



UNIVERSITY OF
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School of Natural Sciences
Computing For Financial Markets

Options Tool

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General Information

- **Option** is a derivative financial instrument that specifies a contract between two parties for a future transaction on an asset at a reference price. The buyer of the option gains the right, but not the obligation, to engage in that transaction, while the seller incurs the corresponding obligation to fulfill the transaction.

Main Operations

- ✓ Option Pricing Models
- ✓ Option Strategies
- ✓ Put Call Parity Theorem

1. Pricing Models

Applet Viewer: OptionsTool.class

Applet

Pricing Models | Option Strategies | Put Call Parity

Welcome to Pricing Models Panel:
Here you can price options and calculate the greeks

Model : Binomial Model | European Options | Call | Info

Option Br Airways | Spot Price 203.600

Strike Price 200.0 | Interest Rate 0.05

Time(years) 0.25 | Steps 6

Stock Volatility 0.3 | Dividend Yield 0.0

Delta 0.7146 | Theta 0.1749

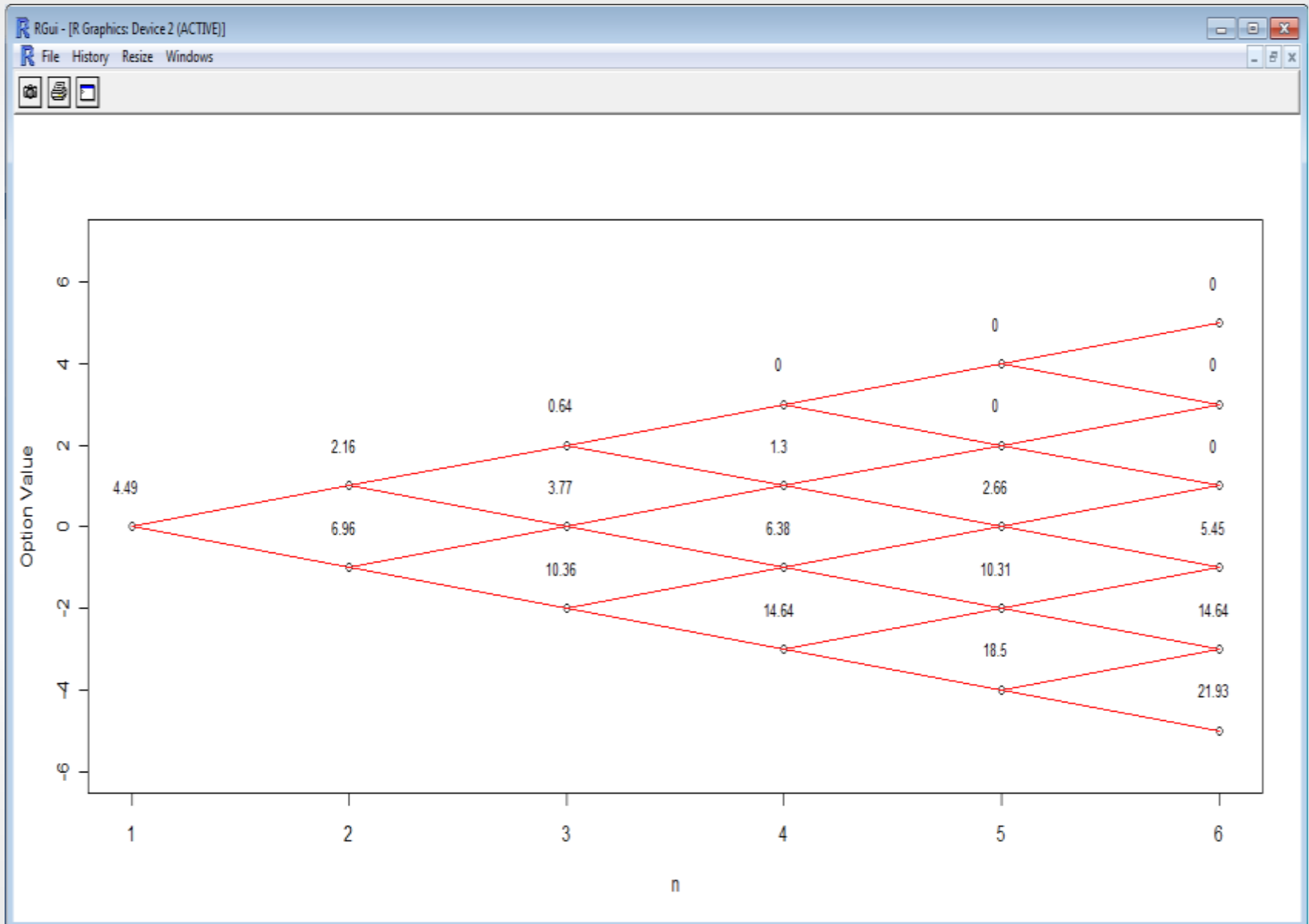
Option Price 15.254

Based on the Market Data on July 15

Option Pricing | View Binomial Tree | Exit

Applet started.

Call R Project From Java



2. Option Strategies

Applet Viewer: OptionsTool.class

Applet

Pricing Models Option Strategies Put Call Parity

Welcome to Option Strategies Panel:
Here you can get your Profit/Loss graph for different Option Strategy

Strategy : Option Spreads Bull Spreads Call **OK**

Please choose your option Br Airways Buy or Sell this option.

Br Airways Calls Puts

Option Jul Aug Sep Jul Aug Sep

Br Airways	<input checked="" type="radio"/> 200.0	4	11.25	13.5	0.25	8.75	12.25
(*203.600)	<input type="radio"/> 205.0	0.75	8.5	11	2.5	11.25	14.75

Please choose your option Br Airways Buy or Sell this option.

Br Airways Calls Puts

Option Jul Aug Sep Jul Aug Sep

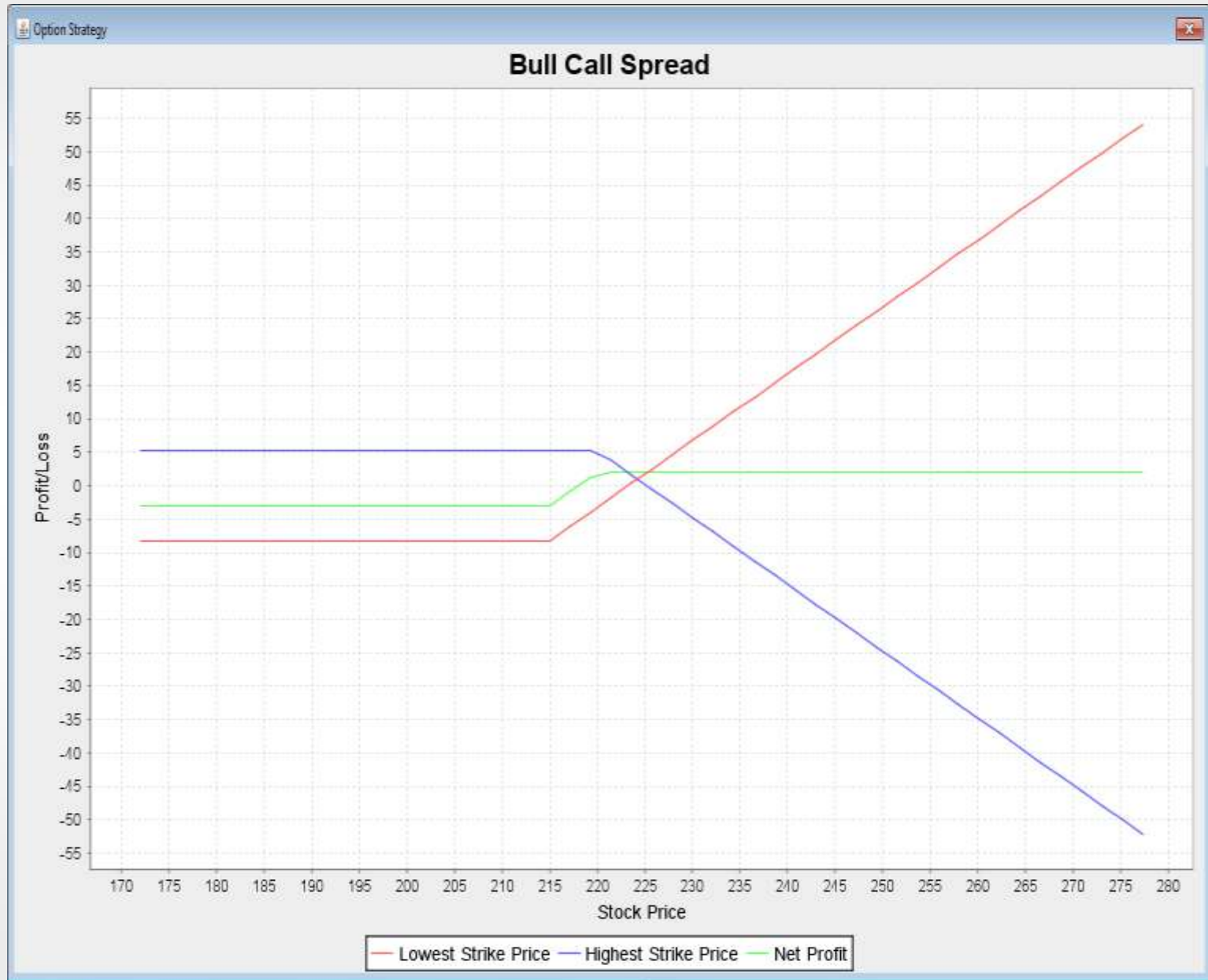
Br Airways	<input type="radio"/> 200.0	4	11.25	13.5	0.25	8.75	12.25
(*203.600)	<input checked="" type="radio"/> 205.0	0.75	8.5	11	2.5	11.25	14.75

Based on the Market Data on July 15

View Graph Details **View Table Details** **Exit**

Applet started.

Strategy Graph



3. Put Call Parity

Applet Viewer: OptionsTool.class

Applet

Pricing Models Option Strategies **Put Call Parity**

Welcome to Put Call Parity Panel:
Here you detect arbitrage opportunities

$$c - p = S - K e^{-rT}$$

Info

Option *Br Airways* Month *Jul*

Spot Price *203.600* Strike Price *200.0*

Call Price *4* Put Price *0.25*

Interest Rate *0.05* Time(years) *0.25*

There is an arbitrage opportunity. Sell stocks and buy options.

Based on the Market Data on July 15

Calculate Parity *Details* *Exit*

Applet started.

Thank you for your time and for your
attention

