

Homework #6, Economics 362, Due Thursday, February 23.

1. Consider a drop in G .
 - (a) Suppose the drop is temporary.
 - i. What is the impact on the AA and DD curves?
 - ii. Where is the new short-run equilibrium?
 - iii. Explain in intuitive terms, the move from the time of the initial shock, to the short run equilibrium. Show in graphs, what happens to R , E , P , Y over time.
 - (b) Suppose the drop is permanent. Redo the previous question. Show in graphs, what happens to R , E , P , Y over time.
 - (c) What happens to the yield curve in the two experiments? (See bottom of the articles section on the class website for a discussion of the yield curve... <http://www.faculty.econ.northwestern.edu/faculty/christiano/362/w2006/articles2006.htm>)
2. Suppose it is expected that there will be a permanent reduction in the money stock, beginning some time in the future. Describe carefully, what will happen in the short and long run, to the endogenous variables of the model. Be sure to explain in detail what happens in the long run, and provide geometric proofs for your findings about the short run. What is predicted to happen to the yield curve?
3. Suppose there is a permanent increase in the money supply. Suppose that during the short run period in which output is high, ρ is reduced. That is, the short run expansion in output makes investors temporarily happier about holding US assets.
 - (a) Display the impact of this experiment on the DD and AA curves.
 - (b) Show that if the fall in ρ is large enough, the exchange rate could exhibit a slow depreciation over time to its new long-run level.
 - (c) Explain, intuitively, how the introduction of risk considerations can overturn the usual ‘overshooting’ result we obtain in the base-line version of the model which does not include ρ .

4. It is often asserted the sharp drop in US interest rates beginning late 2000 reflected the Fed's aggressive drive to bring the US out of the recession of the time.
 - (a) Explain why this explanation runs into difficulties with our base-line model.
 - (b) Explain (referring to you answer to 3(c)) how risk considerations are helpful to someone who wants to attribute what happened after 2001 to the Fed.
 - (c) Explain, using graphs, how uncertainty about the level of the Fed's commitment to easing the money supply beginning late 2000 might resolve the difficulties in (a).

5. Since 2001, there has been a major rise in G and a fall in T . Looking at the US data, explain why it looks like monetary policy - not fiscal policy - was probably the dominant force acting on the economy in this period. In doing this, use what you learned above about monetary policy. Also, work out the implications of a jump in G and/or fall in T in the model (permanent or temporary, or a mixture of the two) and compare these implications with the actual data. Although I think you'll find that the evidence favors a monetary policy interpretation of the data, the question is sufficiently open ended, that it is possible you could come out with the opposite conclusion. I would welcome such a thing, and I would particularly welcome any changes you might want to make to the model to support your conclusion. Whatever you do, however, you must make your assumptions clear and prove your conclusions graphically.