EE312 Macroeconomics, 2/2019 (Sec. 046402 - Sicha) : Ch4, Supplement

Example 1. Assume an economy has the short time Phillips Curve that is defined by
$\pi_t = \pi_t^e + 0.12 - 2u_t$ and $\pi_t^e = \theta\pi_{t-1}$
Suppose that the rate of unemployment is initially equal to the natural rate. In year t, the authorities decide to bring the unemployment rate down to 5% and hold it there forever.

- Suppose that θ is initially equal to 0. At time t, the policymakers keep $u_t = 0.05$ forever.
  - What is the natural rate of unemployment?
  - At time t, the policymakers keep $u_t = 0.05$ forever. What are π_t, π_{t+1}, π_{t+2} and π_{t+3}?
- Assume that θ is equal to 1. Let $u^* = 0.06$. Initially, $\pi = 0$.
  - At time t, the policymakers keep $u_t = 0.05$ forever. What are π_t, π_{t+1}, π_{t+2} and π_{t+3}?
- Assume that $\theta = 0.5$. Let $u^* = 0.06$. Initially, $\pi = 0$.
  - At time t, the policymakers keep $u_t = 0.05$ forever. What are π_t, π_{t+1}, π_{t+2} and π_{t+3}?

Example 2. Suppose the expected inflation rate is unchanged, the natural rate of unemployment falls. What will happen to Phillips curve?

Example 3. Suppose the natural rate of unemployment is unchanged, the expected inflation rate falls. What will happen to Phillips curve?