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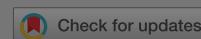
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Some contributions to sequential Monte Carlo methods for option pricing

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densities over time. In particular, we approximate the optimal importance sampling distribution in the SMC algorithm by using a sequence of weighting functions. This is demonstrated on two examples, barrier options and target accrual redemption notes (TARNs). We also provide a proof of unbiasedness of our SMC estimate.

KEYWORDS:

Diffusions sequential Monte Carlo option pricing

AMS SUBJECT CLASSIFICATION:

91G60 (primary) 65C05 (secondary)

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes

1. We have $\sigma(n, S_n) = \sigma(n, S_{n-1})$ and $\sigma(n, S_n) = \sigma(n, S_{n-1})$

2. If μ is $\frac{1}{2}$, we can propose. If it is a full volatility in the local

3. When there is a change in the variance of the error term, then the variance of the OLS estimator increases and affects the efficiency of the estimator.

4. Path of the same unreliable



Additional information

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