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: \( \sim 5\% \) 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:

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

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

\[ \beta(L) = \beta_1 L + \ldots + \beta_m L^m \]

- Predicted values of the 7 R&R dummies: \( \text{Prob}(d_{1974}) = 0.86 \), \( \text{Prob}(d_t) > 0.5 \) on 3 dates, \( \text{Prob}(d_t) > 0.25 \) 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:

\[ Y_t = \sum_{i=1}^{2} \beta_i Y_{t-i} + \sum_{i=0}^{3} \alpha_i M_{t-i} + \epsilon_t \]

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

\[ Y_t = \sum_{i=1}^{2} \beta_i Y_{t-i} + \sum_{i=0}^{3} \alpha_i M_{t-i} + \sum_{i=0}^{1} \delta_i DBANKS_{t-i} + \sum_{i=0}^{1} \phi_i DFAILS_{t-i} + \epsilon_t \]
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 \( \text{DBANKS} \) and \( \text{DFAILS} \) 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; \( \text{DFAILS} \) is no longer significant \( t - 1 \)

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<thead>
<tr>
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<tbody>
<tr>
<td>( \text{Shocks to M1}(t - 2) )</td>
<td>0.119</td>
<td>0.205+</td>
</tr>
<tr>
<td>( \text{Shocks to M1}(t - 3) )</td>
<td>0.161</td>
<td>0.277*</td>
</tr>
<tr>
<td>( \text{DFAILS} )</td>
<td>( -0.000085 )</td>
<td>( -0.000046 )</td>
</tr>
<tr>
<td>( \text{DFAILS}(t - 1) )</td>
<td>( -0.00015^* )</td>
<td>( -0.000081 )</td>
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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".