Case Studies in Financial Engineering

CASE 7

Principal-Protected Equity-Linked Note

Darden School of Business, University of Virginia, Case No. UV7126, March 10, 2016

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1. Characterize the structured product, namely by identifying the options embedded and the upside and the risks for investors.

2. Estimate the volatility you would use for the pricing of this product, by employing at least two different methodologies.

3. Present the valuation of the product, by using:

   a) Monte Carlo simulation;
   b) Binomial tree;
   c) Closed formula.

4. What is the probability at the issuance date of an investor to:

   a) lose more than 20% of the investment?
   b) obtain a positive return?

5. What is the minimum and the maximum potential returns? Please explain your calculations.

6. Detail a risk hedging strategy from the buyer and seller perspectives.