Call Price Calculation with Simple binomial, Leisen Reimer and Black-Scholes Method

Report 3

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Function	Description
LeisenReimerTrunc	This function calculates the binomial model with a different convergence algorithm which improves the convergence to the correct price, and convergence is also smoother.
Function BSCall	This function calculates the price of options by the Black-Scholes method.
Function Bi_Call_Eur	This function calculates the binomial model by the Cox-Ross Rubinstein method.

Function Name	Parameters definition											
LeisenReimerTrunc	AmeEurFlag ("a" or "e")			CallPutFlag ("c" or "p")			S (market price)			X (target price)		T (maturity)
	r (interest rate)			b (dividend parameter)			v (volatility)			n (step)		
Function BSCall	Stock price (market price)			Exercise (target price)			Rate (interest rate)			Sigma (volatility)		Time (maturity)
Function Bi_Call_Eur	s (market price)	x (tarket price)		t (maturity)	r (interest rate)		sd (volatility)	n (step)				

Assumptions		
Market Price	s	100
Tarket Price	x	100
Maturity	t	1
Interest Rate	r	0.01
Volatility	sd	0.2
Step	n	

Method	Final value of call option
Black-Scholes Model	8.43331869
Leisian Riemer	8.433279828
Simple binomial	8.44305044