

Take-Home Final Exam

This exam consists of four questions worth a total of 100 points. It is due in Mergenthaler 466 by 5:00 PM on December 16. You can use the textbook, your lecture notes, and any other information you find, and you can ask the TAs and instructor for hints. You may not discuss the exam with other Monetary Analysis students (past or present).

QUESTIONS

1. (25 points) Consider the following two statements:
 - (i) The efficient markets hypothesis may not be 100% correct, but it is a good approximation to reality in financial markets.
 - (ii) The efficient markets hypothesis is not a good approximation to reality. It is often violated to a substantial degree in financial markets.

Pick one of these statements and write a concise essay supporting the position. Discuss the evidence for your position, and also refute the main arguments made by advocates of the other position. Note: your job is to pick one of the positions and advocate it as persuasively as possible, as in a debate. Don't waffle. (Suggested length: 2-3 pages)

2. (20 points) Mini-essays (suggested length: a couple paragraphs each for Parts A and B; four concise bullet points for Part C)

A. Suppose that cash is abolished. All funds that you receive are direct deposited in your checking account, and you pay for everything with debit or credit cards. How might this change help the Federal Reserve stimulate the economy and reduce unemployment?

B. In the next decade, what factors might lead Greece to drop the euro and reestablish its own currency?

C. Suppose the Federal Reserve surprises everyone by sharply raising the federal funds rate. Explain how this action is likely to affect the nominal interest rates on (i) three month Treasury bills (ii) ten year Treasury bonds (iii) ten year AAA corporate bonds and (iv) ten year junk bonds. Compare the sizes of the different effects.

3. (25 points) This problem is a variation on the numerical example of adverse selection in chapter 7 (pp. 193-195). The difference here is that there are three firms, not two: a safe firm, a risky firm, and an in-between firm. The safe and risky firms have the same possibilities for investment returns as in chapter 7. The in-between firm earns \$150 with probability p and 0 with probability $1-p$. Like the other firms, it needs \$100 to finance its project. All other assumptions are the same as in chapter 7.

A. Suppose $p=1$. Which of the three firms will be able to issue bonds, and what payments will they promise? Answer these questions for two cases: (i) symmetric information (ii) asymmetric information.

B. Now suppose $p=5/6$. Answer the same questions as in Part A for the two cases.

C. Now suppose $p=2/3$. Answer the same questions as in Part A for the two cases.

4. (30 points) Discuss the policies of the U.S. government, the Federal Reserve, and regulators of financial institutions. (Suggested length: 1-2 pages for each part.)

A. With hindsight, could policymakers have done things before 2007 to prevent the financial crisis and recession of 2007-2009 or to make them less severe? What policies were needed? Explain.

B. Over 2007-2009, could policymakers have done more than they did to minimize the damage from the crisis? Explain.

C. Today, do policymakers have tools to reverse the increase in unemployment that occurred during the crisis? What, if anything, can they do to reduce unemployment beyond what they are already doing? Are there drawbacks to these policies? Explain.

(In all parts, discuss what economic policies are best; ignore the question of whether they are possible politically.)