EE431: Economics of financial market and institutions

Semester 2/2016

Practice questions

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1. Analyze the impact of the following situations on the market interest rate of Thailand.
    a. Investors expect a persistent problem on Thai's deflation.
    b. Market expects that FED will keep raising the FED fund rate over the next two FOMC meetings to come.
    c. Several private listed companies are expected to be downgraded by a credit-rating agency.
    d. Chinese economy would continue to have a slow growth due to the problem in Chinese financial sector.
    e. Market expects that oil price is going to increase.
    f. Thai government has decided to increase the size of budget deficit from 4% to 6%
2. Why do we observe in the data that bond rates of most OECD countries are lower than that of emerging market economy? Use the framework discussed in class to explain the phenomena.
3. In his recent paper, Simon Gilchrist has found that 12-months lagged period of US credit spread, measured by the difference between BBB bond rate and 3-month US T-bills, negatively correlates with current payroll employment growth. In words, he found that an increase in credit spared is

likely to precede a decline in employment activity. Use the analytical framework discussed in class to rationalize the empirical findings.

4. Discuss the similarities and differences between Expectation hypothesis and Liquidity premium theory.

5. Under the expectations hypothesis, if the yield curve is upward-sloping, the market must expect an increase in short-term interest rates. True/false/uncertain? Why?

6. Under the liquidity preference theory, if inflation is expected to be falling over the next few years, long-term interest rates will be higher than short-term rates. True/false/uncertain? Why?

7. Assuming the pure expectations theory is correct, an upward-sloping yield curve implies:
   a. Interest rates are expected to increase in the future.
   b. Longer-term bonds are riskier than short-term bonds.
   c. Interest rates are expected to decline in the future.

8. Following the Liquidity premium theory, if yield curve has become flat, what do you think it could be inferred from the movement the yield curve?

9. Following the US subprime crisis where we've seen a sharp rise in credit spread and a negative term spread, the US Federal Reserve has then responded to the situation by adopting many unconventional monetary

policies. Under the policy, Federal Reserve expands the type of fixed instrument asset that it purchases under the open market operation program. That is, not only does the FED conventionally purchase short-term government bond, it has also purchased other forms of fixed instrument assets including long-term government bond and private credit bond during the crisis period. Use the analytical framework discussed in class to explain the plausible impact of the unconventional monetary policies on the movement of US yield curve and cred spread.

Extra practice questions:

1. (Moderate) The following is a list of prices for zero-coupon bonds of various maturities. Calculate the yields to maturity of each bond and the implied sequence of forward rates.

Maturity (Years)	Price of Bond
1	$943.40
2	898.47
3	847.62
4	792.16

2. (Moderate) Consider the following $1,000 par value zero-coupon bonds:

Bond	Years to Maturity	YTM(%)
A	1	5%
B	2	6%
C	3	6.5%
D	4	7%

According to the expectations hypothesis, what is the expected 1-year interest rate 3 years from now?

3. (Hard) The yield to maturity on 1-year zero-coupon bonds is currently 7%; the YTM on 2-year zeros is 8%. The Treasury plans to issue a 2-year maturity *coupon* bond, paying coupons once per year with a coupon rate of 9%. The face value of the bond is $100.

a. At what price will the bond sell?

b. What will the yield to maturity on the bond be?

c. If the expectations theory of the yield curve is correct, what is the market expectation of the price that the bond will sell for next year?

d. Recalculate your answer to (*c*) if you believe in the liquidity preference theory and you believe that the liquidity premium is 1%.