Quantitative Finance > Computational Finance

Shortfall Risk Approximations for American Options in the multidimensional Black--Scholes Model

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We show that shortfall risks of American options in a sequence of multinomial approximations of the multidimensional Black--Scholes (BS) market converge to the corresponding quantities for similar American options in the multidimensional BS market with path dependent payoffs. In comparison to previous papers we consider the multi assets case for which we use the weak convergence approach.

Subjects: **Computational Finance (q-fin.CP)**; Probability (math.PR); Pricing of Securities (q-fin.PR)

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