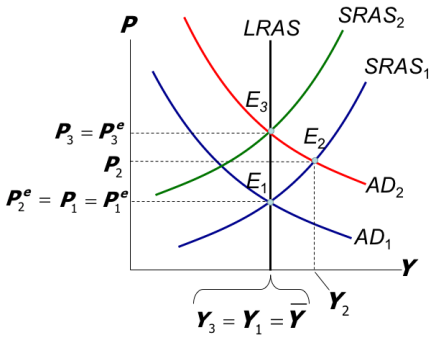
EE312 Macroeconomics, 2/2017 (Sec. 046402 - Sicha) : Supplement 2

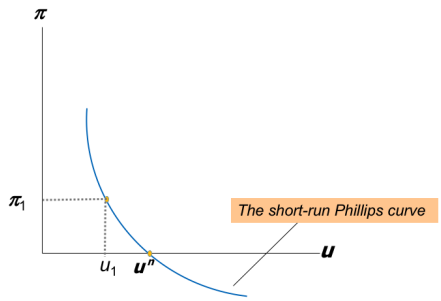
Shor-run and Long-run Phillips Curve

A short-run Phillips curve

Goods Market

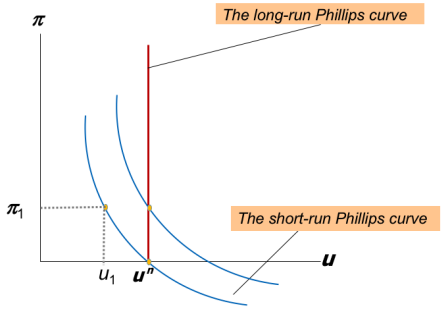


Short-run Phillips Curve



- Initially, the economy is at point E1
  - unemployment $= u^n =$ natural rate
  - Y = natural output $= \bar{Y}$ and $P^e = P_1 = P$
  - $\pi^e = 0$.
  - $\pi = \pi^e - (u - u^n)$.
- Money Supply increases
  - AD shifts to the right from AD1 to AD2
  - In the short-run, if workers expect the price to remain the same ($P^e = P_1$),
    - SRAS remains the same at SRAS1.
    - Equilibrium changes from point E1 to E2
    - P increases and Y increases
    - $P \neq P^e$. $P^e = P_1$ but $P = P_2$.
    - $\pi > \pi^e$ and unemployment is lower than u^n
  - In the long-run
    - rational expectation, price flexibility, adatptive expectation - gradually correct their expectation
    - $P^e = P_3$
    - nominal wage increases at the same proportion as price increases
    - Output decreases from Y_2 to the natural output $\bar{Y}$
    - Unemployment increases to u^n, natural rate
    - Equilibrium changes from point E2 to E3.
    - At E3, $P^e = P = P3$.
    - After that, $\pi = \pi^e = 0$.

Long Phillips Curve



- Initially, $\pi^e = 0$.
- π^e increases from 0 to 2%. Short-run Phillips curve shift to the right.
- If $\pi > 2\%$, $u < u_n$. Nominal wages will increases, unemployment will increase.
- If $\pi < 2\%$, $u > u_n$. Nominal wages will decreases, unemployment will decreases.
- If $\pi = 2\%$, $u = u_n$. Nominal wages will remain the same, unemployment will remain the same.