

EC303: Money and Banking

In-class exercise 7

Spring 2022

Exercise 1

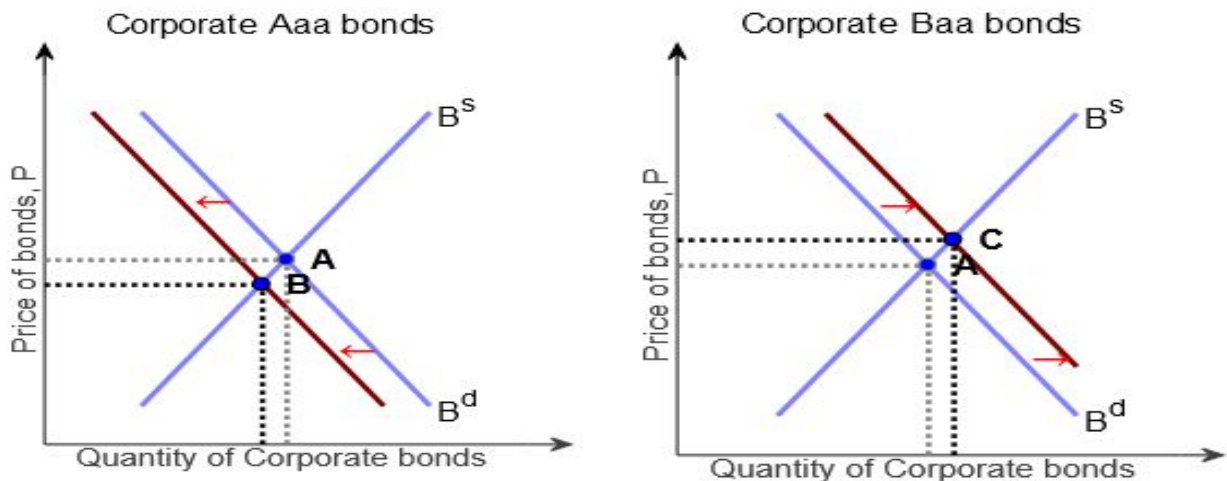
Suppose people expect the interest rate on one-year bonds for each of the next four years to be 4%, 5%, 6%, and 7%. If the expectations theory of the term structure of interest rates is correct, then how much is the implied interest rate on bonds with a maturity of two, three, and four years?

Exercise 2

Would interest rates of Treasury securities be affected by the tax rate change in municipal bonds? Why or why not?

Exercise 3

Based on the graphs below, answer the following questions.



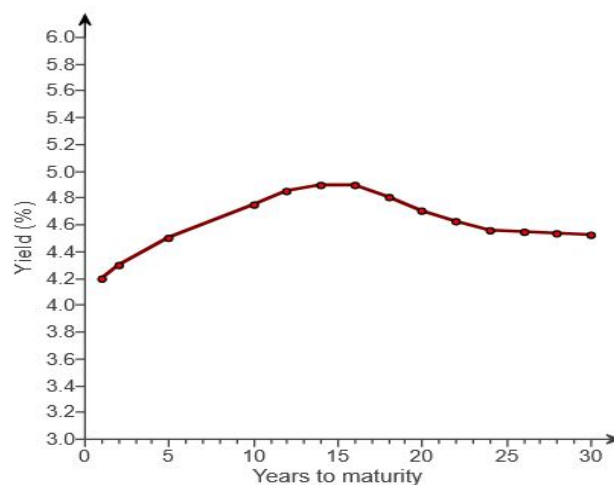
1. Is the risk premium increasing or decreasing?
2. Is the economy entering a recession or an expansion?

Exercise 4

What would happen to the risk premiums of municipal bonds if the federal government guarantees today that it will pay creditors if municipal governments default on their payments?

Exercise 5

If a yield curve looks like the one shown in the diagram below, what is the market predicting about the movement of inflation? Hint: What information does yield curve contain about future inflation?



Exercise 6

Suppose that the Federal Reserve made an announcement that it would purchase up to \$500 billion of longer-term Treasury securities over the following six months. What effect might this policy have on the yield curve?

Exercise 7

The table below shows current and expected future one-year interest rates, as well as current interest rates on multiyear bonds. Use the table to calculate the liquidity premium for the multiyear bonds in year 1 and 2 (l_{t1} and l_{t2}).

Year	One-Year Bond Rate	Multiyear Bond Rate
1	2.00%	2.00%
2	3.00%	5.00%
3	5.00%	7.00%
4	6.00%	8.00%
5	8.00%	11.00%