

Option Pricing with Regime-switching by Trinomial Tree Method

by

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Abstract

We present a fast and simple tree model to price simple and exotic options in Markov Regime Switching Model (MRS) with multi-regime. We modify the trinomial tree model of Boyle (1986) by controlling the risk neutral probability measure in different regime states to ensure that the tree model can accommodate the data of all different regimes at the same time preserve its combining tree structure. In MRS, the market might not be complete, therefore we provide some ideas and discussions on managing the regime switching risk as a support of our results.