Whitman College
Econ 308
Exam 3
April 30, 2010

Write all answers in your blue book. Show **all** of your work. The exam ends at 2:20.

1. (15pts) Suppose the United States has a 5.5% average annual rate of growth of the money supply over the course of several years. Use the Quantity Theory of Money to predict the average U.S. inflation rate over these years. Thoroughly explain your work.

2. Suppose Lisa makes a one-year loan to Bradford at an annual nominal interest rate of 4.5%.

(a) (5pts) If both people anticipate a 3.2% real interest rate for the loan, what do they expect the inflation rate to be over the year of the loan?

(b) (5pts) Would Lisa and Bradford want the actual inflation rate to be as low as possible over the year of the loan? Explain.

3. Suppose there is one kind of deposit in the banking industry. Bank A holds deposits of $500 million, excess reserves of $5 million, and required reserves of $25 million. Suppose that all banks in this economy hold the same ratio of excess reserves to deposits. Suppose further that the public chooses a ratio of currency to deposits that is 0.25.

(a) (5pts) What is the money multiplier for this economy?

(b) (5pts) Suppose that this economy's central bank sold $30 million of Treasury bills. What would ultimately happen to the money supply as a result of this open market operation?

(c) (5pts) If the central bank wanted the money supply to rise by $30 million, what specific action would the central bank take?

(d) (5pts) When the central bank makes an open market sale of Treasury bills, in what direction does the Federal Funds Rate change? Explain why the Federal Funds Rate changes.

4. (10pts) One United States dollar currently buys 93.98 Japanese yen. Suppose that over the course of the next 12 months, Japan runs an inflation rate of 1.21%. Assume that Purchasing Power Parity holds. If one year from now the US dollar buys 92.87 yen, what would the U.S. inflation rate be over the 12 months between now and then?

5. (10pts) Suppose the government wanted to use economic policy to make private investment expenditures rise, but not change real aggregate output. In the IS-LM model, what combination of monetary and fiscal policy could achieve this goal, and what would happen to the real interest rate under this combination of policies? Explain, with reference to an IS-LM diagram.

6. (10pts) Consider the March 15, 2010 National Public Radio interview with Joshua Green, author of the April 2010 *Atlantic* article “Inside Man.” We listened to the first half of this interview in class on March 29. Green describes Treasury Secretary (and former New York Federal Reserve President) Timothy Geithner’s three-part plan for keeping the current financial crisis from becoming another Great Depression. Briefly describe each of the three parts of Geithner’s plan.

7. Consider the remarks Dr. Christina Romer, Chair of the President’s Council of Economic Advisers, prepared for a conference at Princeton University held on April 17, 2010. She titled her speech “Back to a Better Normal: Unemployment and Growth in the Wake of the Great Recession.” In this speech, Romer considers and rejects the idea of tightening fiscal policy now.

(a) (15pts) According to Romer, what would happen if we tightened fiscal policy now? Explain her reasoning. Use the fixed-nominal-wage-contracts version of the Aggregate Supply-Aggregate Demand model to help explain. Refer to an AD-AS graph in your explanation.

(b) (5pts) In her speech, Romer says that “rapid recovery is the most important thing that we could do to prevent the currently high rate of cyclical unemployment from becoming structural.” (p. 11) She goes on to note that the academic literature suggests that prolonged recessions can cause the natural rate of unemployment to rise. In our textbook, Gregory Mankiw describes how a recession might “leave permanent scars on the economy by altering the natural rate of unemployment.” (p. 400) According to Mankiw, how could a prolonged recession change the natural rate of unemployment?

8. (5pts) Consider Paul Krugman’s April 18, 2010 blog post about financial reform. You read portions of this post for class on April 21. Krugman cites six views (not all mutually exclusive) of what the current financial crisis is all about. Briefly describe the three that Krugman thinks are the big problems that caused the financial crisis.