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Pricing foreign currency options with stochastic volatility. (English) Zbl 1126.91374

Shephard, Neil (ed.), Stochastic volatility. Selected readings. Oxford: Oxford University Press (ISBN 0-19-925720-5/pbk; 0-19-925719-1/hbk). Advanced Texts in Econometrics, 357-381 (2005).

Summary: This paper investigates the consequences of stochastic volatility for pricing spot foreign currency options. A diffusion model for exchange rates with stochastic volatility is proposed and estimated. The parameter estimates are then used to price foreign currency options and the predictions are compared to observed market prices. We find that allowing volatility to be stochastic results in a much better fit to the empirical distribution of the Canada-U.S. exchange rate, and that this improvement in fit results in more accurate predictions of observed option prices.

For the entire collection see [\[Zbl 1076.60005\]](#).

MSC:

[91G20](#) Derivative securities (option pricing, hedging, etc.)

Cited in **73** Documents

Keywords:

[diffusion model](#); [parameter estimates](#)