Discussion of “Exits from Recessions” by Bordo and Landon-Lane

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This Paper Provides Support for a Growing Literature

- Exits from recessions have changed in character
- Interwar and postwar recessions, the turn of interest rate ($r^D$ or $r^{FF}$) was fast, between 0 and 2 quarters
- But after 1991 and 2001, turn was much slower, 9 and 10 quarters
  - Sluggish recovery of output
  - Longer lagged recovery of employment and unemployment (“the jobless recovery” was first noticed in 1991-92)
  - “Early Recovery Productivity Bubble”
What the Paper Does

• Part 2. Historical Narrative going back to 1920-21
• Part 3. Descriptive Evidence, Determining the Turning Points
• Part 4. Simple Regression Analysis
• Part 5. Predictions for the Current Episode
This Discussion is Based in Part on New Research

- NBER WP 16380, just released
- “The End of the Great Depression 1939-41: Policy Contributions and Fiscal Multipliers”
- New quarterly data bank 1919-51
- The source of several of my charts
A Central Conceptual Issue Is Not Addressed

• What is a monetary instrument?
• No controversy on $r^D$ or $r^{FF}$
• But is Monetary Base an instrument?
  – Flat 1929-33
• Is M2 an instrument? (Endogeneity 1929-33)
• More controversial, real rates and real MB
  – Authors define relative to current inflation rate. Thus real rate and real MB growth have built-in negative correlation to inflation rate that is not addressed in the analysis
• Examples: 1974-75 negative real rate, 2009 high real rate, both due to oil prices rather than monetary policy instrument
Issues Regarding the Narrative (Part 2)

- 1920-21. Ignores the central role of the collapse in G:

\[
\begin{align*}
G/Y^* & \quad 29.1 \ (1919:Q1) \quad 7.3 \ (1920:Q1) \\
& \quad 11.0 \ (1921:Q1)
\end{align*}
\]

Compare with p. 7 “the cause of the recession was the Fed’s decision . . .”
This Illustrates a Problem with the paper

- A narrow view of economic history, the only thing that causes recessions or ends them is monetary policy

- The Great Depression was entirely caused by an increase in rD in Aug 29 and again in Oct 31

- No mention of MB, which was flat throughout 1929-33 and actually higher in 1933 ($7.2 B) than in 1929 ($7.0 B)

- No mention of endogeneity of money supply to non-monetary causes of the Great Contraction
Other Examples of a Narrow Interpretation of History

• 1937-38. No mention of contractionary fiscal policy as Social Security taxes were introduced before benefits were paid

• 1938-41. Role of monetary vs. fiscal policy, see our new paper

• 1945-48. No mention of price controls or the inflationary impact of their termination on July 1, 1946

• 1953-54. No mention end of Korea war spending

• 1973-75. Role of oil shocks is recognized but not the exchange rate behavior post-Bretton Woods or the inflationary impact of the end of price controls in mid-1974.

• 1979-80, 81-82. No mention second round oil shock or appreciation of dollar 1980-85.
Part 3, Descriptive Evidence

• This would have been easier to follow with a few simple time series charts

• What you’ll see next for the interwar period
  – Pitfalls of using H-P trend method with parameter 1600 to measure the output gap
  – Improved interwar trend that captures the sharp differences between 1920s and 1930s
  – Interwar Comparison of discount rate with improved output gap
H-P 1600 Trend for Interwar Years? Utter Nonsense
Actual to Trend Log Output Ratio using HP(1600) Trend vs. Exponential Trend

Percent Log Ratio of Actual to Trend Real GDP, HP(1600) and Exponential-through-Benchmarks, 1913:Q1-1954:Q4
My Output Gap vs. FRNY Discount Rate, Quarterly, 1919-51
Previous Slides Largely Confirm Paper’s Interwar Timing

• Policy was prompt and countercyclical during the 1920s except perversely procyclical in 1920

• Early tightening in 1932 while Y/Y* was still declining

• No discount rate policy at all between 1935 and 1950

• Next, postwar comparison of nominal Fed Funds rate with unemployment rate
Fed Funds Rate and Unemployment Rate, 1954-2010

Percent

Federal Funds Rate

Unemployment Rate

Source: Federal Reserve Database and Bureau of Labor Statistics
Summary of Fed Funds Rate vs. Unemployment Rate

- Dominance of unemployment rate is clearly seen
- Pre-1990 strongly countercyclical Fed Funds rate and movements of U rate coincide with NBER dates
- Post-1990 Fed Funds rate response delayed until unemployment begins to decline, because of jobless recoveries in which U lags NBER
- Paper’s conjectures in Part 5 about Fed’s response in 2010 are off base because it ignores the post-1990 change
Fed Funds Rate and Inflation Rate, 1954-2010

Federal Funds Rate

Inflation Rate

Source: Federal Reserve Database, BEA NIPA Tables and Bureau of Labor Statistics
Fed Funds rate vs. Inflation

• Much looser relationship than with unemployment
• Inflation provides no information on Fed funds rate responses after 1990
• Next slide. Endogeneity of real Fed funds rate
Fed Funds Rate and Inflation Rate, 1954-2010

Inflation Rate

Real Federal Funds Rate

Source: Federal Reserve Database, BEA NIPA Tables and Bureau of Labor Statistics
Regression Methodology

- Imagine that everything responded one quarter after the NBER trough quarter
- Dependent variables would be 1 1 1 1 1 1
- Explanatory variables would be 1 1 1 1 1 1
- Regression equation \( y = 1 + 0 \times x \)
- How do they get positive and significant betas?
- Their results hinge on the pre vs post 1990 change in the lag of the fed funds rate and of the unemployment rate
- Data looks more like 1 1 1 1 1 1 1 9 9
- Regressed on 1 1 1 1 1 1 1 9 9
Other Regression Comments

• They have too many policy variables, should focus on rates and cut out nominal M2, real rate, real MB, and real M2

• They have too many explanatory variables, should focus on inflation and unemployment

• Strong negative correl U rate vs. Y/Y* makes it redundant to use both

• Their measure of Y/Y* for the postwar is flawed as in the interwar period, helping to explain why unemployment rate performs better
H-P 1600 vs. Kalman Trend
Postwar, Notice 2008-10
Take Previous Graph and Add 8-quarter Change in Actual GDP
To Take a Broader View, Compare Their Method to Standard Taylor Rule Plots

- One can estimate the Taylor Rule responses to illustrate that the Fed switched from an inflation target to a gap target (U or Y) after 1990.

- Taylor Rule plots can illustrate deviations of Fed policy from a rule in a way that the paper’s methodology cannot.

- Magnitudes matter, not just timing.

- Taylor Rule plots don’t just study exits from recessions but place all periods, expansions and recessions, on equal footing.

- Next chart, Taylor Rule, nominal Fed funds rate responds by 1.5 to inflation gap and by 1.0 to output gap.
Taylor Rule vs. Actual Federal Funds Rate, 1970-2010

Federal Funds Rate

Taylor Rule 1

Source: Federal Reserve Database and BEA NIPA Tables
Last Comment, Endogeneity of Money Supply
What Explains Most of the Rise in M1, G Itself

- Actual
- Basic VAR Fcast
- G
Conclusions

• The paper provides a new way of looking at the timing of Fed policy responses at the ends of NBER-dated recessions

• The basic finding is correct: fast countercyclical responses pre-1990 and slower responses post-1990 timed to U Rate

• Paper’s predictions of a quick Fed response in 2010 are off base because it doesn’t pay attention to its own findings

• Many problems with the interpretation and execution. Doubtful that this method will replace analysis of Taylor Rule regressions and plots

• Scope for many more VAR-type analyses of controversial topics in the interwar period, including the endogeneity of monetary variables, the role of G vs. M in causing the 1920-21 recession, and much more