Professor Christiano
C-11, Winter 1997

Final Exam

IMPORTANT: read the following notes

- You may not use calculators, notes, or aids of any kind.
- Note the points each question is worth and plan your time accordingly. The total number of points possible is 100, and the number of points per question is indicated in parentheses.
- Explain your answers carefully. Make liberal use of diagrams.
- Write neatly and label all diagrams. We cannot give you credit if we cannot read your answer.
- Write your name and TA section (whether Thursday or Friday) on each blue book.

1. (8) When inflation was high in the late 1970's, a debate occured about the costs of getting rid of it. Some argued that if the Fed had a lot of credibility, the cost might be essentially zero. Others argued that the cost was likely to be quite high, and that getting rid of inflation might require a big sacrifice in terms of high unemployment. Explain the two sides of this debate. In your discussion, be sure to indicate why credibility is so important, and how the lack of it can make fighting inflation costly.

2. (23) The initial phase of the Great Depression was characterized by relatively little change in real money balances, a fall in prices, a very substantial (roughly ten-fold!) drop in investment, a relatively small drop in consumption, very little change in government purchases and a falling nominal rate of interest. Explain why each of the following is, or is not, a candidate for the impulse that triggered the Depression. In each case, show carefully (using the AD-AS graphical apparatus) what the expected consequence of the given impulse is, in order to show why, or why not, the implications are consistent with what happened.

    (a) Consumer pessimism.

    (b) Investor pessimism.

    (c) A cutback in government purchases.

    (d) A rise in taxes.

    (e) A monetary contraction implemented by the Fed.

3. (23) In 1968, Congress passed a one-year increase in taxes. The Fed calculated (using historical data to pin down parameters like the MPC, that it needed), that the tax hike would have a very depressive effect on the economy. So, they responded by implementing a substantial increase in the money supply in order to prevent these bad effects.

    (a) Explain carefully, using our graphical apparatus, how the Fed would have determined what increase in the money supply was required to neutralize the ill-effects of the tax hike. Explain the role of their estimate of the MPC in this calculation.

(b) The Fed later learned that it had over-estimated by far the depressive effects of the tax hike on the economy. Many concluded that there was a basic flaw in the Fed's method for computing the impact of a tax change. Describe that flaw carefully.

4. (23) Several commentators have recently criticized the Fed for using its tools to slow the economy down when growth gets 'too' fast. In defending this policy, the Fed argues that it is central to its strategy for preventing a resurgence of inflation.

   (a) The people at the Fed fully understand that inflation cannot take off without increased money growth, which the Fed itself controls. Yet they defend their strategy as a way to prevent an inflation takeoff anyway. What is their defense?

   (b) What are the risks associated with the Fed's strategy for fighting inflation? Here, you should carefully describe a scenario (using the AD-AS graphical apparatus) in which the Fed's policy causes a problem.

   (c) Describe an alternative monetary strategy for fighting inflation that avoids the risks of the Fed's current strategy.

5. (23) Describe, in detail, the short and long-run effects of an exogenous increase in the demand curve for money by households. Do the same for a reduction in the money supply by the Fed. In your discussion use all relevant graphs (i.e., AD-AS, IS-LM, etc.). In looking at data on recessions, what would you have to look at to determine whether one or the other of these two scenarios was operative?