RECENT ALGORITHMS FOR PRICING HIGH-DIMENSIONAL AMERICAN OPTIONS

Abstract

High-dimensional pricing problems occur frequently with financial options (examples include basket options, outperformance options, and interest-rate and foreign-currency options) and real options. American versions of these options, i.e., versions where the owner has the right to exercise early, are particularly challenging to price. We describe several new simulation-based methods for pricing high-dimensional American options when there is a finite, but possibly large, number of exercise dates. Computational results will also be presented.