## Professor Christiano C-11, Fall 1997

## Second Midterm

IMPORTANT: read the following notes

- You may not use calculators, notes, or aids of any kind.
- Please feel free to ask the proctor questions if the wording of a question is unclear.
- A total of 100 points is possible, with the distribution by question indicated in parentheses.
- Indicate on your blue book which TA section you are in.
- Explain your answers carefully in clear English. We are particularly interested in whether you understand the underlying economic intuition. Supplement what you say with liberal use of diagrams.
- Write neatly and label all diagrams. We cannot give you credit if we cannot read your answer.

- 1. (30) The unemployment rate in Europe in the 1980s and 1990s rose from below the US rate to way above it.
  - (a) Why do some people think this observation poses a challenge to the NAIRU hypothesis? Is it the mere fact of the rise in the unemployment rate itself that is the problem for NAIRU, or is it something else?
  - (b) What is the hysteresis hypothesis that has been proposed to explain the observations? Explain the sense in which hysteresis constitutes a very different view about unemployment than the NAIRU.
  - (c) What difference does it make from the point of policy, whether the Europeans choose to believe in the NAIRU or in the hysteresis hypothesis?
- 2. (30) Suppose there is a rise in the demand for real balances at any given level of income and rate of interest. (That is, with  $L(i) = \bar{L} li$ , l > 0, there is a rise in  $\bar{L}$ .) Explain the effects of this on i, Y, P, I, u in the short and medium-run. Be sure to describe the dynamic path taken by the economy in the short run. Make the basic logic of your argument clear through the appropriate use of graphs or algebra. Most importantly, please do your best to convey the basic economics at an intuitive level.
- 3. (15) What is the time consistency problem in monetary policy? What can be done to alleviate the problem?
- 4. Answer ONE of the following two questions:
  - (a) (25) In 1968, President Johnson got a temporary tax increase passed by the Congress. Based on the experience with the 1964 tax cut, everyone expected the tax increase to exert significant pressure on aggregate demand. To everyone's surprise at the time, the 1968 tax increase actually had very little effect. Later, the episode

came to be viewed as an example of the importance of private expectations in determining the economic effects of a government policy action.

What is it about private sector expectations that could account for the relatively strong effect of the 1964 tax cut and the weak effect of the 1968 tax increase?

(b) (25) Suppose you observe two different countries in which the degree of market power held by firms is the same, but in one of the two countries the power of unions is much greater. Apart from the rate of unemployment, all other variables impacting on wage and price setting are assumed to be identical. Given the framework developed in this course, which of the two countries can be expected to have the higher rate of unemployment on average?