Problem set 2
266: Fi. Markets and Institutions
Spring 2010
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Directions. You are to do this problem set alone.

Due Date/time. Your work is due by beginning of class (1:30 PM) May 6 (Note: I've pushed this back to the last day of class). You can hand the work in to me at the beginning of class. If you put the work under my office door or in my mailbox, it must be in before I leave for lecture at about 1:20pm. If you have an electronic version of your work, you can email it to me. The time stamp must be no later than 1:30pm.

1. Brief answer/definition: Derivatives and money market.

1.1 Futures contract

1.2 Strike price (for option)

1.3 American vs. European style option

1.4 Notional value of credit default swap

1.5 What is the difference in counterparty risk between an exchange traded derivative and an over-the-counter derivative.

1.6 Repo (repurchase agreement)

1.7 Commercial paper

2. Governance of the Fed See
http://www.federalreserve.gov. Also see the the intro, history section, and conclusion of an article of mine linked here:
http://e105.org/e266/download/xx27.pdf

2.1 Who serves as Governors of the Federal Reserve Board? How are they selected? What are their terms? What are the main qualifications of the current Governors?

2.2 How are the presidents of the Federal Reserve Banks chosen? What is their main role in monetary policymaking?

2.3 What is the term of the Chairman of the Fed? How are the terms of the President of the U.S. and the Chairman of the Fed Related? When does the current Chairman's term expire?

2.4 Famous economists James Tobin and Milton Friedman (who disagreed on most issues) look at the issues raised by 1.1–1.4 and argue that the Federal Reserve is a profoundly anti-democratic institution. Why in a democratically-oriented country such as the U.S. do you suppose such an institution came into being?

2.5 According to the linked summary, what does the reform bill in the Senate propose regarding selection of Fed presidents? What do you think of the idea of removing conflicts of interest? Bill summary:
http://banking.senate.gov/public/_files/FinancialReformSummary231510FINAL.pdf
(Note: the bill is under change currently, so this question refers to the linked summary which may no longer be what is in the Senate.)

2.6 Some argue that section 13.3 of the Federal Reserve Act is particularly troubling from a democratic perspective. What is section 13.3 and why has it been important recently? Note: you might want to read a brief piece Bob Barbera and I wrote on this:
http://www.voxeu.org/index.php?q=node/3244

3. Bank reserves

3.1. What are reserves of a commercial bank? Required reserves? Excess reserves? In what form can reserves be held?

3.2 Using monthly data, plot excess reserves of commercial banks against time.

Note: The data can be obtained from the St. Louis Fed. FRED data on the web. Hand in the plot.

3.3 Two events in the Fall of 2008 explain the sharp rise in excess reserves, what are these?

Note: You may want to read the N.Y. Fed's discussion of the payment of interest in there annual report for 2008 on Fed operations.
http://www.newyorkfed.org/markets/annual_reports.html

4. Monetary policy in normal times. By normal times, we mean recent times I mean that the main way policy is conducted is by setting and attempting to hit a target for the federal funds rate. With the rate at effectively zero lately, other methods have been used, but we will presumably return to more normal times in the near-ish future.

4.1 Plot monthly data for the effective federal funds rate since, say, 1985. (Once again, this can be done in FRED and should be handed in.). Create a graph over a shorter period, say 1 year or so. How does this differ from the graph of most market interest rates?

4.2 Suppose that the market is pushing the fed funds rate below the Fed's target. What would the Fed do to get the rate back to target?

4.3 Explain why, so long as the Fed lends freely through the discount window at the Fed's discount rate, the discount rate should put a ceiling on the highest rate at which banks will exchange funds in the Fed funds market. (Note: This presumes that banks see no stigma in 'going to the window.').

4.4 The Fed recently began paying interest on reserves that banks hold at the Fed. Explain why the interest rate on reserves should put a floor on the lowest rate at which banks will exchange funds in the federal funds market.