

Homework #4 (Due before lecture 7)

1. Valuation of kth-to-Default CDS

Find the fair spread for the following first-to-default basket:

Number of Reference Names: 3

Notion: \$1

Time to Maturity: 5 years

Recovery Rate: 50% for all names

Default Intensity (yearly): 2%

The Gaussian copula between each pair of names: 0.2

Interest Rate (yearly, continuously compounded): 10%

2. Valuation of Single-name CDS

Find the fair spread for the following single-name CDS:

Notion: \$1

Time to Maturity: 2 years

Recover Rate: 50%

Default Intensity (or hazard rate): 2% for the first year, 4% for the second year

Interest Rate (yearly, continuously compounded): 10%

Note:

- Put all your output and MATLAB code in one word file and post it to Blackboard.
- See homework hints for solving the CDS and F2D problems.