

Econ 102 –Spring 2014 – Week 16

Exercise 1

The economy of River Plate is characterized by the following equations:

$$\begin{aligned}C &= 100 + .75(Y - T) - P && \text{(consumption)} \\T - TR &= 200 && \text{(net taxes)} \\G &= 240 && \text{(government spending)} \\X - M &= -40 && \text{(net exports)} \\I &= 1000 - 1600r && \text{(investment)} \\M_s &= 2000 && \text{(money supply)} \\M_d &= 3500 - 6000r && \text{(money demand)} \\AD: Y &= C + I + G + (X - M) && \text{(aggregate demand)} \\AS: Y &= 4P - 3W - 2Q && \text{(aggregate supply)}\end{aligned}$$

where r is the nominal interest rate, P is the GDP Deflator, W is the average wage, and Q is the oil price. Suppose that $W=50$, and $Q=25$. Answer the questions below:

- Calculate the monetary equilibrium (find r and M that clear the money market)
- Find the equilibrium where $AD=AS$
- Assume the current reserve ratio is $rr=0.40$ and that people do not keep any cash (i.e. they deposit all their money in banks). If the new $rr=0.333$, what is the impact on the equilibrium?
- Suppose the economy is currently operating at maximum capacity (Long Run Equilibrium). If the size of the labor force increases, what will happen to W , L and P in the new long run equilibrium? Explain using a graph.

Exercise 2

An economy is at the full employment level of output. Suppose people in this country begin purchasing more foreign cars. Answer the following questions:

- What will happen to the domestic price level? How does the new short run equilibrium look like? Draw a graph. Explain how the economy adjusts to the LR equilibrium.
- Suppose now that the government devaluates the domestic currency. How is the new adjustment path? Explain.

Exercise 3

A rise in productivity increases potential output, but some worry that demand for the additional output will be insufficient even in the long run. How would you respond?