

Discussion of "Inflation Expectations and Recovery from the Depression in 1933: Evidence from the Narrative Record" by Andrew Jalil and Gisela Rua

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Bundesbank Conference on Central Banks and Crises
July 8, 2015

Summary

- Main hypothesis: Inflationary expectations underwent a regime change in spring 1933; identify key events which led to the turnaround and examine the causal link between this regime switch and recovery from the Depression
- Identification of inflationary news shocks
 - Use narrative and historical accounts from news reporting, business analyst forecasts to identify five key dates
- Econometric analysis
 - Event study to examine impact of identified news shocks: $\simeq 5\%$ rise in stock prices, 2% depreciation of US dollar
 - Use the Bernanke (1983) specification for analyzing impact on output: 7% rise in output growth when regime switch in inflation expectations is incorporated
- Narrative approach to examine if other events may have been responsible for the recovery: abandoning the gold standard, changes in velocity

Main Comments

1. Identified news shocks
2. Econometric strategy to examine macroeconomic effects
3. Further use of the narrative record

Comment 1: Identified News Shocks

- For causal link between inflationary expectations and output, analysis must separate exogenous shocks to inflationary expectations from the endogenous response of these expectations to the real economy
- Narrative approach for constructing dummy variables to identify news/policy shocks does not imply exogeneity
- Leeper (1997) and Shapiro (1994) show that the Romer and Romer (1989) dummies indicating monetary policy shocks are predictable from lagged values of output and inflation

Comment 1: Identified News Shocks

- Leeper's model:

$$E [d_t | \Omega_t] = F (\alpha, \beta (L) x_t)$$

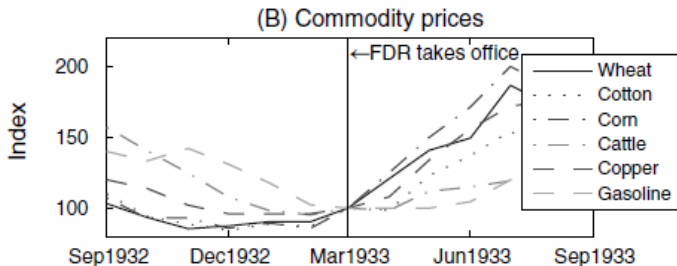
where $x_t = (Y_t, P_t, R3_t, R10_t, TR_t, PCM_t)$ and $F (\cdot)$ is the logistic function:

$$\beta (L) = \beta_1 L + \dots + \beta_m L^m$$

- Predicted values of the 7 R&R dummies: $Prob(d_{1974}) = 0.86$, $Prob(d_t) > 0.5$ on 3 dates, $Prob(d_t) > 0.25$ on 2 dates
- Endogeneity is found to be significant: real effects of policy changes from VAR analysis are reduced after endogeneity is modeled

Comment 1: Identified News Shocks

- From the diaries of Dr. James P. Warburg - indications of an advance in commodity prices prior to the April Proclamation:
 - "Around March 29th, there was a great deal of talk about devaluing the dollar. The devaluation was on April 19th and so the discussions on this topic were in the newspapers by this time".
- Evolution of commodity prices (Figure 1 from Eggertsson, 2008)



Comment 1: Identified News Shocks

- Authors identify April 19th as the first date around which inflationary expectations shifted
- Consider whether the five inflationary dummies are predictable from past observations of output, commodity prices, exchange rates

Comment 2: Specification for Estimating Effect on Output

- The Bernanke (1983) model modifies the following specification:

$$Y_t = \sum_{i=1}^2 \beta_i Y_{t-i} + \sum_{i=0}^3 \alpha_i M_{t-i} + \varepsilon_t$$

- Debt crisis is introduced as an exogenous, independent shock:

$$Y_t = \sum_{i=1}^2 \beta_i Y_{t-i} + \sum_{i=0}^3 \alpha_i M_{t-i} + \sum_{i=0}^1 \delta_i DBANKS_{t-i} + \sum_{i=0}^1 \phi_i DFAILS_{t-i} + \varepsilon_t$$

Comment 2: Specification for Estimating Effect on Output

- Meltzer and Brunner (1988) concern about endogeneity in the Bernanke (1983) specification:
 - "[...] Once monetary authorities allow for the emergence of a major deflation of asset, output and price levels, in a system with many holders of nominally fixed debt, **a debt crisis is an induced response to the deflation.**" (emphasis added)
- Specification used in Jalil and Rua (2015):

$$Y_t = \sum_{i=1}^2 \beta_i Y_{t-i} + \sum_{i=0}^3 \alpha_i M_{t-i} + \sum_{i=0}^1 \delta_i DBANKS_{t-i} + \sum_{i=0}^1 \phi_i DFAILS_{t-i} + \lambda R_t + \varepsilon_t$$

Comment 2: Specification for Estimating Effect on Output

- In Bernanke (1983), including *DBANKS* and *DFAILS* leaves monetary shock coefficients mostly unchanged (size and significance)
 - \Rightarrow Non-monetary effects of financial crisis augmented monetary effects
- Intuition for change in the significance of the monetary and banking crisis variables?
 - From Table 6: Lagged *M1* shocks are more significant; *DFAILS* is no longer significant $t - 1$

| <i>Coeff</i> | <i>Bernanke (1983)</i> | <i>Jalil and Rua (2015)</i> |
|---------------------------------|------------------------|-----------------------------|
| <i>Shocks to M1</i> ($t - 2$) | 0.119 | 0.205+ |
| <i>Shocks to M1</i> ($t - 3$) | 0.161 | 0.277* |
| <i>DFAILS</i> | -0.000085 | -0.000046 |
| <i>DFAILS</i> ($t - 1$) | -0.00015* | -0.000081 |

Comment 2: Specification for Estimating Effect on Output

- Consider robustness of the effects of R_t on output using a VAR approach: basic VAR or identification using Cholesky/sign restrictions of Uhlig (2005)
- Dynamic effects of the regime switch dummy variables on output can also be analyzed

Comment 3: Narrative Record for Output

- Authors use three narrative and historical sources to identify expectations about changes in prices
- Eggertsson (2008): regime change in fiscal deficits solidified the announcements about the change in inflation expectations; expectations of future output are important
- As inflation expectations changed, were there expectations about corresponding increases in quantities (output or production)?
- The narrative approach may be able to identify this. Example: search for "output".