عنوان مقاله:

Option Pricing in the Presence of Operational Risk

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خلاصه مقاله:

In this paper we distinguish between operational risks depending on whether the operational risk naturally arises in the context of model risk. As the pricing model exposes itself to operational errors whenever it updates and improves its investment model and other related parameters. In this case, it is no longer optimal to implement the best model. Generally, an option is exercised in a jump-diffusion model, if the stock price either exactly hits the early exercise boundary or the price jumps into the exercise price region. However paths of the diffusion process are continuous. In this paper the impact of operational risk on the option pricing through the implementation of Mitra's model with jump diffusion model is presented. A partial integral differential equation is derived and the impact of parameters of Merton's model on operational risk and option value by operational value at risk measure is employed. The option values in the presence of operational risk on data set are computed and some of the results are presented.

کلمات کلیدی:

Option pricing, Operational Risk, Hedging

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