Whitman College
Econ 407
Exam 2
November 18, 2011

Write all answers in your blue book. You have 1.5 hours for the exam.

1. (a) (2pts) When it initially created the Federal Reserve, what policy goal did Congress charged the Fed to achieve?

(b) (1pt) What one monetary policy tool did Congress give the Fed at its creation?

(c) (2pts) What are the two parts of the Fed's dual mandate that Congress added with subsequent legislation?

For questions 2-7, consider Robert Lucas and Nancy Stokey's analysis in their article "Liquidity Crises: Understanding sources and limiting consequences: A theoretical framework" in Federal Reserve Bank of Minneapolis *The Region*, June 2011.

2. (a) (10pts) Lucas and Stokey modify the Diamond-Dybvig (1983) banking model to give it a monetary interpretation. Consider the version of the Lucas and Stokey model in which banks hold safe assets such as Treasury bills and high-grade commercial paper. Why is it that in this model a bank's "ability to make good on its [deposit-withdrawal] promise is fragile"?

(b) (10pts) According to Lucas and Stokey, the repurchase agreement (repo) market performs for money market mutual funds and hedge funds "the same function that commercial banks perform for smaller depositors." What, according to Lucas and Stokey, is the advantage the repo market gives to the money market mutual funds and hedge funds that lend in this market?

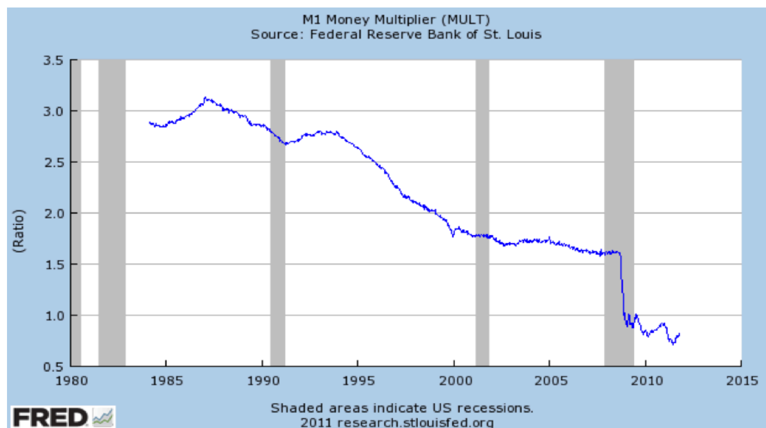
3. (15pts) In a September 7, 2011 interview with former Federal Deposit Insurance Corporation Chairman Sheila Bair, Diane Rehm asks how we could have avoided the 2008-2009 financial crisis. Ms. Bair responds that the crisis was "very avoidable" and explains what we could have done to prevent it. What is her explanation?

(b) (10pts) Do Lucas and Stokey agree with Ms. Bair's position that taking particular actions would rule out a financial crisis like the one in 2008-2009? Explain.

4. In 1844 England passed a law making it a crime for the Bank of England to increase note issues in panics, i.e. the Bank of England wasn't allowed to print money and lend it out during a liquidity crisis. The reason for the law was to make speculators think that the Bank of England would not serve as a lender of last resort when a speculative bubble burst and panic ensued. By insisting in advance that they would not bail out speculators, the English Parliament hoped they would stifle speculative bubbles. However, once a panic actually did ensue, the Prime Minister wanted to stop the panic.

(a) (5pts) How is moral hazard involved in the Prime Minster's predicament? Be sure to define moral hazard in your answer.
(b) (5pts) How is the Prime Minster's predicament an example of a time inconsistency problem? Be sure to define the time inconsistency problem.
(c) (5pts) What did the Prime Ministers end up doing in liquidity crises?
(d) (5pts) Explain whether Lucas and Stokey would approve of what the Prime Ministers did in liquidity crises.

5. (a) (5pts) Define and derive the M1 money multiplier.



(b) (5pts) Why did the money multiplier drop in 2008? Why is it still very low now?

6. (5pts) Considering all the trouble that economies can get into because their financial institutions lend long term with funds they borrowed short term, why don't we have our regulatory system suppress this maturity transformation process? Refer to Walter Bagehot, Brad Delong and Lucas and Stokey in your explanation.

7. (15pts) In the section of their article where they offer policy suggestions on the future role of deposit insurance, Lucas and Stokey note that the liquidity crisis of 2008 involved investment banks, money market funds, and the repo market, all of which "are outside the protection of the insured system." Lucas and Stokey ask whether investment banks, money market funds and the repo market should be "brought into the fold, with the relevant portion of their investment portfolio regulated in the same way that commercial banks are." Explain the reasoning behind their answer to this question about whether the government should insure investment banks, money market funds, and the repo market.