

Lecture 18: Inflation and Unemployment

- Current Events
- The Phillips Curve
- Nominal and real interest rates

The Phillips Curve

* The price level vs The inflation rate

$$P(t) = P^e(t) (1 + \mu) F(u(t), z)$$

\approx

$$\pi(t) = \pi^e(t) + (\mu + z) - \alpha u(t)$$

* original Phillips curve; Figures: 8-1/8-2/8-3/8-4/8-5

The Phillips Curve and The Natural Rate of Unemployment

$$\pi^e(t) = \pi(t)$$

\Rightarrow

$$u_n = \frac{(\mu+z)}{\alpha}$$

$$\pi(t) = \pi^e(t) - \alpha (u(t) - u_n)$$

Inflation and Disinflation

* In the long run $\pi = g_m - g_y$

* Disinflation and credibility


$$\pi(t) = \pi^e(t) - \alpha (\mathbf{u}(t) - \mathbf{u}_n)$$

Real and Nominal Interest Rates

$$\text{IS:} \quad Y = C(Y-T) + I(Y,r) + G$$

$$\text{LM:} \quad \frac{M}{P} = YL(i)$$

$$\mathbf{r} = \mathbf{i} - \pi^e$$

The Long Run: $\pi^e = \pi = g_m - g_y$  Changes are relatively small; a “constant.”

Dynamics: Figure 14-6 / Evidence: Figure 14-7