CQF January 2009
Module 3.6
Live Class: March 25
Lecturer: Sébastien Lleo

Option Valuation Models: Connecting the Dots

In this lecture:

We conclude on the first half of the course by bringing together the three valuation models we have seen so far:

- the binomial model;
- the PDE approach;
- the martingale approach.

Summary:

In this lecture we have seen

- the binomial model and the martingale approach coincide regardless of the specific implementation we choose for the binomial model.
- when we adopt the CRR implementation, the binomial model's risk-neutral pricing formula (2) converges to the Black-Scholes formula;
- when we adopt the CRR implementation, the binomial model's no-arbitrage pricing formula (1) converges to the Black-Scholes PDE;

In complete markets, the no-arbitrage approach and the martingale measure approach are strictly equivalent.