ECON 110, Prof. Hogendorn

Problem Set 10 Answers

1. *SimpleKeynes_a.*

   (a) With inflation stuck at 0.045, output must be found by solving:

   \[
   0.045 = 0.04 - (Y - 1) \Rightarrow Y = 0.995
   \]

   (b) Since output is now 0.02 units higher at any level of inflation, we can see that it must be 1.015 at the fixed inflation rate.

   (c) In part (b), output is above the full employment level of output. Therefore, there will be a tendency for inflation to rise. The rising inflation will tend to reduce aggregate demand, and the economy will move back toward the full employment level of output.

2. *AverageJoe_a.*

   (a) Since the inflation rate is above expectations, output will be above full employment (point 1):
(b) The rise in inflation expectations is not initially met with a rise in real inflation, people behave as if real prices were falling, reducing their aggregate demand to ADI'. The economy moves into recession (point 2).

(c) Once inflation actually rises to 3.2%, it satisfies expectations and people increase their aggregate demand. ADI shifts right and the economy moves back to full employment (point 3). (As we drew it, ADI shifts back to the original curve.)

Commentary: Ordinarily, with the economy at point 1, we expect a slow rise in inflation and inflation expectations, and a direct move to point 3. This problem suggests a more wrenching mechanism: if people anticipate the rise in inflation quicker than it actually happens, the mismatch between expected and actual inflation could throw the economy into recession.

(d) Suppose the government raised taxes. If nothing else changed, this would increase government savings \( S_G = T - G \), and if prices are sticky, this would reduce aggregate demand. ADI would shift left. Over time, inflation would fall as markets began to clear again. So yes, this would work, but at the expense of a recession.