

ECO 400: Monetary Theory and Policy

Instructor: Murray, James

Take Home Exam 2

Due Wednesday, November 25 at 11:00am. Late exams will earn zero credit.

Directions: Answer the following questions on separate sheets of paper. *Start each answer on its own sheet of paper.* All answers must be very neat and very clearly legible. If it is difficult to read an answer, no credit will be given.

Rules: *You must not work together on this exam with any other person.* You may however, discuss this exam with others if nobody in the conversation has any class materials in front of them, and no one is writing anything down. That is, you may discuss the exam in casual conversations, but you must still work on the exam independently. Failure to comply with this condition is considered academic dishonesty and will result in the harshest penalty that the university will allow. You are allowed to use your notes, textbook, and computer.

1. (20 points) Suggest something that can influence the elasticity of the money demand function. Explain in the context of a model. What are the implications for the monetary policy transmission of an open market purchase of bonds of a given size?
2. (20 points) Suppose producers predict the recession will worsen over the next years.
 - (a) How would that impact producers' expectations of capital capacity utilization?
 - (b) How would the resulting *shift* in investment affect short run interest rates and real GDP? Show your answer with an appropriate graph and explanation.
 - (c) What open market operation would the monetary authority conduct if it wished to maintain output stability?
 - (d) How would the resulting change in *interest elasticity* of investment affect the monetary policy transmission?
3. (20 points) Use conclusions from Cecchetti (1999) *and* Engel and Rose (2002) to suggest characteristics of a country that make it most likely to benefit from joining a currency union. What are the implications for the effects of monetary policy?

4. Discuss how the Federal Reserve should respond to the following problems to maintain macroeconomics stability. For each problem use the IS/LM model and AS/AD model to illustrate and explain the initial impacts of the problem, and redraw these pictures to show how the monetary policy action you suggest affects the short run equilibrium. If necessary clearly state what you assume is the Fed's primary objective.
- (a) (10 points) A negative shock to expectations causes consumer confidence to decrease and businesses' expectations about future employment and capital utilization to decrease.
 - (b) (10 points) War in the Middle East escalates and OPEC decides to significantly reduce the supply of oil.
5. (20 points) Explain the distinction Cecchetti and Disyatat (2009) make between central bank liquidity and funding liquidity. What is the implication for the type of monetary policy expansion that should be conducted for each type of shortages in liquidity? How does the monetary policy expansion for each type of liquidity shortage affect the composition of the central banks assets?

References

- CECCHETTI, S. G. (1999): "Legal Structure, Financial Structure, and the Monetary Policy Transmission," Federal Reserve Bank of New York Economic Policy Review, 5, 9–28.
- CECCHETTI, S. G., AND P. DISYATAT (2009): "Central Bank Tools and Liquidity Shortages," Federal Reserve Bank of New York Economic Policy Review, Forthcoming.
- ENGEL, C., AND A. K. ROSE (2002): "Currency Unions and International Integration," Journal of Money, Credit, and Banking, 34, 804–826.