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A New Approach to Pricing Double-Barrier Options with Arbitrary Payoffs and Exponential Boundaries

Peter Buchen & Otto Konstandatos

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Abstract

We consider in this article the arbitrage free pricing of double knock-out barrier options with payoffs that are arbitrary functions of the underlying asset, where we allow exponentially time-varying barrier levels in an otherwise standard Black–Scholes model. Our approach, reminiscent of the method of images of electromagnetics, considerably simplifie ... ducing the pricing o ... option. We illustrate ... and Ikeda (1992) f ... ive an expl ... r affine payoffs ... all and put options ...

Key Wo...
parity relations of double-barrier options

Notes

[1]Where single flat barriers were treated.

[2]Where the flat double-barrier case is treated.