LECTURE 9
Effects of Postwar Monetary Policy

February 19, 2013
I. The Approach
The Type of Episode Romer & Romer Focus On

“[W]e focus on times when the Federal Reserve attempted not to offset perceived or prospective increases in aggregate demand but to actively shift the aggregate demand curve back in response to what it perceived to be ‘excessive’ inflation. Or, to put it another way, we look for times when concern about the current level of inflation led the Federal Reserve to attempt to induce a recession (or at least a ‘growth recession’).”
Fed Decision to Tighten Policy to Reduce $\pi$: Short-Run Effects

\[ r_0, r_1 \]

\[ Y_0 \, (= \bar{Y}) \]

\[ Y_1 \, Y_0 \, (= \bar{Y}) \]

\[ \pi_0, \pi_1 \]

\[ IA_0, IA_1 \]

\[ AD_0, AD_1 \]
What Is the Short-Run Effect on Net Exports and the Real Exchange Rate?

- $r$ rises.
- $\text{CF}(r)$ is a decreasing function, so net capital outflows fall.
- $\text{NX}$ must equal $\text{CF}$, so net exports fall.
- $\text{NX}(\varepsilon)$ is a decreasing function of $\varepsilon$, so to bring about the reduction in net exports, the real exchange rate appreciates.
Fed Decision to Tighten Policy to Reduce $\pi$: Long-Run Effects

$Y_0, Y_{LR}$

$\pi_0, \pi_1$

$\pi_{LR}$
What Would Have Happened without the Change in the Rule
Why Did We Focus on This Type of Episode, Rather than All “Unusual” Monetary Developments?

- Less subjective
- Easier
II. IDENTIFYING THE EPISODES
Narrative Evidence of a Policy Shift in 1947

“It was [the] opinion [of the chief Federal Reserve economist present] that throughout the war and postwar period there had been too many fears of postwar deflation, ... and that, although any downturn should be taken care of at the proper time, the important thing at the moment was to stop abnormal pressures on the inflationary side” (Minutes, 1947, p. 111)

The other Board economist at the meeting “thought there would and should be a mild recession” (Minutes, 1947, p. 112)
Dates of Shifts to Anti-Inflationary Monetary Policy

- October 1947
- September 1955
- December 1968
- April 1974
- August 1978
- October 1979
- (December 1988)
III. EVIDENCE ABOUT THE EFFECTS OF MONETARY POLICY
The Unemployment Rate after “Romer & Romer Dates”
A Simple Version of F&S/R&R’s Model

(1) \( \Delta \ln Y_t = a + b \Delta \text{MonPol}_t + e_t \),
where \( \Delta \text{MonPol} \) is a measure of changes in monetary policy.

(2) \( \Delta \text{MonPol}_t = c + d Z_t + u_t \),
where \( Z \) is a measure of shifts to anti-inflationary monetary policy, not correlated with \( e \) or with \( u \).
Now substitute eq. (2) into eq. (1):

$$\Delta \ln Y_t = a + b [c + d Z_t + u_t] + e_t$$

$$= (a + bc) + (bd) Z_t + (b u_t + e_t)$$

$$\equiv \alpha + \beta Z_t + \varepsilon_t.$$
\[ \Delta \ln Y_t = \alpha + \beta Z_t + \varepsilon_t. \]

So:

Run a regression of \( \Delta \ln Y_t \) on \( Z_t \).
The Equation that Romer and Romer Estimate:

- Uses industrial production as its measure of output.

- Allows monetary shocks to have delayed effects.

- Accounts for seasonal variation.

- Includes lagged values of output growth.
The Equation that Romer and Romer Estimate:

\[ y_t = a_0 + \sum_{i=1}^{11} a_i M_{it} + \sum_{j=1}^{24} b_j y_{t-j} + \sum_{k=0}^{36} c_k D_{t-k} \]
Estimated Impact of Shift to Anti-Inflationary Monetary Policy on Industrial Production
What Do You Think?
IV. IMPLICATIONS FOR POSTWAR BUSINESS CYCLES
The Unemployment Rate after “Romer & Romer Dates”
The CPI Inflation Rate after “Romer & Romer Dates”
V. ROMER AND ROMER ON FRIEDMAN AND SCHWARTZ (time permitting)
Estimated Impact of a Contractionary Monetary Shock in the Interwar Period on Industrial Production (Shocks: 1/1920, 10/1930, 3/1931, 10/1931, 1/1937)
Estimated Impact of a Contractionary Monetary Shock in the Interwar Period on Industrial Production (Shocks: 1/1920, 10/1931, 2/1933, 1/1937, 9/1941)