Series 11

Introduction to Computational Finance

return no later than May 19th 2020 at 8:00

Bonds

Suppose we have a bond with 3 years maturity, a face value of 100$ and coupons of 10% paid semi-annually:

time [years]	coupon [CHF]
0.5	5
1	5
1.5	5
2	5
2.5	5
3	5

- What is the required yield to sell the bond at par ?

Interest curve

Considering the following bonds:

Principal	Maturity (month)	Coupon semi-annually	Price	Principal	Maturity (year)	Coupon annually	Price
100	1	0	99.80	100	2	4	103.21
100	2	0	99.60	100	3	4	104.85
100	3	0	99.40	100	4	4	106.36
100	6	3	100.27	100	5	4	107.77
100	12	4	101.57	100	7	0	84.48
				100	10	0	77.72

- Draw the graph of the corresponding interest rate.
- Comment you graph.

Report

Each student is expected to give back a personal work consisting of a report in PDF format presenting his/her results and answering the questions of the exercise, as well as the script used to generate the presented results. Both report and script have to be uploaded on Moodle (IFC/Series11).