

American Basket Options Pricing Using By Monte Carlo Simulation

Mathematical Modeling &
Simulation (MC-409)

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Details

- Project Title: American Basket Options Pricing Using By Monte Carlo Simulation
- Subject: Mathematical Modeling & Simulation (MC-409)
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- Candidate Roll No: DTU/2K16/MC/013
- Project Link: <https://github.com/anishLearnsToCode/longstaff-schwartz-pricing-option-model>

Basket Option

A **basket option** is a [financial derivative](#), more specifically an [exotic option](#), whose [underlying](#) is a weighted sum or average of different assets that have been grouped together in a [basket](#). For example, an [index option](#), where a number of stocks have been grouped together in an index and the option is based on the price of the [index](#).

American Option vs. European Option

An **American option** is a version of an **options** contract that allows holders to exercise the **option** rights at any time before and including the day of expiration. Another version or style of **option** execution is the European **option** that allows execution only on the day of expiration.

Strike Price

A strike price is the set price at which a derivative contract can be bought or sold when it is exercised. For call options, the strike price is where the security can be bought by the option holder; for put options, the strike price is the price at which the security can be sold.

In The Money (ITM) vs. Out Of The Money (OTM) vs. At The Money (ATM)

A call option is **in the money** (ITM) if the market price is above the strike price. A put option is **in the money** if the market price is below the strike price. An option can also be out **of the money** (OTM) or **at the money** (ATM).