A duplicate method to find the optimal stop time in the Bermuda Contracts Agreement

Mohammad Rasol Mohazzabi*,Dr. Mahmoud Shafiee,

We present an Iterative procedure for computig the optimal Bermudan stoping time& hence the Bermudan Snell envelope. The method produces an increasing sequence of approximations of the Snell envelope below, which coincide with the Snell envelope after finitely many steps. Then, by duality, the method induces a convergent sequence of upper bounds as well. In a Markovian setting the presented procedure allows to calculate approximative solutions with only a few nestings of conditional expectations. The method may be considered generic. The method may be considered generic for all discrete optimal stopping problems. The power of the procedure is demonstrate for Bermudan swaptions in a full factor LIBOR market model.

Keywords : Keywords: Bermudan Option, Optimal Stopping, Monte Carlo Simulation, LIBOR Market Model.