Financial Mathematics

MATH 5870/6870¹ Fall 2021

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¹Based on Robert L. McDonald's *Derivatives Markets*. 3rd Ed. Pearson. 2013.

- § 10.1 A one-period Binomial tree
- § 10.2 Constructing a Binomial tree
- § 10.3 Two or more binomial periods
- § 10.4 Put options
- § 10.5 American options
- \S 10.6 Options on other assets
- § 10.7 Problems

Binomial option pricing

The binomial option pricing model or Cox-Ross-Rubinstein pricing model assumes that

the price of the underlying asset follows a binomial distribution,

that is,

the asset price in each period can move only up or down by a specified amount.

The binomial option pricing model enables us to determine the price of an option,

given the characteristics of the stock or other underlying asset.

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