Macroeconomics, Part IIA,
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Supervision 3
Financial Markets

Short Questions (250 words max) 1. What does it mean when an asset market is (informationally) efficient?

2. According to the asset market approach, a credible announcement of a future increase in the nominal interest rate reduces the demand for nominal bonds and gives rise to an increase in the nominal interest rate today. True or false? Explain.

Problems 3. Using supply and demand in the bond market, show graphically and explain intuitively what the effect is on U.K. bond prices and the nominal interest rate in the following two cases:

(a) The adoption of inflation targeting by the Bank of England reduces inflation expectations.

(b) Financial contagion from defaults in emerging market economies leads to a reduction of liquidity in U.K. bond markets.

4. Suppose that the expectations theory of the term structure holds.

(a) Show that the interest rate on a 4-year discount bond approximately equals the average of the four 1-year rates, i.e.,

$$i_{4t} = \frac{1}{4}\left(i_t + i^e_{t+1} + i^e_{t+2} + i^e_{t+3}\right)$$

What determines the accuracy of the approximation?

(b) Calculate the current interest rates for maturities of 1 to 5 years (i_{1t}, i_{2t}, i_{3t}, i_{4t} and i_{5t}) when $i_t = 5\%$, $i^e_{t+1} = 4\%$, $\mathrm{i}^e_{t+2} = 3\%$, $\mathrm{i}^e t + 3 = 4\%$ and $\mathrm{i}^e_{t+4} = 5\%$. Draw the yield curve.

(c) Now suppose that actual interest rates equal $\mathrm{i}_{1t} = 5\%$, $\mathrm{i}_{2t} = 5\%$, $\mathrm{i}_{3t} = 4.7\%$, $\mathrm{i}_{4t} = 6.2\%$ and $\mathrm{i}_{5t} = 6.7\%$. Compute the liquidity premium, l_{nt}, for each maturity n. What does this suggest about investors' liquidity preferences over the 5 year horizon?

Essay (1000 words max) 5. "The short end of the yield curve is negatively correlated with the long end". Discuss.

Main Readings Frederic S. Mishkin (2006), The Economics of Money, Banking, and Financial Markets, 8th edition chapters 4-6, 27.

Bofinger (2001), Monetary Policy: Goals, Institutions, Strategies and Instruments, appendix 8.1-8.4.

Supplementary References - De Bondt and Thaler (1989), "Anomalies: A Mean-RevertingWalk Down Wall Street", Journal of Economic Perspectives 3(1), Winter, pp. 189-202.

- Estrella and Mishkin (1996), "The Yield Curve as a Predictor of U.S. Recessions", Federal Reserve Bank of New York, Current Issues in Economics and Finance 2(7), June, pp. 1-6.

- Fama (1991), "Efficient Capital Markets: II", Journal of Finance 48(5), December, pp. 1575-1617.

- Haldane and Read (1999), "Monetary Policy and the Yield Curve", Bank of England Quarterly Bulletin, May.

- Varian (1987), "The Arbitrage Principle in Financial Economics", Journal of Economic Perspectives 1(2), Fall, pp. 55-72.