TRINOMIAL SCHEME WITH "DISORDER". THE MINIMAL ENTROPY MARTINGALE MEASURE $^{\rm 1}$

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Abstract

In the paper we investigate the problem of finding the minimal relative entropy martingale measure for the financial market which is described by one class of stochastic process S in discrete time. This process has such form that, until the random moment θ , it is a process represented by certain trinomial scheme and then it is represented by another trinomial scheme, i.e. S has "disorder" and it happens at moment $\theta = \theta(\omega)$. The probability distribution of θ is known.

Key words and phrases: Trinomial scheme, martingale measure, relative entropy, stochastic process with "disorder".

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