

IBM initial stock price: \$264.32 Strike price (K): \$264

Put price: \$7.17 Synthetic stock (Call - Put + Bond): \$264.32

Portfolio Construction:

+1 IBM Stock

Call price: \$7.93

-1 Call Option (ATM) +1 Put Option (ATM) +1 Zero-Coupon Bond (value = K * exp(-rT))

This creates a delta-neutral portfolio that maintains a stable value

even as the stock fluctuates, visualized over the last month of real prices.