Laboratory 6: Dividends and Barriers

Needed Bloomberg Skills

- Find a list of dividend dates for a company. 
  DVD
- Interpret the dividend yield graph. 
  GP...Edit Chart...Dividend in search box
- Superimpose dividend dates on a price history chart. 
  Edit Chart...
    Dividend in search box, or 
    Browse...Events...Dividends
- Superimpose option prices on a price history chart. 
  Edit Chart... 
  In search box, company name US then month to list
- Access the pricing screen for exotic options. 
  OVME..Style dropdown field
- Change the barrier option types. 
  Barrier Direction

Assignment

All of these questions should be answered for your company.

1. Produce a graph of your company’s price history. Identify the dividend dates. For two of those dates, discuss what happens to the stock price. Is it consistent with the theory?

2. Superimpose the price history for a call on your company to the graph in #2. For the same dates as in #2, discuss what happens to the option price. Is it consistent with the theory?

3. Consider the following three European call options:
   (a) down-and-out with barrier equal to 0.1
   (b) up-and-out with barrier equal to 5K
   (c) vanilla
How do you expect the values of these options to compare? Verify your reasoning with Bloomberg. (IMPORTANT: Provide printouts to show that all the other parameters are comparable.)

4. On the option pricing screen, we wish to examine the following European call barrier options using continuous Black-Scholes:

   (a) down-and-out
   (b) up-and-in

Keeping the strike price fixed, examine how the price of each option varies as the barrier value varies. Explain your result financially.