

LONG-RUN UNEMPLOYMENT-INFLATION DYNAMICS

Basic Phillips curve:

$$\pi = \pi^e - a(u - u_n)$$

Simple hypothesis:

$$\pi^e = \pi_{-1}$$

which implies

$$\pi - \pi_{-1} = -a(u - u_n)$$

Implication: “clockwise spirals” in inflation and unemployment

Sad history of 1960s Phillips curve and how it fell apart in 70s confirms this basic picture

Suppose bad policy in past has left legacy of expected inflation. Now you want to bring inflation down. Requires period of above -natural rate unemployment. In fact, requires $1/\alpha$ “point-years” of unemployment to bring inflation down one percent. This is the “sacrifice ratio” (also another definition in terms of output, using Okun’s Law)

Sacrifice ratio would not be as high if gov’t could affect expectations directly, with credible promise to bring inflation down. “Credibility” is an important issue among central bankers.