

Whitman College
Econ 407
Exam 1
October 7, 2011

Write all answers in your blue book. **Show all of your work.** The exam ends at 12:00.

1. (20pts) Consider the speech “Lessons from the Financial Crisis: Canada in Comparative Perspective” given in February 2011 by Nicholas Le Pan, Superintendent of Financial Institutions for Canada from 2001 to 2006.

What two reasons does Mr. Le Pan give for a country to regulate the safety and soundness of its financial system?

2. (a) (5pts) Among the four functions of money that W. S. Jevons describes in “Money and the Mechanism of Exchange” (1893), which does he believe is the essential function of money?

(b) (5pts) Why, according to Jevons, should his reader “discriminate carefully and constantly between the four functions which money fulfills”?

3. (10pts) In “Deflating the Case for Zero Inflation” (1990), Rao Aiyagari writes that “inflation encourages the waste of resources each time people convert interest-earning assets into money.” According to Aiyagari, how could most of the benefits of reducing these transactions costs “be achieved in simpler, more direct ways than manipulating the inflation rate”?

Use the information on Treasury yield curve rates below to answer **Questions 4 and 5.**

Treasury Yield Curve Rates

Date	1 Mo	1 Yr	2 Yr	3 Yr	5 Yr	7 Yr	10 Yr	20 Yr	30 Yr
10/5/11	0%	0.10%	0.25%	0.43%	0.96%	1.45%	1.92%	2.62%	2.87%

4. Consider the following excerpts from a September 22, 2011 Wall Street Journal article by Jon Hilsenrath and Luca Di Leo.

Fed Launches New Stimulus

Federal Reserve Chairman Ben Bernanke, acting more aggressively than expected, launched a new package of measures to support a limping economy and once again took the kind of unconventional approach that has become a trademark of his tumultuous five-year tenure running the central bank. The latest move by the chairman was a decision to dramatically recast the Fed's \$2.65 trillion securities portfolio in an effort to reduce long-term interest rates. The Fed plans to shift its holdings so it will have more long-term U.S. Treasury bonds and more mortgage debt

than previously planned. It hopes the lower rates will boost investment and spending and provide a shot of adrenaline to the beleaguered housing sector...

The steps come with tangible risk for the central bank. Mortgage bonds and long-term Treasury bonds are more volatile and more prone to loss than the short-term Treasury debt which the Fed will be selling. If inflation does rise, the Fed could be exposed to embarrassing losses in its own portfolio.

- (a) (5pts) Suppose that under the Fed's new stimulus plan, the Fed buys 30-year United States Government Treasury bonds, each with a face value of \$100,000. What price did the Fed pay for this 30-year bond on October 5, 2011?
- (b) (5pts) Why would the Fed's purchase of long-term Treasury bonds reduce long-term interest rates?
- (c) (20pts) Explain why shifting its holdings to more long-term Treasury bonds means that "if inflation does rise, the Fed could be exposed to embarrassing losses in its own portfolio." Be explicit and detailed in explaining your reasoning.

5. For parts (a)-(c) below, suppose people are expecting the annual inflation rate to be at least two percent for the next five years.

- (a) (5pts) Are savers expecting that they will get a positive real interest rate from the two year Treasury bill offered October 5, 2011? Explain your reasoning.
- (b) (20pts) Use the Pure Expectations Theory of the term structure of interest rates to forecast the rate on a two-year Treasury bill offered for sale three years from now.
- (c) (5pts) Suppose that the Pure Expectations Theory assumptions hold. Are savers expecting that they will be able get a positive real interest rate on the two year Treasury bill that will be offered three years from now? Explain your reasoning.