Whitman College
Econ 407
Exam 2
April 15, 2010

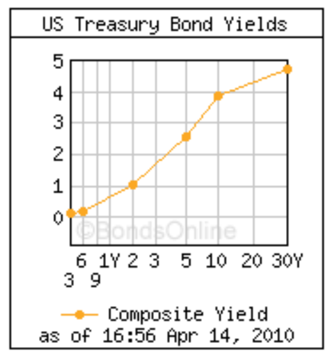
Write all answers in your blue book. Show all of your work. The exam ends at 2:20.

1. To answer parts (a)-(f), consider the yields (reported in percentage terms) for United States government Treasury debt, and the yield curve graph of these data for April 14, 2010, given below.

US Treasury Bonds (16:56 ET April 14, 10)

Maturity	Yield	Yesterday	Last Week	Last Month	Yield Change
3 Month	0.11	0.11	0.12	0.10	0.00
6 Month	0.20	0.20	0.21	0.19	0.00
2 Year	1.03	1.03	1.02	0.92	0.00
5 Year	2.58	2.55	2.58	2.38	0.03
10 Year	3.84	3.80	3.84	3.67	0.05
30 Year	4.71	4.66	4.72	4.61	0.06

Historical Data



(a) (3pts) What was the price of a ten-year Treasury bond issued on April 14, if it had a face value of $10,000 and no intermediate payments?

(b) (2pts) State the assumptions of the Liquidity Premium theory of the term structure of interest rates.

For questions (c)-(f), suppose that the Liquidity Premium Theory of the term structure of interest rates holds.

For parts (c) and (d), suppose that market participants currently expect that interest rates will fall.

(c) (5pts) What would have to be true about the size of the current liquidity premium on the 10-year Treasury note? Explain.

(d) (5pts) Given your answer to part (c), how plausible is it that market participants currently expect that interest rates will fall? Explain.

For parts (e) and (f) suppose that savers' liquidity premia are given in the table below.

(e) (10pts) Forecast the annual nominal interest rate on a three-year Treasury note offered for sale two years from now.

(f) (10pts) Suppose everyone believes that the expected annual inflation rate will be 1.50% for each of the next four years. What is the expected annual real interest rate for the one-year Treasury bill that will be issued April 14, 2012?

Term to maturity	Liquidity premium (in percent per year)
3 months	0
1 year	0.10 (i.e. 1/10 of a percent per year)
2 years	0.35
3 years	0.55
4 years	0.75
5 years	0.85

2. Consider Brad DeLong's March 29, 2010 blog postings that we discussed in class. DeLong notes that Greg Mankiw has said "*I think it is possible to imagine a bank with almost no leverage at all. Suppose we were to require banks to hold 100 percent reserves against demand deposits. And suppose that all bank loans had to be financed 100 percent with bank capital…(This system is, I believe, similar to what is sometimes called 'narrow banking.')… One thing such a system would do is forgo the 'maturity transformation' function of the current financial system.*"

(a) (5pts) In the table below, fill in the balance sheet for a narrow bank like the one Mankiw is imagining. (Copy the table into your blue book.)

Balance Sheet

Assets	Liabilities
Reserves_______________	Deposits $800 million
One-year loans ________________	
Five-year loans ________________	Bank Capital ________________

(b) (10pts) Paul Krugman, quoted in DeLong's blog, objects to Mankiw's idea "*on two levels: if it were possible, it would do away with the main purpose of banks, and anyway, it's not possible....*" DeLong then notes that to understand Krugman's reasoning, it helps "*to ask the economist's question: What is the market failure? What is the market failure that would justify narrow banking--which means using the fist of Leviathan to shut down the maturity-transformation industry? Why not let those who promise that they can turn long-term illiquid risky sow's-ear investments into short-term safe liquid silk purses carry out their trade*?" What is DeLong's answer to this question?

(c) (5pts) DeLong goes on to note that "*it is no accident that the modern market-driven financial crisis and the industrial business cycle start in 1825, as the British Industrial Revolution enters its heyday*." What is his reasoning?

(d) (5pts) What solution does DeLong advocate for the market failure he describes?

(e) (5pts) Do you think DeLong believes that bank maturity-transformation provides a role for deposit insurance? Explain your reasoning.

3. (a) (5pts) Define and explain the moral hazard problem of deposit insurance.

(b) (5pts) Economists have suggested that until the late 1970's, a protective subsidy limited the moral hazard problem of deposit insurance. Explain what the protective subsidy was and how it limited the moral hazard problem.

4. Consider the March 15, 2010 National Public Radio interview with Joshua Green, author of the April 2010 *Atlantic* article "Inside Man." 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. The first part of the plan was the Federal Reserve lowering the target federal funds rate to nearly nothing. The second part was passing a fiscal stimulus package. The third part was getting funds into banks so that they would continue lending.

(a) (10pts) Describe in detail the third part of Geithner's plan.

(b) (10pts) What evidence does Green cite to suggest the third part of the plan worked?

(b) (5pts) Green describes Geithner's plan being "*out of sync with the public desire for swift, retributive justice against the banks*." For instance, Geithner opposed calls to have the government fire Bank of America's CEO, and he opposed calls for pay caps at banks that received federal aid. According to Green, why did Geithner advise President Obama against accommodating the public's desire to punish banks?