Homework #5: Money & Business Cycles

Econ 352: Macroeconomics

1 Williamson Ch 12. problem 4: (3 pts)

In the monetary intertemporal model, suppose that the money supply is fixed for all time. Determine the effects of a decrease in the capital stock, brought about by a war or natural disaster, on current equilibrium output, employment, the real wage, the real interest rate, and the price level. Explain your results.

2 Williamson Ch 12. problem 7: (3 pts)

Suppose that, in a liquidity trap, bank reserves are less liquid than government debt. If the central bank conducts an open market purchase of government debt, what will be the effect on the price level? Use a diagram, explain your results, and discuss.

3 Williamson Ch 13. problem 1: (3 pts)

In the real business cycle model, suppose that government spending increases temporarily. Determine the equilibrium effects of this. Could business cycles be explained by fluctuations in G? That is, does the model replicate the key business cycle facts from Chapter 3 when subjected to temporary shocks to government spending? Explain carefully.

4 Williamson Ch 13. problem 7: (3 pts)

Suppose that the central bank observes a drop in real GDP, but does not know what caused this drop.

4.1 Williamson Ch 13. problem 7, sub-problem a: (1 pts)

How would the central bank respond if it believed that GDP dropped because of a decline in total factor productivity, and that the real business cycle is correct?

4.2 Williamson Ch 13. problem 7, sub-problem b: (1 pts)

How would the central bank respond if it believed that GDP dropped because of a wave of pessimism, and that the Keynesian coordination failure model is correct?

4.3 Williamson Ch 13. problem 7, sub-problem c: (1 pts)

Explain your answers to (a) and (b) with the aid of diagrams.