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次扩散BS模型下带交易费的期权定价

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Pricing option with transaction costs under the subdiffusive Black-Scholes model

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- 摘要
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摘要 研究次扩散\,BS\,模型下的离散带交易费的期权定价问题. 引入作为标的股票价格的次扩散几何布朗运动. 在存在交易费的情况下, 利用离散时间平均自融资\,delta\,对冲策略得到欧式看涨期权的定价公式.

关键词: 期权定价 交易费 次扩散动力学

Abstract: This paper dealt with the problem of discrete time option pricing by the subdiffusive Black-Scholes model with transaction costs. A subdiffusive geometric Brownian motion was introduced as the model of underlying asset prices exhibiting subdiffusive dynamics. In the presence of transaction costs, by a mean self-financing delta-hedging argument in a discrete time setting, a pricing formula for the European call option in discrete time setting was obtained.

Key words: option pricing transaction costs subdiffusive dynamics

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