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# A stochastic local volatility technique for TARN options

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## ABSTRACT

Target Accumulation Redemption Notes (TARN) are financial derivatives which give their holders the right to receive periodic coupons until the accumulated sum of those ones reaches an agreed target. In this work, we solve a partial differential equations model for TARNs by a finite difference alternating directions method. We combine the numerical resolution with a stochastic local volatility technique and show the numerical results for a particular problem.

KEYWORDS:

Option pricing

TARN

stochastic local volatility

partial differential equations model

alternating directions scheme

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## Disclosure statement

No potential conflict of interest was reported by the authors.

## Additional information

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