PANEL DISCUSSION: DATING BUSINESS CYCLES

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Any opinions expressed here are mine and do not necessarily reflect those of other Federal Open Market Committeee members.

NBER DATING PROCESS

- Mitchell's dissertation, 1913.[1]
- Burns and Mitchell, 1946.[2]
- Process developed and put in place without being informed by modern macroeconomic theory.
- Theory offers guidance about more natural summary measures of economic performance.
- Binary nature is bothersome and may be harmful if it acts as an informational signal.

1. Mitchell, Wesley C., *Business Cycles*, 1913.

2. Burns, Arthur F., and Wesley C. Mitchell, *Measuring Business Cycles*, National Bureau of Economic Research, New York, NY 1946.

STATISTICAL MODELS: AUTOMATION

- Why do this via judgement call by the Dating Committee?
- Statistical models exist and do a better job.
- *Everyone can replicate the recession call.*
- This would be an important improvement.

BINARY NATURE

- Throws away information—why?
- Simple summary of the state of the economy should be continuous.
- Two-state nature influences research questions and analysis.
- "Recession" is an artificial construction putting "special emphasis" on certain time periods.

BINARY SIGNALS AS HARMFUL SUMMARY STATISTICS

- We know expectations are critical to how the macroeconomy operates.
- Recession call is a signal—it can act as a coordinating device.
- We want firms to assess their own markets and prospects for earnings.
- Sending a signal can send firms into "recession state."
- Creates amplified and spurious cyclical patterns in economy.

EXAMPLE: LEARNING AND THE GREAT MODERATION*

- Regime-switching shocks; two-state Markov.
- Households and firms must infer state via Bayesian inference.
- Confusion about states moderates behavior.
- Clarity about states exacerbates behavior: "Sounding the siren."

* Bullard, James and Aarti Singh, "Learning and the Great Moderation," Federal Reserve Bank of St. Louis Working Paper 2007-027B, June 2007, Revised March 2009.

UNDEFINED LEVEL OF ACTIVITY FROM BURNS AND MITCHELL

- The Burns and Mitchell idea of leaving the level of activity undefined is mystifying.
- Theory gives us guidance about what we would like to summarize.
- Theory says: utility.
- This would suggest an index of consumption and leisure.
- Most approaches to summarizing the economy have steadfastly avoided leisure measures.
- But: consider comparisons of the U.S. and European workplace.
- WWII was not a utility-raising event.

ZERO AS A BENCHMARK NUMBER

- Declines in the level of activity as defining events.
- This makes little sense from a growth theory perspective.
- We expect economies to grow on average.
- Growth averages differ across economies.
- Implies "recession" experiences differ across economies because of arbitrary definition.
- More sensible "two standard deviations below normal."

Hodrick–Prescott Filtering and Related Methods

- More consistent with established growth theory.
- Trends can be tracked.
- Below par – above par performance half the time.
- Avoids the alarm bell problem.
- Controls for differing growth rates across economies.

PROSPECTS FOR REFORM

- Recession dating has become part of the American psyche.
- It has been handed to us from a pre-modern theory era.
- Arguably harmful.
- Easy ways to improve:
  - Statistical methods could automate the process.
  - Tie closer to standard theory for ideas about what to measure.