Tutorial Assignment 9 - Due 11 October at 10:00am (Start of Week 11) - Term Structure

Started: Oct 10 at 9:49

Quiz Instructions

Please note: this is marked by a computer program. I have built in an allowance for rounding, but it is not a big allowance. It is safest to NOT round intermediate results and do all rounding at the very end.

This tutorial assignment is marked and worth 1.25 marks toward your final mark in this subject. There are 12 questions and you will be awarded $\frac{1.25}{8} = 0.15625$ marks toward your final mark for EACH question.

Please note that your tutorial assignment consists of 2 parts -

Part A is unmarked - you can download the questions as a PDF from the first question of the quiz.

Part B is marked by Canvas - it is the on-line quiz you are about to take now. Please print a pdf or take a screen shot of your answers to the computer-based quiz (Part B) at the end. This is insurance in case you write something that the program thinks is an error, but it is not really an error. **Your only time limit is the due date and time. Please note, that only your last attempt of the Quiz is saved and marked.**

Q: What if I do not have time to finish in one sitting?

A: You are permitted multiple attempts, but your **last** attempt before the due date and time is the one that is marked. Canvas, appears to save your answers after you enter them, but you might want to make note of them just in case of a computer glitch.

Please download the unmarked Part A here:

Assignment9_TermStructure_PartA.pdf

It's wise to do part A. There certainly could be final exam questions that are similar.

Where relevant, assume that you are answering questions for/about a risk-neutral investor, i.e. .

This exercise should help you to understand the formulas (and the intuition behind them) discussed in lecture. Suppose that the 1-year interest rate is 5% and that the expected future 1-year interest rates in one year and in two years are 6% and 7%

Question 1

1 pts

What should be the 2-year interest rate (r_{02}) according to the expectations theory?

Question 2

1 pts

Based on the value of r_{02} you found above, what are the 1-year holding period returns for the following strategy: Buy a 2-year bond (with $1 face value) and sell it after one year.

Question 3

1 pts

Based on the value of r_{02} you found above, what are the 1-year holding period returns for the following strategy: Buy a 1-year bond (with $1 face value) and sell it after one year.

Question 4 — 1 pts

What is the forward rate from 1 to 3, assuming the expectations hypothesis holds?

Question 5 — 1 pts

What is the 3-year interest rate assuming expectations theory holds?

Question 6 — 1 pts

So far we did not account for risk aversion, what should be the price of the 2-year bond **per $1 of face value** if investors require an addition 2% to hold the 2-year bond?

Question 7 — 1 pts

Given such value of r_{02}, what will be the 1-year holding period return of the 2-year bond?

Question 8 1 pts

What about the 1-year forward rate?

No new data to save. Last checked at 9:49 Submit Quiz