

# Fear of Lift-off: Uncertainty, Rules and Discretion in Monetary Policy Normalization

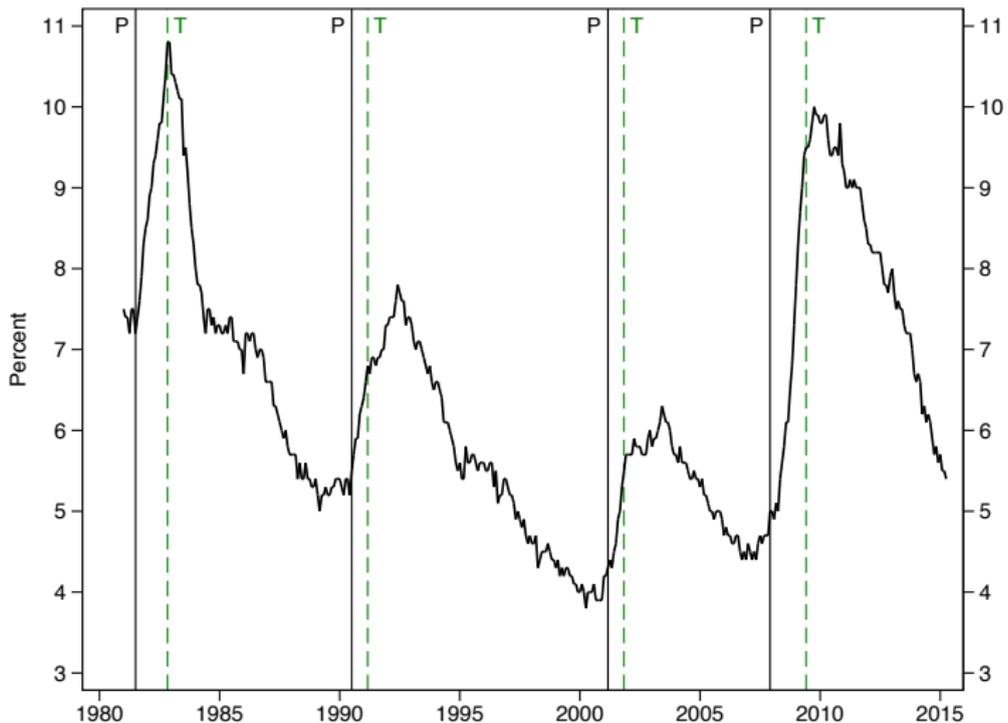
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Federal Reserve Bank of St Louis  
St Louis, June 3, 2015

# Overview

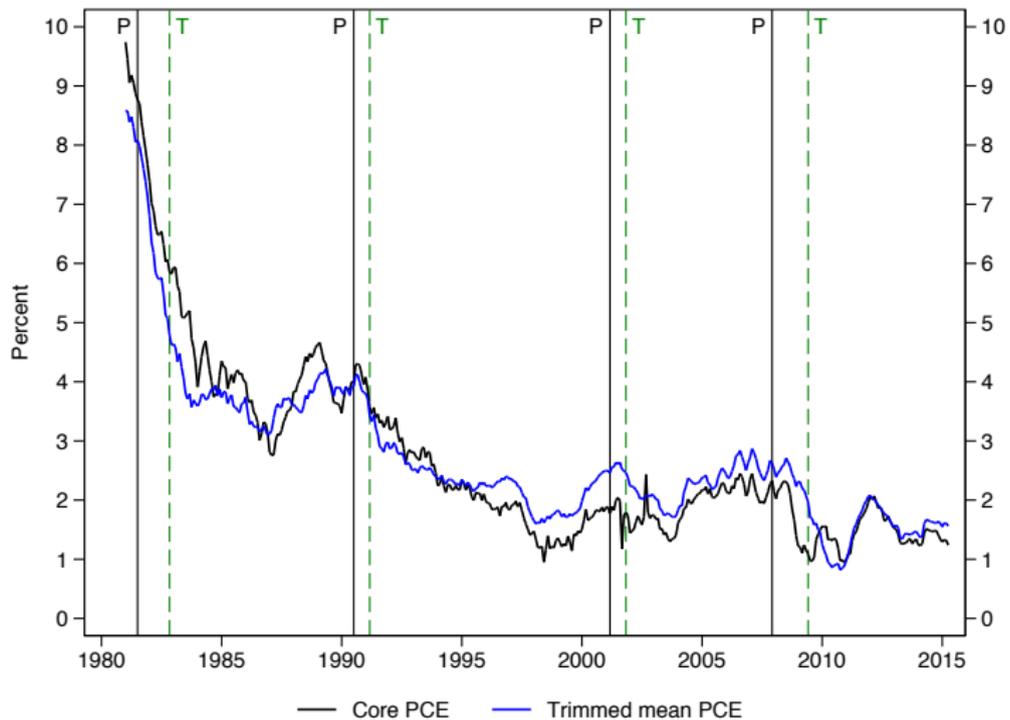
- ▶ Four recessions.
- ▶ Fear of lift-off.
- ▶ Systematic policy, uncertainty and discretion.
- ▶ An independent central bank with a muddled mandate
- ▶ The case for rules.

# Four recessions: Unemployment

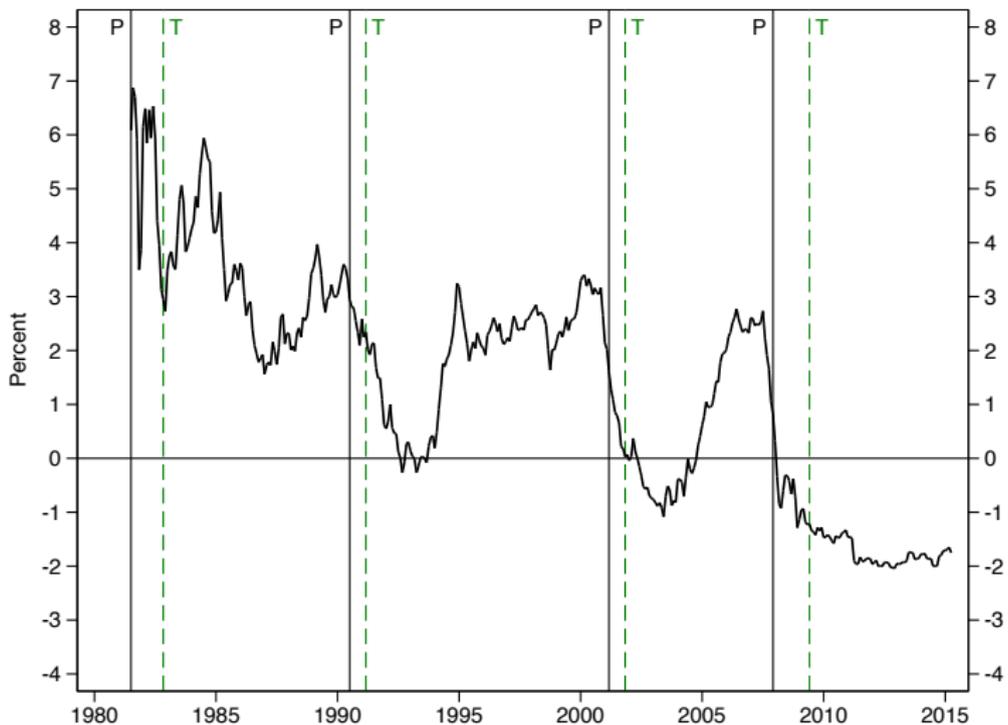


Vertical lines denote business cycle peaks (P) and troughs (T).

# Four recessions: Inflation

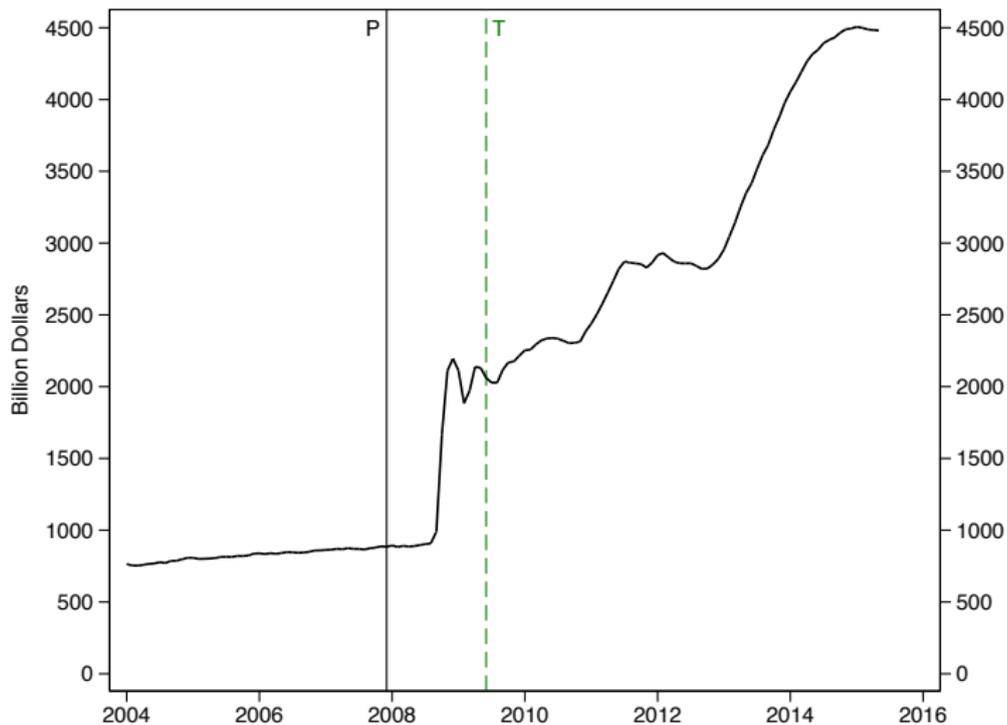


# Four recessions: Real interest rate



Real rate interest reflects the difference of the 12-month T-bill rate and year-ahead inflation expectations (SPF quarterly survey).

# Additional policy accommodation through QE



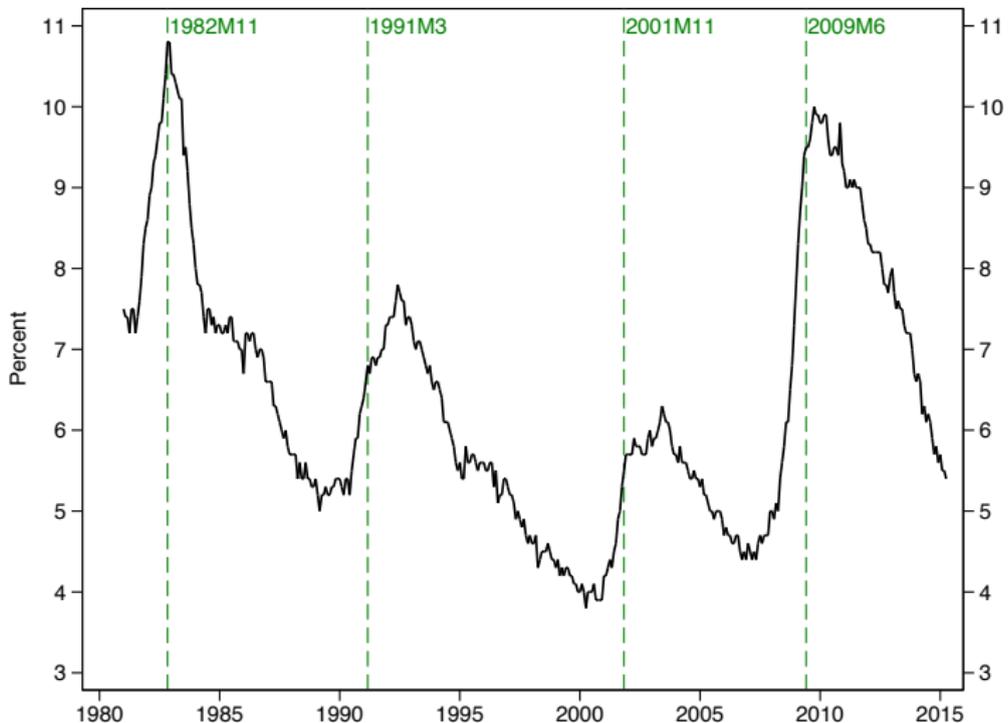
Size of Federal Reserve balance sheet.

# Unemployment after the end of recessions

“[F]ollowing every previous U.S. recession since World War II, the unemployment rate has returned close to its pre-recession level, and, although the recent recession was unusually deep, I see little evidence of substantial structural change in recent years.”

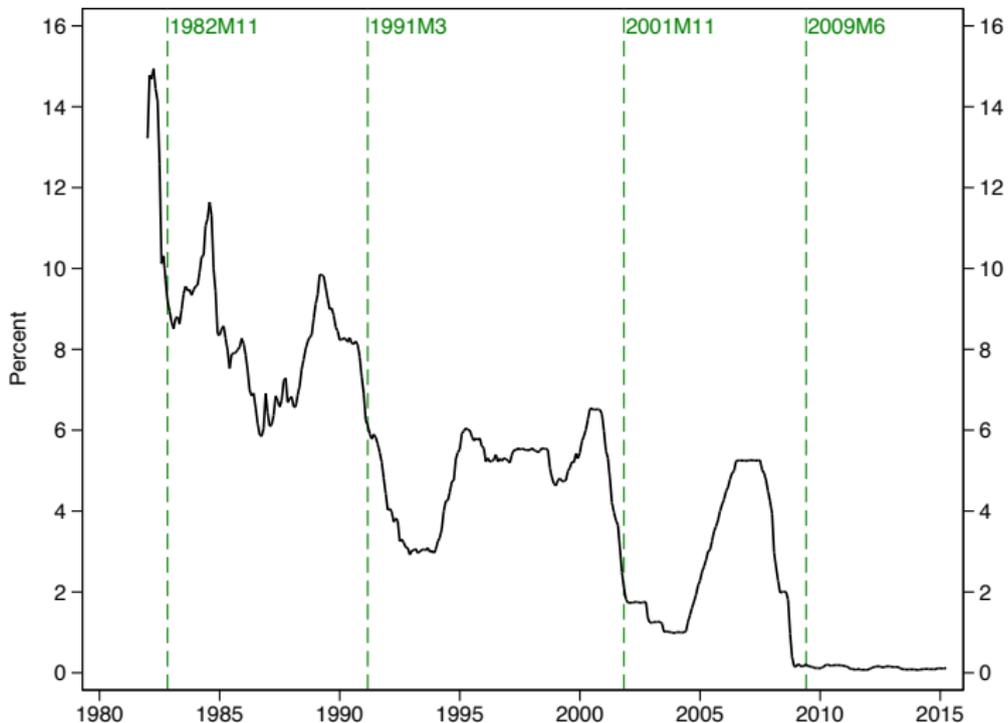
(Ben Bernanke, August 31, 2012.)

# Unemployment after the end of recessions



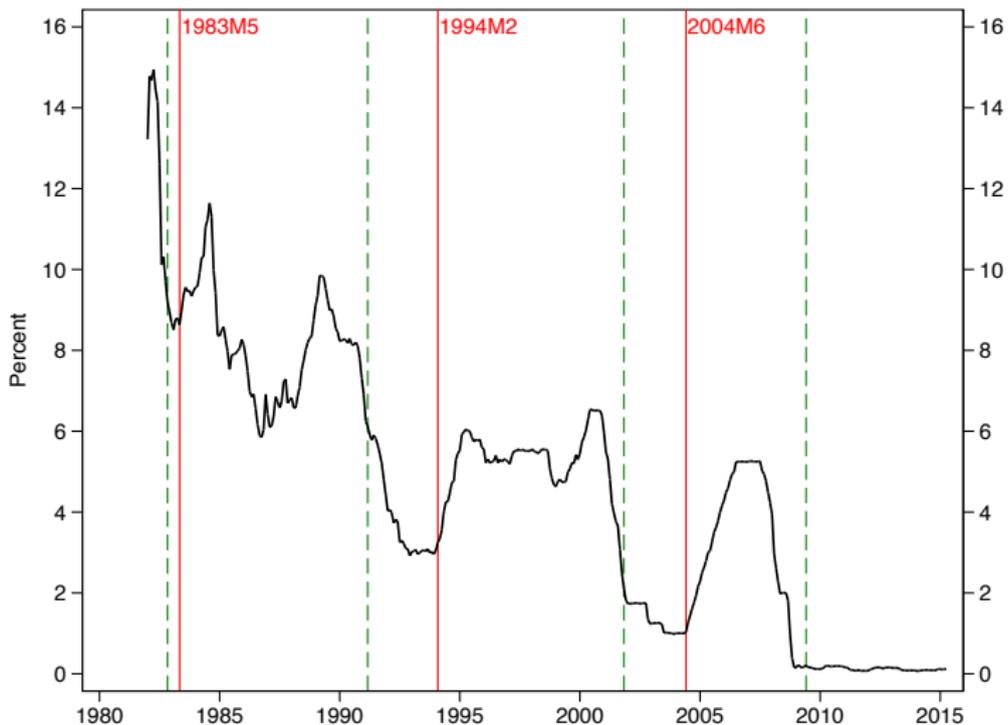
Green vertical lines denote business cycle troughs.

# Fed funds rate after the end of recessions



Green vertical lines denote business cycle troughs.

# Fed funds rate and lift-off



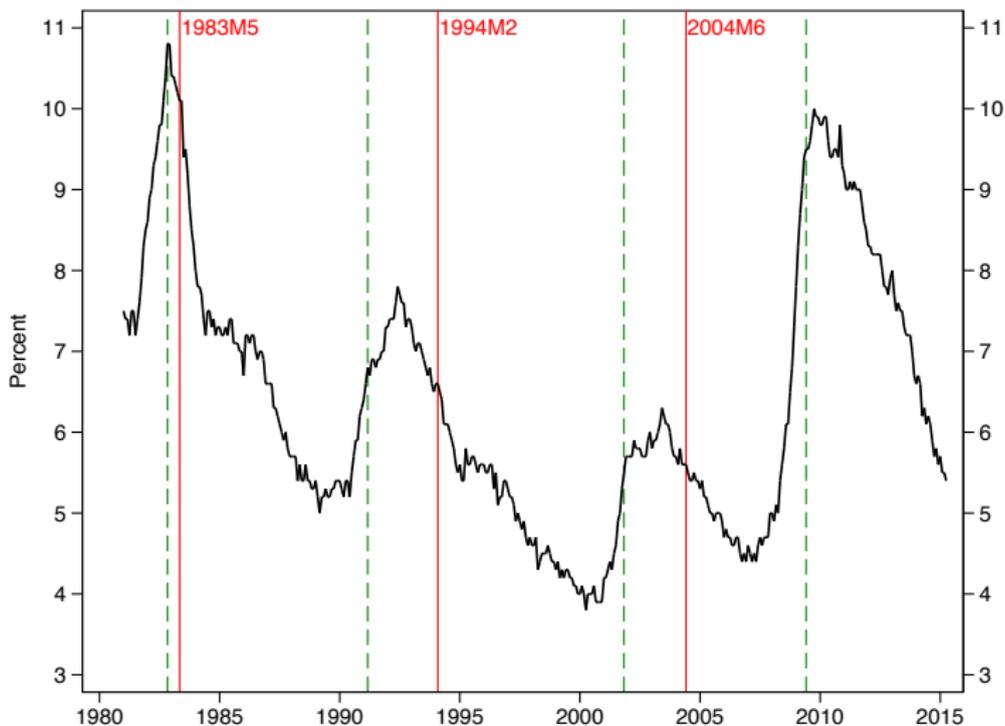
Green vertical lines denote business cycle troughs. Red vertical lines denote the month of lift-off following business cycle troughs.

# Fear of lift-off?

## Policy lift-off after the end of four recessions

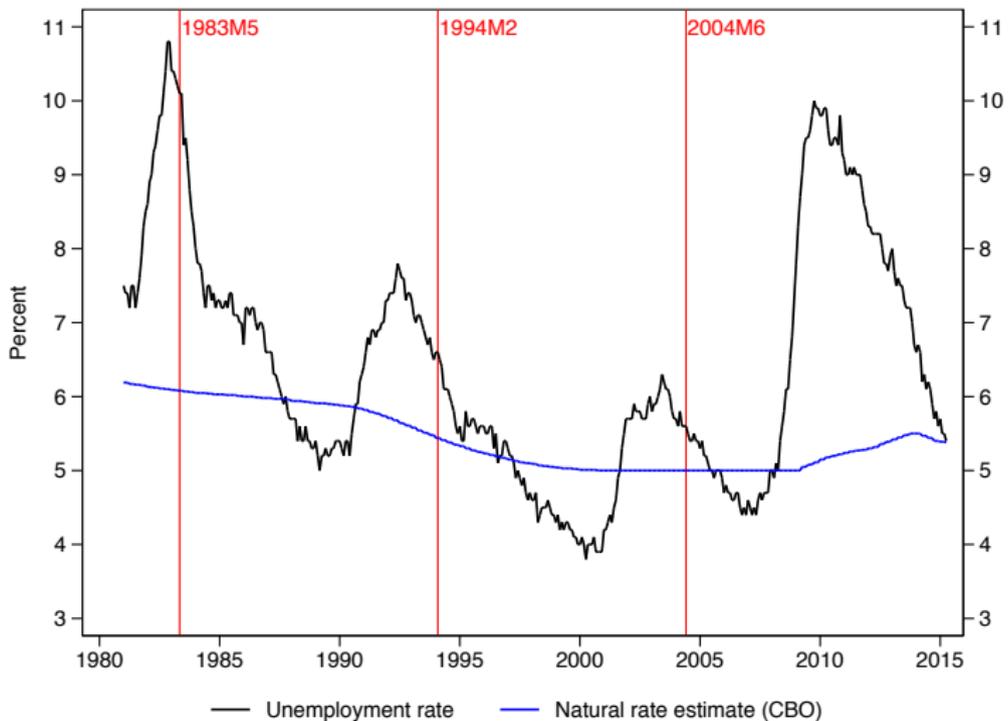
Recession dates		Policy lift-off	
Peak	Trough	Lift-off month	Months after trough
Jul 1981	Nov 1982	May 1983	7
Jul 1990	Mar 1991	Feb 1994	35
Mar 2001	Nov 2001	Jun 2004	32
Dec 2007	Jun 2009	?	72+

# Four recessions: Unemployment and lift-off



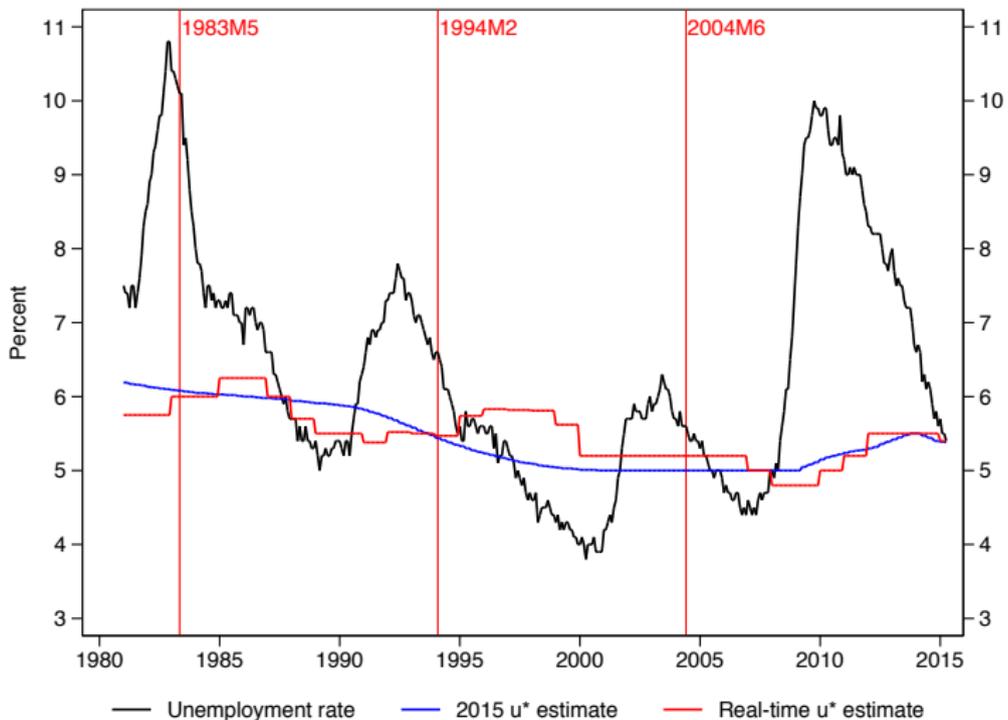
Green vertical lines denote business cycle troughs. Red vertical lines denote the month of lift-off following business cycle troughs.

# Lift-off and full employment



The natural rate of unemployment reflects the latest (2015) CBO estimates.

# Real-time vs revised natural-rate estimates



Real-time estimates reflect CBO estimates published during each year since 1981.

# Fear of lift-off?

## Unemployment rate and policy lift-off

Dates		Unemployment rate		
Recession Trough	Lift-off month	Actual	Natural (real-time)	Gap
Nov 1982	May 1983	10.1	6.0	4.1
Mar 1991	Feb 1994	6.4	5.5	0.9
Nov 2001	Jun 2004	5.6	5.2	0.4
Jun 2009	?	?	5.4*	?

\* Latest CBO estimate for the natural rate for 2015 (5.4%).

# What is the natural rate?

## Estimates of the natural rate of unemployment

	Date	Estimate
SPF median	August 2014	5.5
Bluechip mean	October 2014	5.4
FOMC Central Tendency CBO	December 2014	5.2–5.5
Bluechip mean	January 2015	5.4
FOMC Central Tendency	March 2015	5.1
	March 2015	5.0–5.2

# What is the Fed's mandate?

The Board of Governors of the Federal Reserve System and the Federal Open Market Committee shall maintain long run growth of the monetary and credit aggregates commensurate with the economy's long run potential to increase production, so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates.

(Federal Reserve Act, Section 2A, 1977 amendment.)

# Implications of a muddled mandate

- ▶ Real-time uncertainty on what constitutes “maximum employment” and incompatibility with “stable prices” invites discretion.
- ▶ Discretion leads to short-term focus on what is most salient problem.
- ▶ Most salient problem following a painful recession is unemployment.
- ▶ Excessive focus on reducing unemployment leads to stop-go cycles.

# What can policymakers deliver?

- ▶ Even with best intentions, policymakers are human.
- ▶ Capacity to achieve the “optimal” performance corresponding to an infinite horizon optimization problem under uncertainty?
- ▶ A public choice perspective?
- ▶ A cognitive psychology perspective?

## Friedman's footnote

The major comment is the omission of what I have increasingly come to regard as Hamlet on this issue [rules versus discretion], namely the public choice perspective. To illustrate . . . . you talk about a loss function for "the policymaker" that includes solely inflation and the deviation of real output from a target level. If we bring this down to earth, these are likely to be only very indirectly related to the real objectives of the actual policymakers. From revealed preference, I suspect that by far and away the two most important variables in their loss function are avoiding accountability on the one hand and achieving public prestige on the other. A loss function that contains those two elements as its main argument will I believe come far closer to rationalizing the behavior of the Federal Reserve over the past 73 years than one such as you have used.

(Quoted in Fischer, 1990.)

# Akerlof's procrastination

Procrastination occurs when present costs are unduly salient in comparison with future costs, leading individuals to postpone tasks until tomorrow without foreseeing that when tomorrow comes, the required action will be delayed yet again.

...

A central principle of modern cognitive psychology is that individuals attach too much weight to salient or vivid events and too little weight to nonsalient events.

(Akerlof, 1990.)

# A legacy of the Great Recession

- ▶ The Federal Reserve's muddled mandate to achieve maximum employment and price stability invites destabilizing discretion.
- ▶ After the 1970s inflation (when the costs of inflation were more salient) the Fed circumvented this difficulty by interpreting price stability as its primary objective.
- ▶ This changed during the Great Recession (when the costs unemployment became again more salient):

*"The Federal Open Market Committee (FOMC) is firmly committed to fulfilling its statutory mandate from the Congress of promoting maximum employment, stable prices, and moderate long-term interest rates." (FOMC, 2012)*

# How can systematic policy be best assured?

- ▶ An independent central bank with a clear primary mandate to preserve price stability.
- ▶ With its current mandate, Fed independence is insufficient to ensure systematic policy.
- ▶ Even with best intentions, central bank independence is not enough to protect against human nature.
- ▶ The central bank should eschew discretion in favor of a transparent, easy to monitor strategy—a policy rule.

# Which rule?

- ▶ Simple policy rules have strengths and weaknesses relative to optimal adaptable rationally designed plans.
- ▶ The central bank is best placed, with its research, to develop a simple rule that reflects the present state of knowledge (and ignorance), and is robust to error.
- ▶ The central bank should also plan periodic reviews and adaptation of the rule it develops.
- ▶ The key is to eschew discretion in favor of a transparent, easy to monitor strategy.
- ▶ Follow Odysseus (Ulysses) to overcome the temptation of discretion.

# Simple policy rules and natural rates

Level rule (Taylor):

$$i = r^* + \pi + a(\pi - \pi^*) + b(u - u^*)$$

Difference rule (Wicksell):

$$\Delta i = a(\pi - \pi^*) + b\Delta u$$

$\pi^*$ , inflation target.

$\pi - \pi^*$ , inflation gap.

$r^*$ , the natural rate of interest.

$u^*$ , the natural rate of unemployment

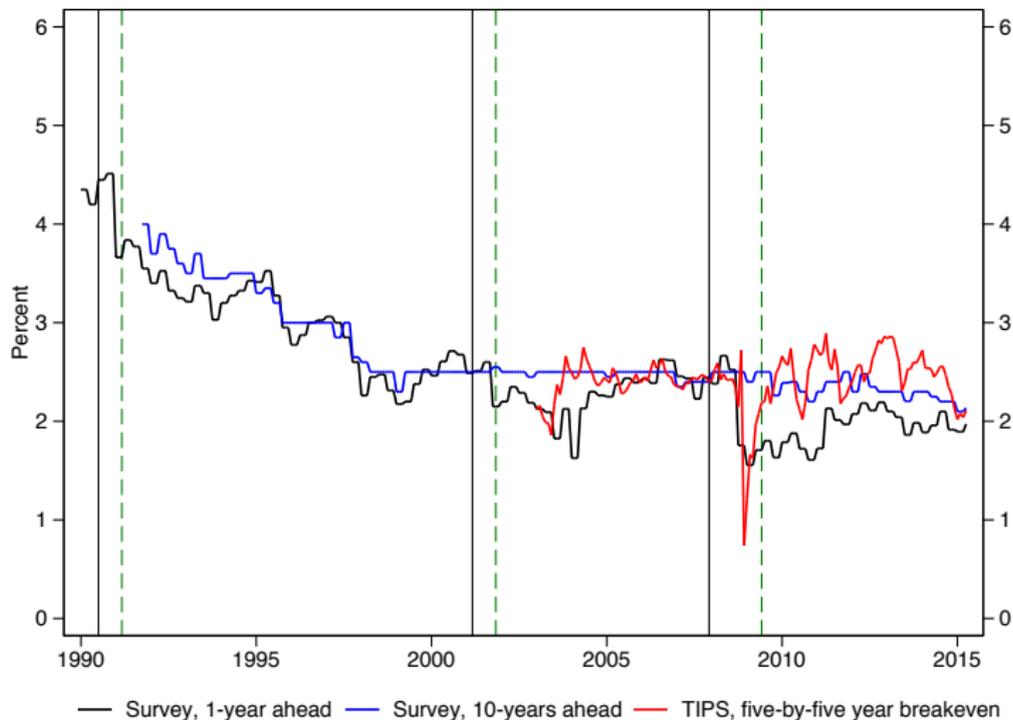
$u - u^*$ , unemployment gap

$\Delta u$ , the change in unemployment.

# Why worry now?

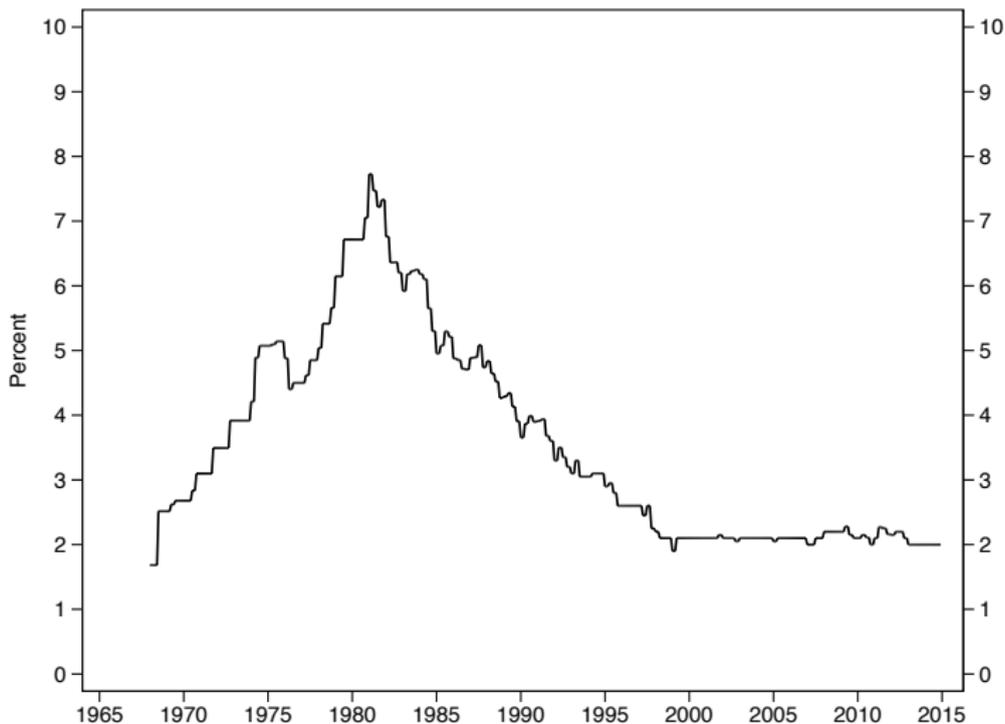
- ▶ Fed discretionary action and excessive monetary policy accommodation has been with us for several years with no consequences on inflationary psychology.
- ▶ Need to recognize generational dynamics and learning.
- ▶ Fed has been benefiting from well-anchored inflation expectations, the result of a generation of systematic policy that stressed the primacy of price stability.
- ▶ The historical experience suggests it would be a grave error to take this stability of expectations for granted.

# Well-anchored inflation expectations



Inflation expectations, survey and market-based measures.

... must not be taken for granted



Long-term inflation expectations proxy in FRB/US model (PTR).

# Asymmetric risks

- ▶ Fear of lift-off at present raises the odds that the Fed will soon be confronted with a costly dilemma:
  - ▶ Tighten policy abruptly to control inflation, precipitating a recession.
  - ▶ Let the inflation genie out of the bottle to avoid recession.
- ▶ Multiplier uncertainty raises costs of inaction.
- ▶ A significant benefit of an earlier lift-off would have been the added information about the effectiveness of the Fed's normalization strategy.
- ▶ Fear of lift-off makes an orderly unwinding of monetary policy accommodation virtually impossible.

## Martin's punch bowl

In the field of monetary and credit policy, precautionary action to prevent inflationary excesses is bound to have some onerous effects—if it did not it would be ineffective and futile. Those who have the task of making such policy don't expect you to applaud. The Federal Reserve, as one writer put it, after the recent increase in the discount rate, is in the position of the chaperone who has ordered the punch bowl removed just when the party was really warming up.

(Martin, October 19, 1955.)