BINOMIAL METHOD FOR CALCULATING THE PRICE AMERICAN CALL OPTION WITHOUT DIVIDEND

ABSTRACT

Stock prices in the free market in reality always be changed up or down over time changes. The possibility of two-way change is used as basis of Binomial method. Option is a contract which only give rights to the contract holder (holder) to buy or sell an underlying asset to the option writer (writer) at a specified price (strike price) within a certain period (expiration date). To get an optimal price of the American call option, the American call option price will be compared to the intrinsic value. Intrinsic value is the economic value of stock options if the option is implemented. Intrinsic value is equal to the difference between the current stock price with the option stock price that have been specified. The purpose of this final project is to reconstruct the American call option pricing model using the binomial method of price calculation and simulation of the American call option with the binomial method. Simulation result shows that the holder can determine a choice, to implement or ignore the option based on the stock price (S) and the strike price (X).

Keywords: American call option, Binomial method