

The valuation of currency options by fractional Brownian motion

ABSTRACT

This research aims to investigate a model for pricing of currency options in which value governed by the fractional Brownian motion model (FBM). The fractional partial differential equation and some Greeks are also obtained. In addition, some properties of our pricing formula and simulation studies are presented, which demonstrate that the FBM model is easy to use.

Keyword: Black–Scholes model; Fractional brownian motion; Currency option; Option pricing