Homework #6: New Keynesian Models, Phillips Curves, and Neo-Fisherism

Econ 352: Macroeconomics

1 Williamson Ch 14. problem 4: (3 pts)

Some macroeconomists have argued that it would be beneficial for the government to run a deficit when the economy is in a recession, and a surplus during a boom. Does this make sense? Explain carefully why or why not, using the New Keynesian model.

2 Williamson Ch 15. problem 1: (3 pts)

In the basic New Keynesian model, suppose that there is an increase in the future marginal product of capital.

1. Suppose that the central bank does nothing. What will be the effect on current inflation and on output?

2. Suppose the economy initially has inflation equal to the central bank's inflation target, and an output gap of zero. When the shock occurs, what should the central bank do?

3. Explain your results in parts (a) and (b) with the aid of diagrams.

3 Williamson Ch 15. problem 5: (3 pts)

In the NKRE model, suppose a Taylor rule as in Equation 15.8, with $-\frac{d}{a} < h < 1$, what does that imply for: (i) steady state equilibria; (ii) the whole set of equilibria that we could see? Explain with the aid of a diagram. You may end up using equation 15.9

4 Williamson Ch 16. problem 4: (3 pts)

Suppose, as in Chapter 9, that in the first model in this chapter there is limited commitment in the credit relationships between the small open economy and the rest of the world. There is some portion of the nation's capital stock, denoted by , which is collateralizable on world markets. This collateralizable capital is illiquid in the current period and is valued at price p on world markets in the future period. Assume that borrowing by the SOE on world markets is limited by the value of collateralizable wealth in the future period. Now, suppose that p falls. How does this affect consumption in the SOE in the present and the future, and the current account surplus? Explain your results with the aid of diagrams.