*Please discuss options on other assets. Define currency options, futures options, index options, and commodity options. State which variables in the securities listed above correspond with the binomial pricing inputs used for stock options.*

Index options

An index option is a financial derivative that gives the holder the right, but not the obligation, to buy or sell the value of an underlying index, such as the Standard and Poor's (S&P) 500, at the stated exercise price on or before the expiration date of the option. The profit potential for long index call options is unlimited, while the risk is limited to the premium amount paid for the option, regardless of the index level at expiration. For long index put options, the risk is also limited to the premium paid, and the potential profit is capped at the index level, less the premium paid, as the index can never go below zero.

Futures options

An option on a futures contract gives the holder the right, but not the obligation, to buy or sell a specific futures contract at a strike price on or before the option's expiration date. These work similarly to stock options but differ in that the underlying security is a futures contract.

Currency options

A currency option (also known as a forex option) is a contract that gives the buyer the right, but not the obligation, to buy or sell a certain currency at a specified exchange rate on or before a specified date. For this right, a premium is paid to the seller. Currency options are one of the most common ways for corporations, individuals, or financial institutions to hedge against adverse movements in exchange rates.

Commodity options

Commodity options are derived from the commodity futures. Much like stock options, the contract is to buy the underlying at a specified time and a specified price.

The binomial pricing model is the same as options on stocks except for the calculation of risk neutral probability.

