of time (this definition of  $\bar{\lambda}$  follows from Equation 24.46, only with  $J$  defined as a jump in  $S$ , rather than  $\ln(S)$ , consistent with this section).

## Chapter 24, Page 415, Figure 24.6

In Figure 24.6 the line for the approximate formula should be shifted up slightly, it should be



**FIGURE 24.6** Jump-Diffusion Smile with a Positive Jump