Whitman College
Econ 407
Final Exam
December 15, 2010

Write all answers in your blue book. Show your work and explain your reasoning.
The exam ends at 5pm.

1. Consider Rao Aiyagari's "Deflating the Case for Zero Inflation." Read parts (a)-(d) below before answering any of these questions.

(a) (15pts) Mr. Aiyagari states that in particular macroeconomic models "reducing inflation will likely reduce economic welfare, at least temporarily--as long as people are stuck with their binding agreements." Describe Mr. Aiyagari's reasoning.

(b) (15pts) Draw a Phillips curve graph that would accompany the explanation you provided in part (a). Describe the connection between your explanation in part (a) and any movements or shifts that you show in your Phillips curve graph.

(c) (15pts) Mr. Aiyagari claims that "if the public are convinced that the government is really shifting to an announced new lower-inflation policy and will stick to it, then the sacrifice ratio could be close to zero." Explain Mr. Aiyagari's reasoning.

(d) (15pts) Draw a Phillips curve graph that would accompany the explanation you provided in part (c). Describe the connection between your explanation in part (c) and any movements or shifts that you show in your Phillips curve graph.

2. Consider the information below, excerpted from the Wall Street Journal.

Central Bank's Mandate Draws Spotlight

By DAVID WESSEL
The Wall Street Journal, November 24, 2010, page A5

With unemployment at 9.6% and inflation below the Federal Reserve's working definition of "price stability," this seems a strange moment for Congress to contemplate instructing the Fed to focus exclusively on fighting inflation. But Sen. Bob Corker (R., Tenn.) wants to revive that notion, which has lain dormant for more than a decade because there has been so little inflation. "I am concerned about inflation down the road," he explains. "The time is right for us to bring clarity to the Fed."

The current consensus is that the Fed can—and, indeed, is now attempting to—reduce unemployment in a recession, but in the long run can deliver only price stability. What Fed Chairman Ben Bernanke calls "the longer-run sustainable unemployment rate" is determined by demographics, job-market rules and other factors beyond the Fed's control. In this view, if the Fed tried to push unemployment too low now, it could create too much inflation later, the mistake the Fed made in the late 1970s.

(20pts) Using a Keynesian Aggregate-Demand Aggregate-Supply framework where in the short run nominal wages are fixed by contract, explain how "if the Fed tried to push unemployment too low now, it could create too much inflation later". In your discussion, refer to an Aggregate-Demand Aggregate-Supply graph and explain any shifts in your graph.

3. Read parts (a)- (g) before you answer any of them.

(a) (2pts) Define M1.

(b) (2pts) Define the monetary base.

(c) (6pts) Define and derive the M1 money multiplier.

In "The Monetary Base and Bank Lending: You Can Lead a Horse to Water…" in the Federal Reserve Bank of St Louis's *September 2010 Monetary Trends*, David C. Wheelock writes " In its response to the worsening financial crisis during the fall of 2008, the Federal Reserve took actions that dramatically increased the size of the monetary base…The base more than doubled in size between September 2008 and May 2010. Yet measures of the money stock… increased far less. For example, M1 increased about 17% over these months."

(d) (5pts) What actions did the Federal Reserve take that made the monetary base more than double between September 2008 and May 2010?

(e) (15pts) Mr. Wheelock asks "Why was the increase in the money stock so small when the increase in the monetary base was so large?" Explain his answer.

(f) (10pts) Describe what happened to the components of the M1 money multiplier between September 2008 and May 2010 to make M1 increase by only 17% when the monetary base was more than doubling.

(g) (15pts) Mr. Wheelock writes that many economists now worry that "money growth will eventually surge and, ultimately, cause higher inflation." In fact, the Federal Reserve had similar concerns back in 1936.
In what ways was the situation in 1936 similar to the situation the Federal Reserve now faces?
What did the Federal Reserve do in 1936 to prevent money growth from surging?
Would you recommend the Federal Reserve take the same action now? Why or why not?

4. (20pts) Consider the information below, excerpted from the Wall Street Journal. Describe the time inconsistency problem that the "living wills" described in the article are meant to overcome. How will the living wills overcome this time inconsistency problem?

Proposal Calls for Banks to Draft 'Living Wills'

By MICHAEL R. CRITTENDEN
The Wall Street Journal, May 12, 2010, page A8

The Federal Deposit Insurance Corp. has proposed to require the U.S.'s largest banks to create a plan for their own liquidation in the case of financial stress.

By planning for the organized breakup of the country's top 40 banks, the government hopes to avoid some of the chaos and costly bailouts that marked the recent crisis. The plan reflects a broader effort by regulators around the world to be better prepared for emergency liquidations of big banks.

The plan would require large bank holding companies, such as Citigroup Inc., J.P. Morgan Chase & Co., and Bank of America Corp., to show how their bank could be cleanly separated from the parent firm, and then dissolved by regulators.

"It is an important step toward ending 'too big to fail,' " FDIC Chairman Sheila Bair said Tuesday at a public board meeting. "We do want plans in place."

The efforts by the Fed and FDIC are in early stages but complement a new regulatory system envisioned by many lawmakers that would give the government new powers to break up big financial firms.

The FDIC's proposal would require banks to disclose detailed information about their technology, payment systems, exposure to other banks and their capital structure.

The banks would also have to provide sufficient information to let regulators determine whether the banks pose a "systemic" risk to the economy.

These sorts of measures have come to be known in the industry as "living wills" or "funeral plans," and regulators say they plan to use them more often to help guide their oversight of the banking sector.

Regulators… say that the measures would give the government a complete list of banks' counterparties and operations, and thus ease efforts to safely and quickly break up a large failed bank. The measures would also signal to financial markets that contingency plans for dissolution are in place, and that a government bailout isn't an option.

5. (15pts) Why didn't the Federal reserve try to pop the housing bubble of the mid 2000s?

6. Consider the information below, excerpted from the Wall Street Journal.

Yields Push Higher on Tax-Deal

By MIN ZENG
The Wall Street Journal, December 8, 2010, page C11

Treasurys extended their slump on Wednesday, sending the 10-year yield to its highest since June, amid a steam of negative news for bonds. President Barack Obama's agreement to extend some Bush-era tax cuts sparked alarm among Treasury investors worried about the ballooning budget deficit.

(a) (20pts) Suppose the weak form of the fiscal theory of the price level holds. Why would the "agreement to extend some Bush-era tax cuts" spark alarm among Treasury bond owners? Thoroughly explain all the elements of your answer.

(b) (10pts) Suppose the strong form of the fiscal theory of the price level holds. Why would the "agreement to extend some Bush-era tax cuts" spark alarm among Treasury bond owners? Explain your answer. In your explanation, you can refer back to some of the elements you developed in part (a).