

# A comparison study on hedging methods of barrier options

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## Abstract

A comparison study on hedging methods of barrier options is conducted in this article. The hedging performance of several hedging strategies are investigated under the Black-Scholes and GARCH models. An efficient scheme for generating the first hitting time of the GARCH-type dynamics is proposed. Simulation results indicate that the modified strike-spread approach has a promising performance with considering transaction costs for hedging barrier options in both Black-Scholes and GARCH models.

Keywords: barrier option, calendar-spread, first hitting time, GARCH model, static hedging, strike-spread