March 31: How the Federal Reserve conducts monetary policy

Review short run model

Output gap: $\tilde{Y}_t = \dfrac{Y_t - \bar{Y}_t}{\bar{Y}_t}$

Okun's Law: $U_t - U^* = -\frac{1}{2} \tilde{Y}_t$

IS curve: $\tilde{Y}_t = \bar{a} - \bar{b}(R_t - \bar{r})$
(real interest rates

MP curve: Fed sets R_t

Policy Rule: $R_t - \bar{r} = \bar{m}\left(\pi_t - \bar{\pi}\right) + \bar{n}\,\tilde{Y}_t$ (Taylor Rule)
   Dual Mandate:
      - price stability
      - maximum employment — output gap zero

AD curve: $\tilde{Y}_t = \bar{a} - \bar{b}\left(\bar{m}\left(\pi_t - \bar{\pi}\right) + \bar{n}\,\tilde{Y}_t\right)$

$\tilde{Y}_t\left(1 + \bar{n}\bar{b}\right) = \bar{a} - \bar{b}\bar{m}\left(\pi_t - \bar{\pi}\right)$

$\tilde{Y}_t = \left(\bar{a} - \bar{b}\bar{m}\left(\pi_t - \bar{\pi}\right)\right)\dfrac{1}{1 + \bar{b}\bar{n}}$

AS Curve: $\pi_t = \pi_t^e + \bar{v}\,\tilde{Y}_t + \bar{o}$

Federal Reserve structure:

- Chair
- Vice chair
- Five governors
- Chair of FRBNY
- Four of the other remaining reserve bank presidents

- Nonvoting reserve bank presidents