

Student Number .....

(to obtain your number, contact K.Patchree, BE Office)

Student ID.....

EE431/438 Economics of Financial Markets and Institutions  
Problem Set 3: Debt Market and Structure of Interest Rate (2)

Please submit at the BE office, 5th floor department of Economics building.

Deadline of submission : Friday, September 20th, 2013, before 15.00 hrs.

Late submission will not be accepted.

1. The excess return required on a risky asset over that earned on a risk-free asset is called .....
2. A Treasury bond due in one year has a yield of 6.2%; a Treasury bond due in 5 years has a yield of 6.7%. A bond issued by General Motors due in 5 years has a yield of 7.9%; a bond issued by Exxon due in one year has a yield of 7.2%. The default risk premiums on the bonds issued by Exxon and General Motors, respectively, are ..... and .....
3. When the price of a bond is above the equilibrium price, there is an excess ..... (demand for or supply of) bonds and price will ..... (increase or decrease)  
When the interest rate on a bond is above the equilibrium interest rate, in the bond market there is excess ..... (demand for or supply of ) bonds and the interest rate will .....(increase or decrease).

Graphically illustrate.

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4. When a recession occurs, normally the demand for bonds ..... (increases or decreases) and the supply of bonds ..... (increases or decreases).
5. When the federal government's budget deficit increases, the ..... (demand or supply) curve for bonds shifts to the ..... (right or left).

6. When the expected inflation rate increases, the demand for bonds ..... (increases or decreases), the supply of bonds ..... (increases or decreases), and the interest rate ..... (rises or falls).

Graphically illustrate.

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7. An economist has forecast that the term structure of interest rates will remain flat. According to the liquidity preference theory, the economist's forecast implies that future short-term interest rates will ..... (increase, decrease, remain constant at current short-term rate) over time.

8. An economist has forecast that the term structure of interest rates will remain flat. According to the pure expectations theory, the economist's forecast implies that future short-term interest rates will ..... (increase, decrease, remain constant at current short-term rate) over time.

9. Suppose the interest rate on a 1-year T-bond is 5.0% and that on a 2-year T-bill is 6.0%. Assuming the pure expectations theory is correct, what is the market's forecast for 1-year rates 1 year from now.

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10. One-year Treasury securities yield 5%, 2-year Treasury securities yield 5.5%, and 3-year Treasury securities yield 6%. Assume that the expectations theory holds. What does the market expect will be the yield on 1-year Treasury securities two years from now?

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11. Three-year Treasury securities currently yield 6%, while 4-year Treasury securities currently yield 6.5%. Assume that the expectations theory holds. What does the market believe the rate will be on 1-year Treasury securities three years from now?

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12. Consider the following information. Plot the yield curves in August 2012 and July 2012 in one graph.

TTM (Time To Maturity)	July 2012	August 2012
1	3.00%	3.01%
2	3.11%	3.12%
5	3.18%	3.23%
7	3.25%	3.36%
10	3.33%	3.45%

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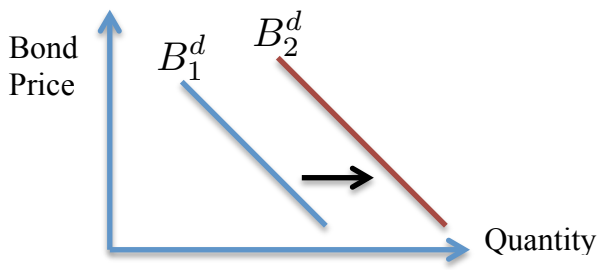
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13. Fill in the tables

Factors that shift the demand for bonds ( $B^d$ )

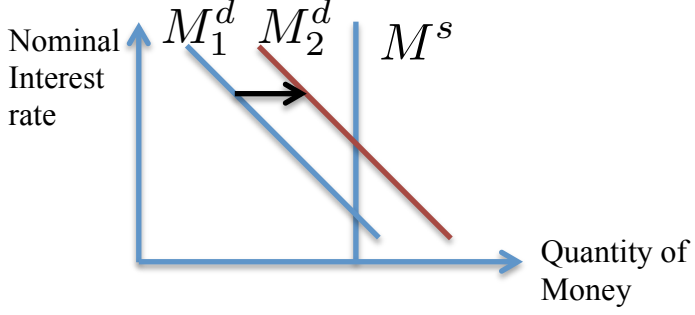
All else being equal An <u>increase</u> in	Cause	Graph the effect on the bond Market
Wealth (example)	$B^d$ 	
Expected Return on Bonds	$B^d$ .....	
Expected Inflation	$B^d$ .....	
Expected Return on other assets	$B^d$ .....	

All else being equal An <u>increase</u> in	Cause	Graph the effect on the bond Market
<b>Riskiness of Bonds</b> relative to other assets	B <sup>d</sup> .....	
<b>Liquidity of Bonds</b> relative to other assets	B <sup>d</sup> .....	

**Factors that shift the supply of bonds ( $B^S$ )**

All else being equal An <u>increase</u> in	Cause	Graph the effect on the bond Market
Expected Profitability	$B^S$ .....	
Expected Inflation	$B^S$ .....	
Government Borrowing	$B^S$ .....	

**Factors that shift the Demand and Supply of Money**

All else being equal An <u>increase</u> in	Cause/ Money Demand or Money Supply/ Increase or decrease	Graph the effect on the money market
Income (example)	Money Demand ↑	
Price Level		
Money Supply		