

A New Option Jump-Diffusion Model: A Simple Formula *

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Abstract

In this paper, we provide an alternative to the jump-diffusion option pricing models.

In doing so, we provide a simple, explicit formula that doesn't require a computational method. Furthermore, we introduce a new, simple method for solving partial integro-differential equation equations.

JEL Classification:

Keywords: Option pricing, Merton model, jump-diffusion, closed-form solution, partial integro-differential equation, the Black-Scholes formula.