Chapter 16: Alternative Perspective on Stabilization Policy

Learning objectives

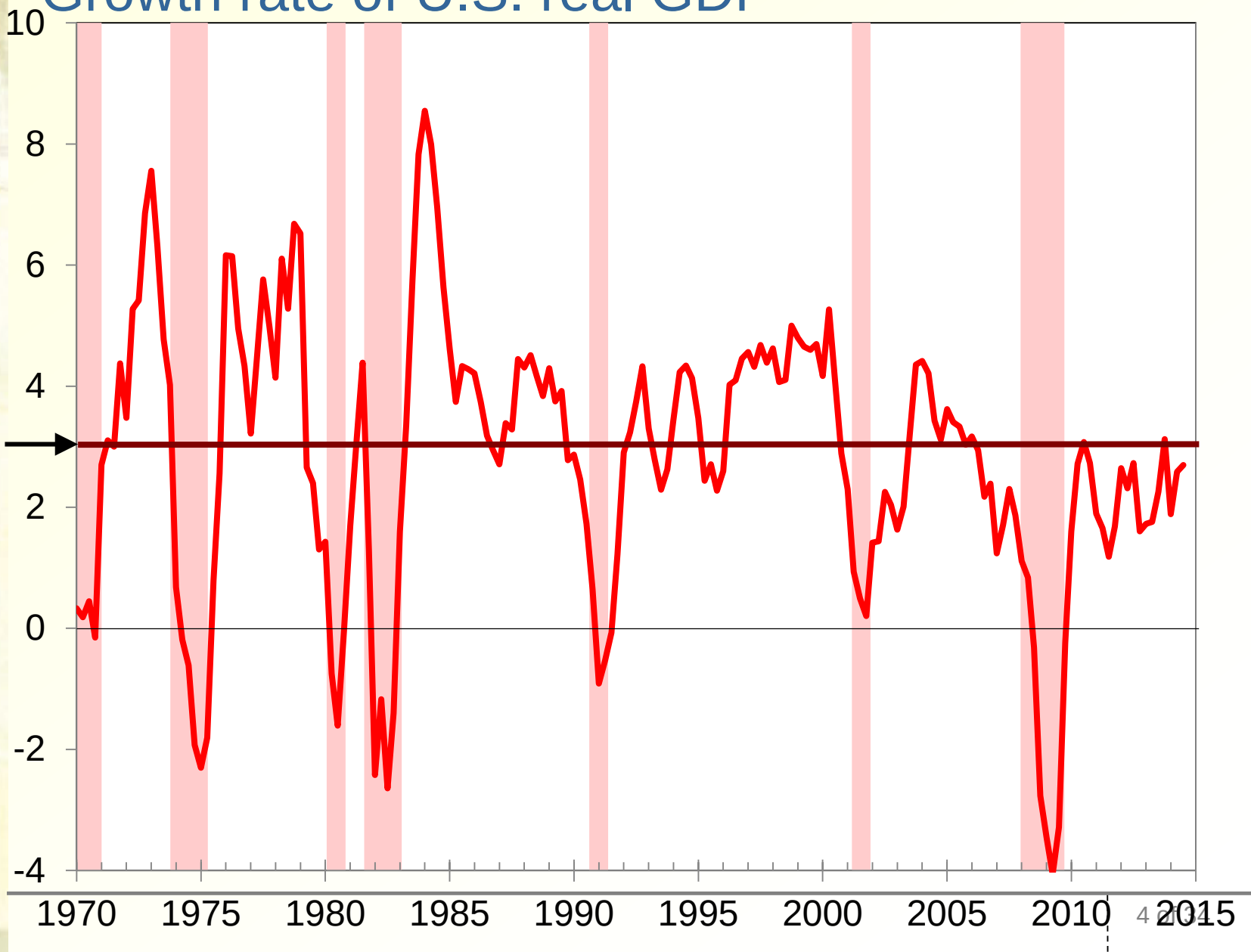
In this chapter, you will learn about two policy debates:

1. Should policy be active or passive?
2. Should policy be by rule or discretion?

Question 1:

Should policy be active or passive?

Growth rate of U.S. real GDP



Increase in unemployment during recessions

peak	*trough*	*increase in no. of unemployed persons (millions)*
July 1953	May 1954	2.11
Aug 1957	April 1958	2.27
April 1960	February 1961	1.21
December 1969	November 1970	2.01
November 1973	March 1975	3.58
January 1980	July 1980	1.68
July 1981	November 1982	4.08
July 1990	March 1991	1.67
March 2001	November 2001	1.50
December 2007	June 2009	6.14

Arguments for active policy

- Recessions cause economic hardship for millions.
- *…it is the continuing policy and responsibility of the Federal Government to…promote full employment and production.* (U.S. Employment Act of 1946)

  …*to support the economic objectives of the government in relation to growth and employment.* (Bank of England Act of 1998)
- The model of aggregate demand and supply (Chapters 10-14) shows how fiscal and monetary policy can respond to shocks and stabilize the economy.

Arguments against active policy

1. Long & variable lags

inside lag:

the time between the shock and the policy response

- takes time to recognize shock
- takes time to implement policy, especially fiscal policy

outside lag:

the time it takes for policy to affect economy

If conditions change before policy's impact is felt, then policy may end up destabilizing the economy.

Automatic stabilizers

- definition:
  policies that stimulate or depress the economy when necessary without any deliberate policy change.

- Examples:
  - income tax
  - unemployment insurance
  - most welfare programs

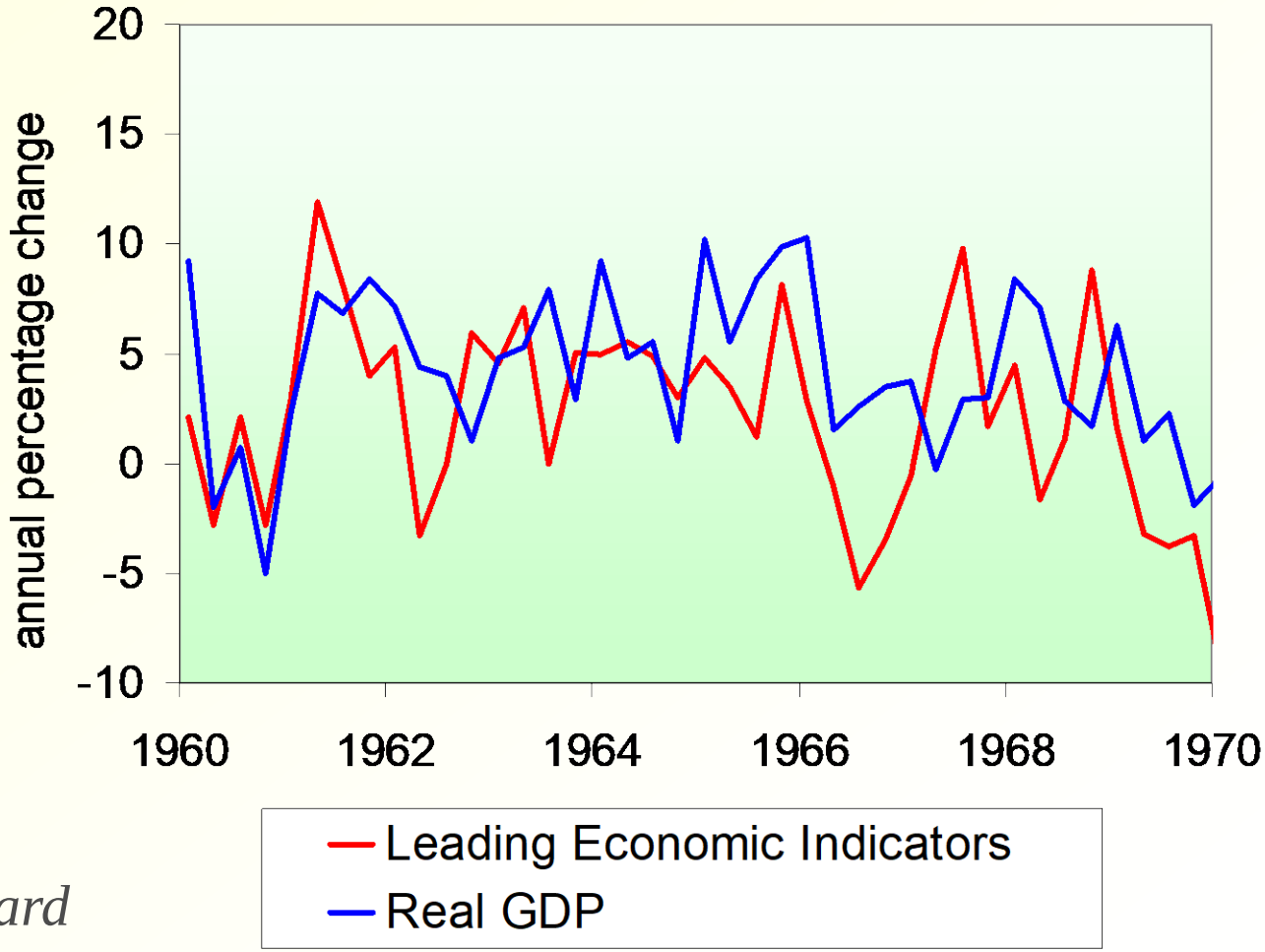
Forecasting the macroeconomy

Because policies act with lags, policymakers must predict future conditions.

Ways to generate forecasts:

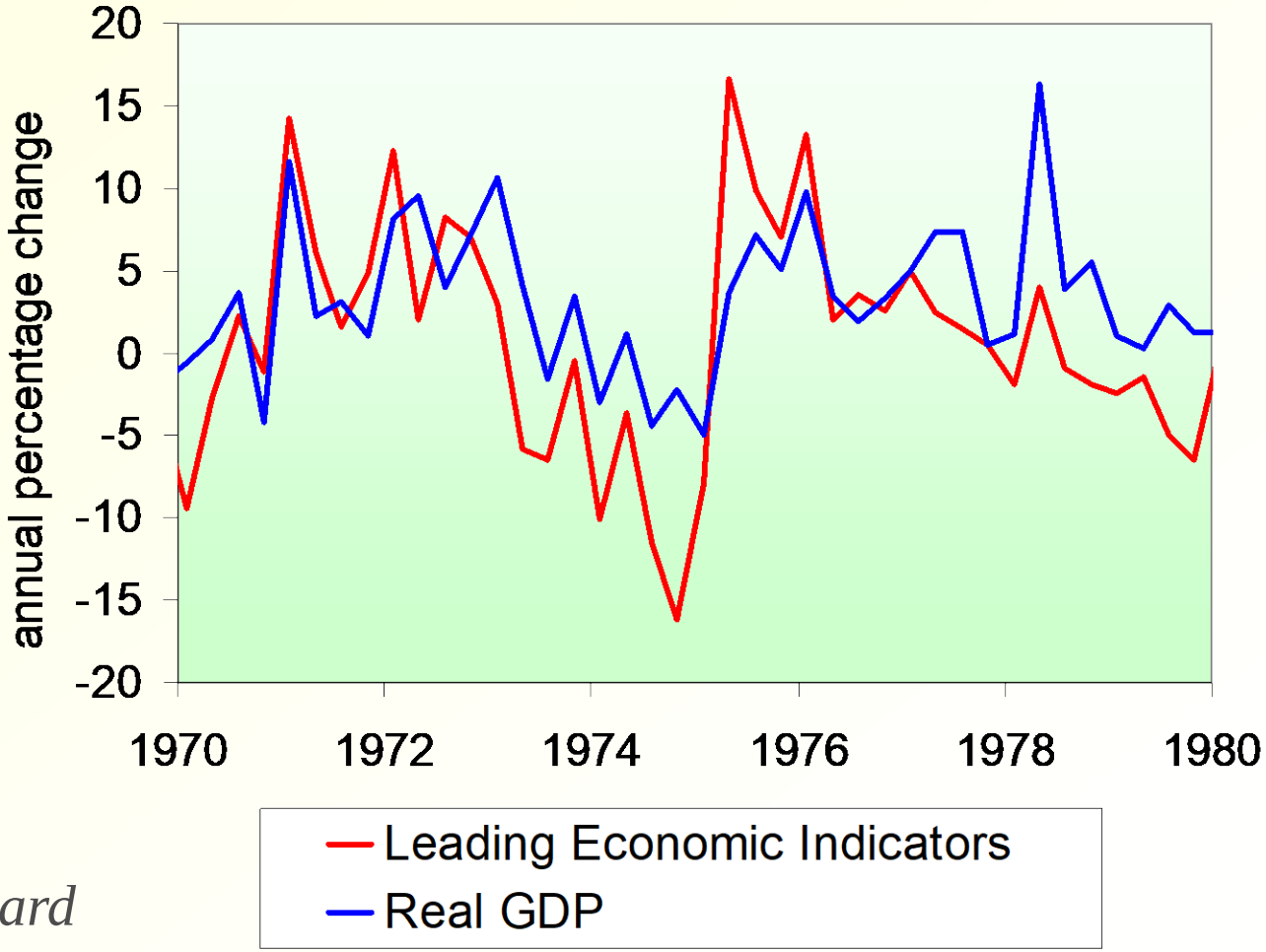
- *Leading economic indicators(LEI):* data series that fluctuate in advance of the economy
- *Macroeconometric models:* Large-scale models with estimated parameters that can be used to forecast the response of endogenous variables to shocks and policies

The LEI index and real GDP, 1960s



source of LEI data:
The Conference Board

The LEI index and real GDP, 1970s



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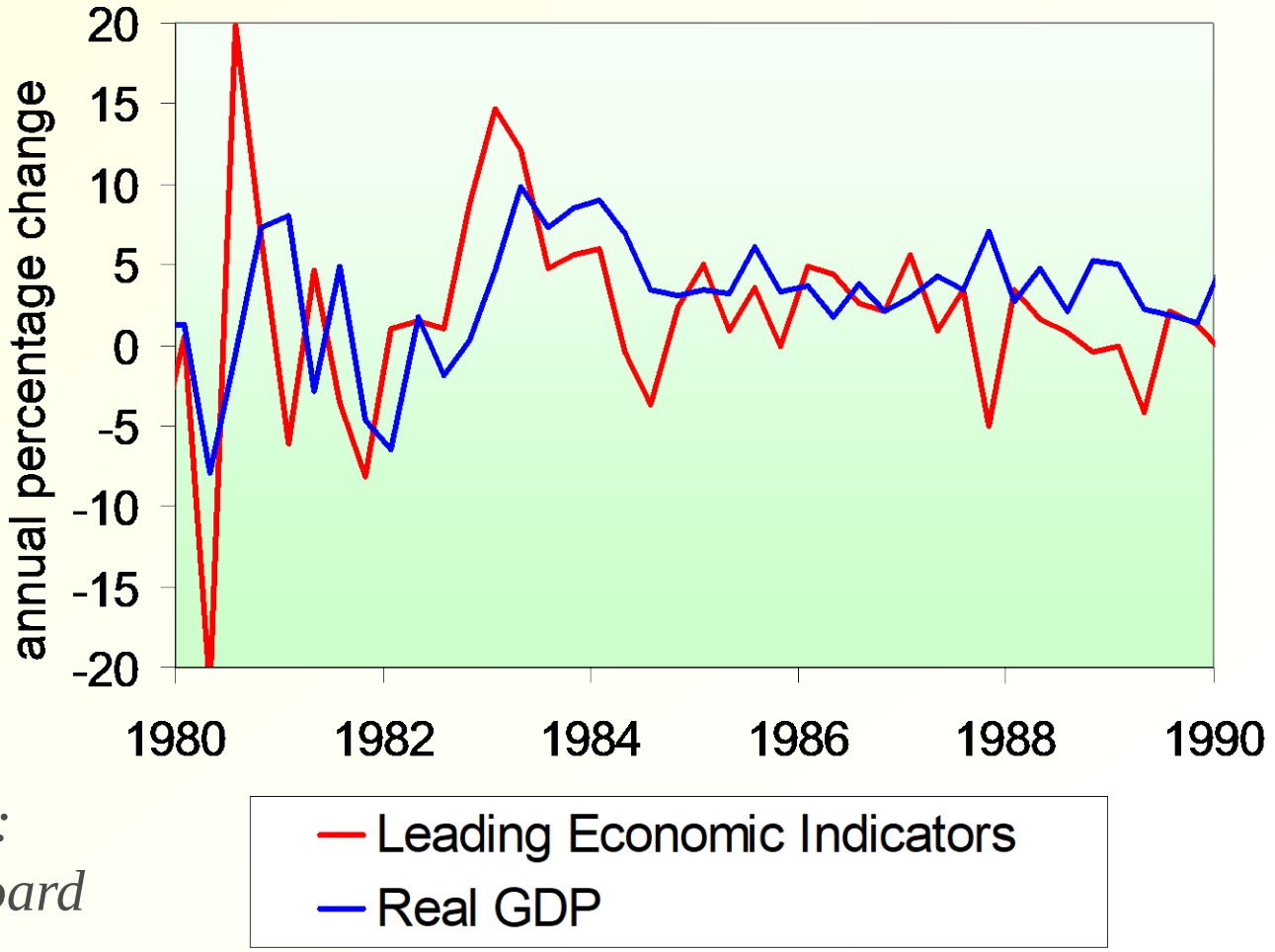
The LEI index and real GDP, 1980s



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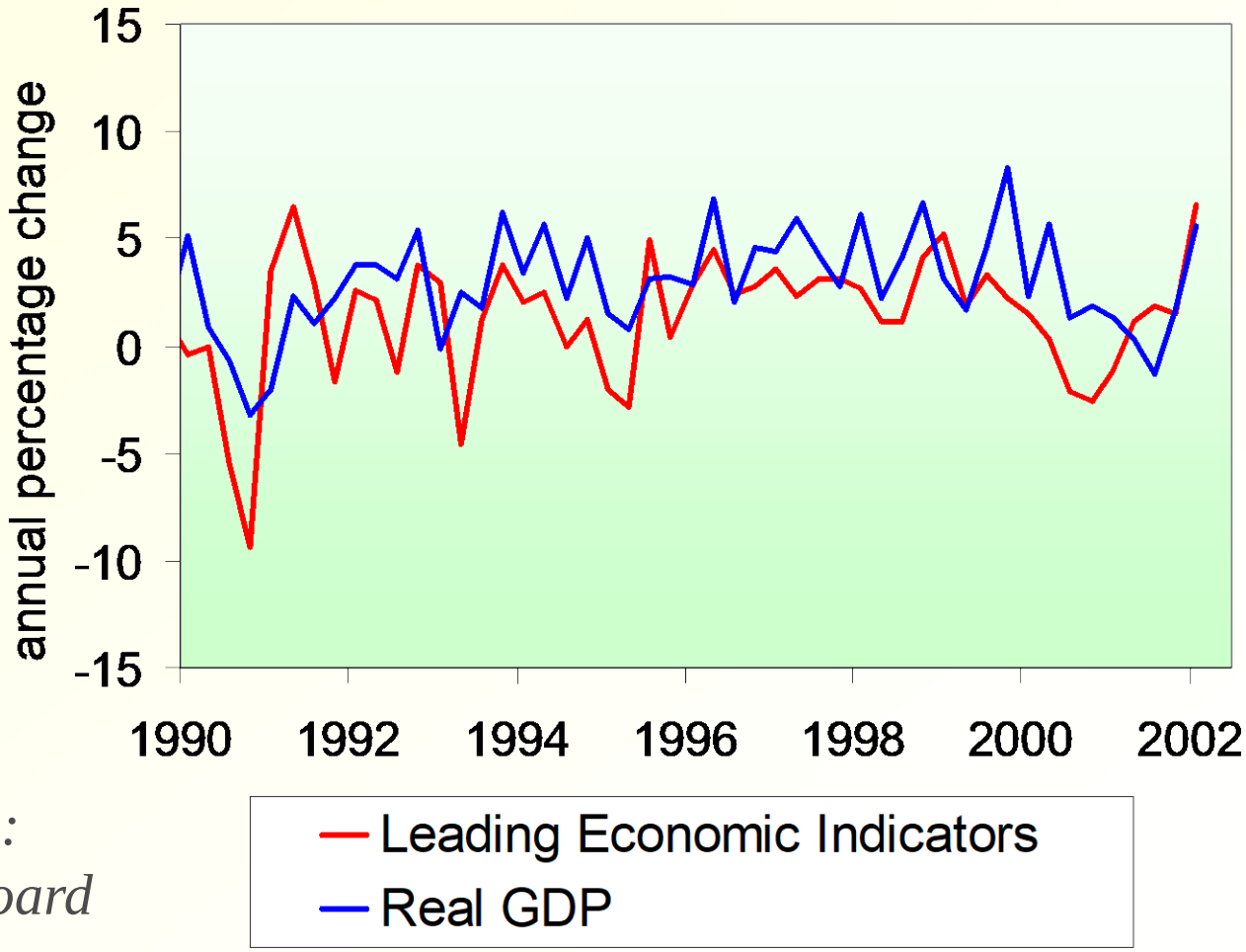
The LEI index and real GDP, 1990s



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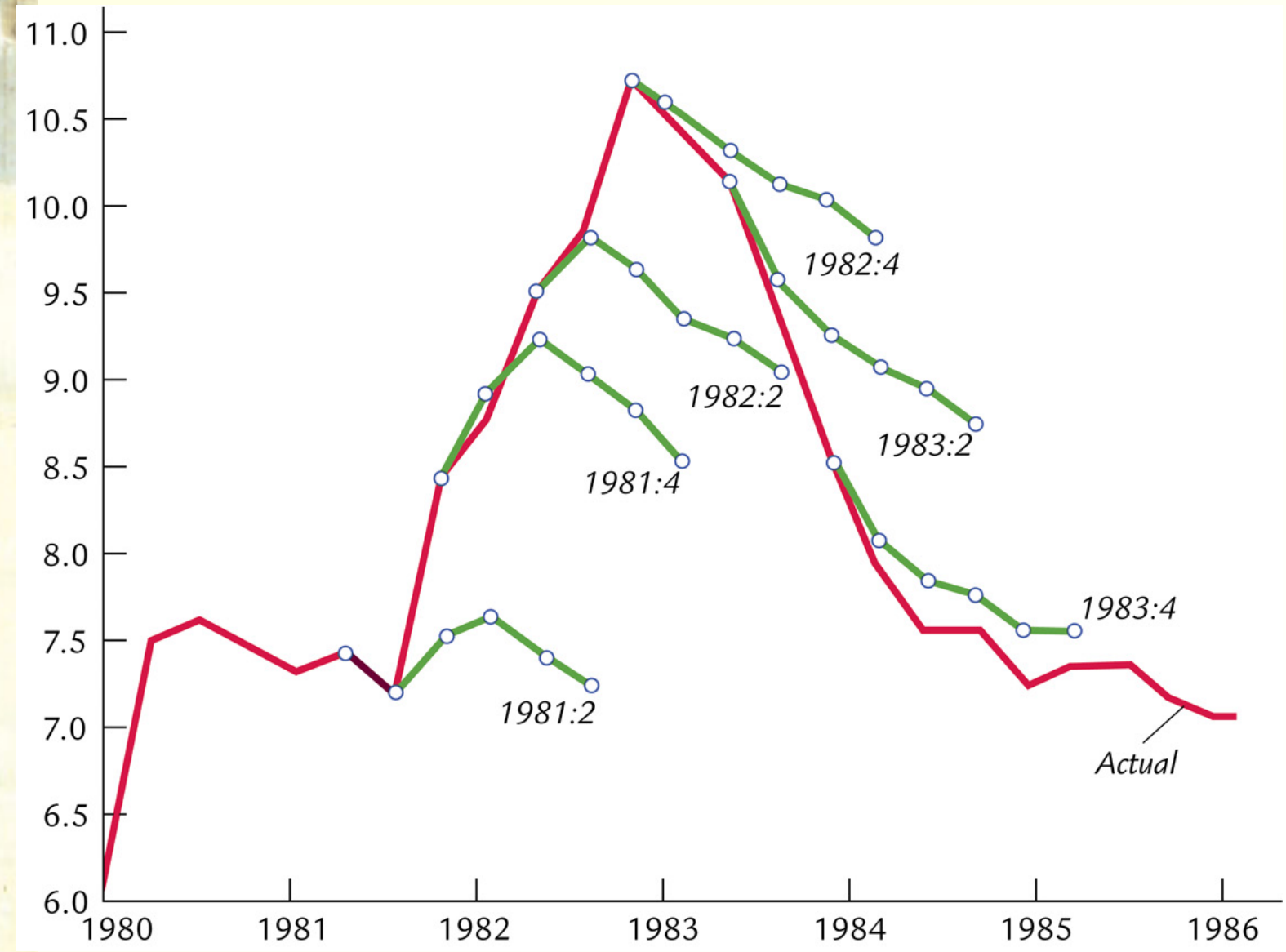
The Conference Board

Mistakes forecasting the 1982 recession



Forecasting the macroeconomy

Because policies act with lags, policymakers must predict future conditions.

The preceding slide showed that the forecasts are often wrong.

This is one reason why some economists oppose policy activism.

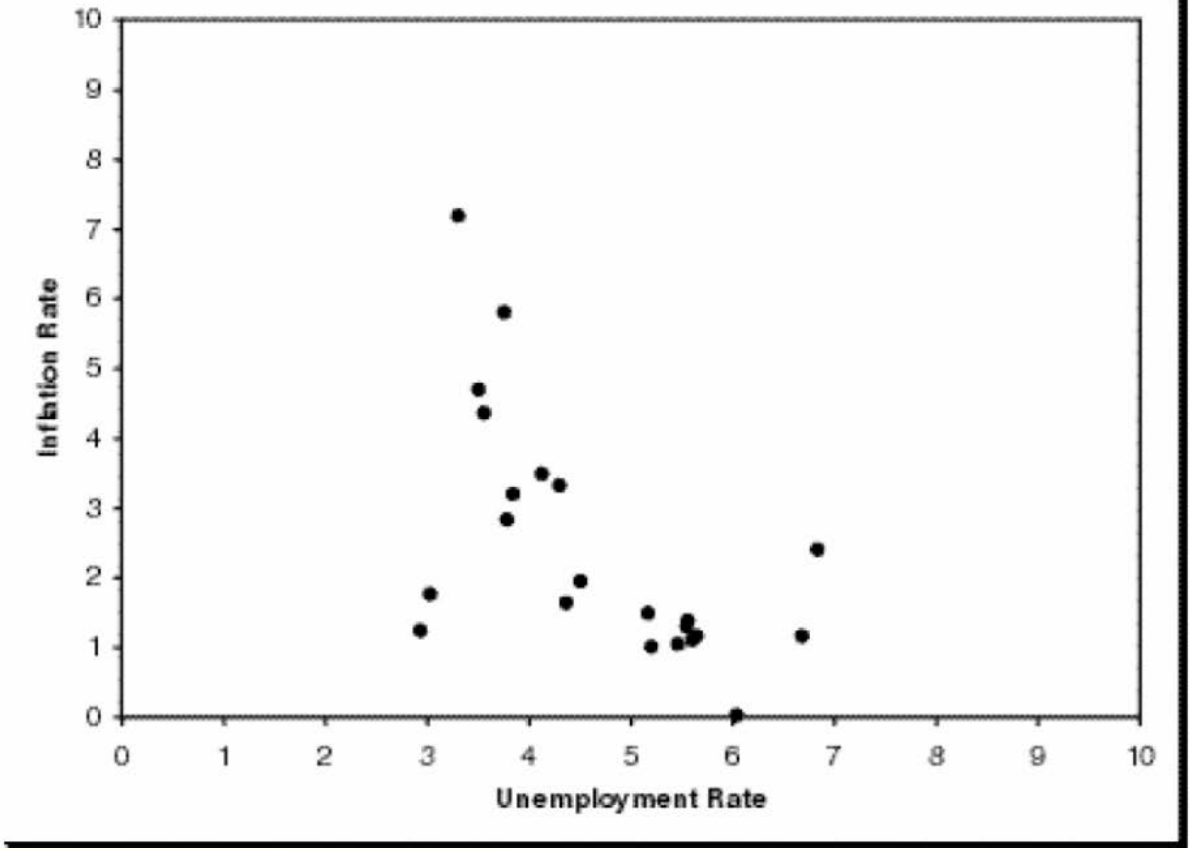
The Lucas Critique

- Due to Robert Lucas who won Nobel Prize in 1995 for “rational expectations”
- Forecasting the effects of policy changes has often been done using models estimated with historical data.
- Lucas pointed out that such predictions would not be valid if the policy change alters expectations in a way that changes the fundamental relationships between variables.

The Lucas Critique

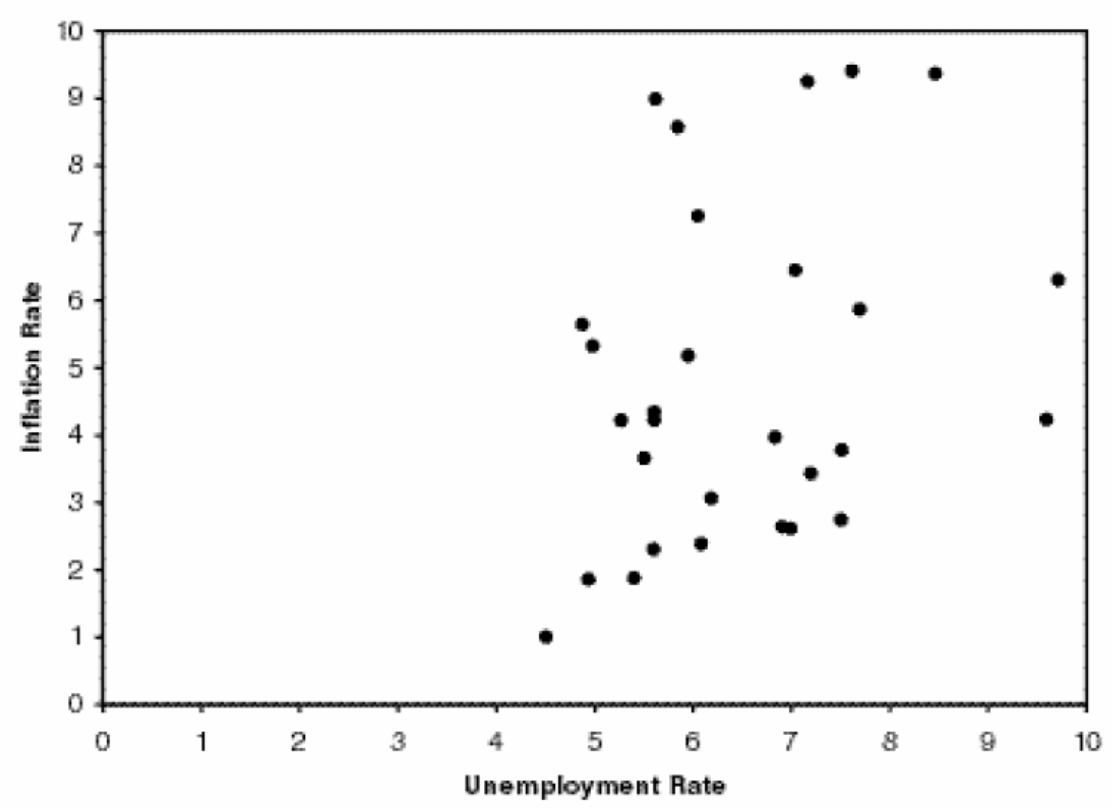
What do we see in the data?

The U.S. Phillips Curve (1948–1969).



The Lucas Critique

In the next decades, many governments tried to use monetary policy to stimulate the economy.



The U.S. Phillips Curve (1970–present).

An example of the Lucas Critique

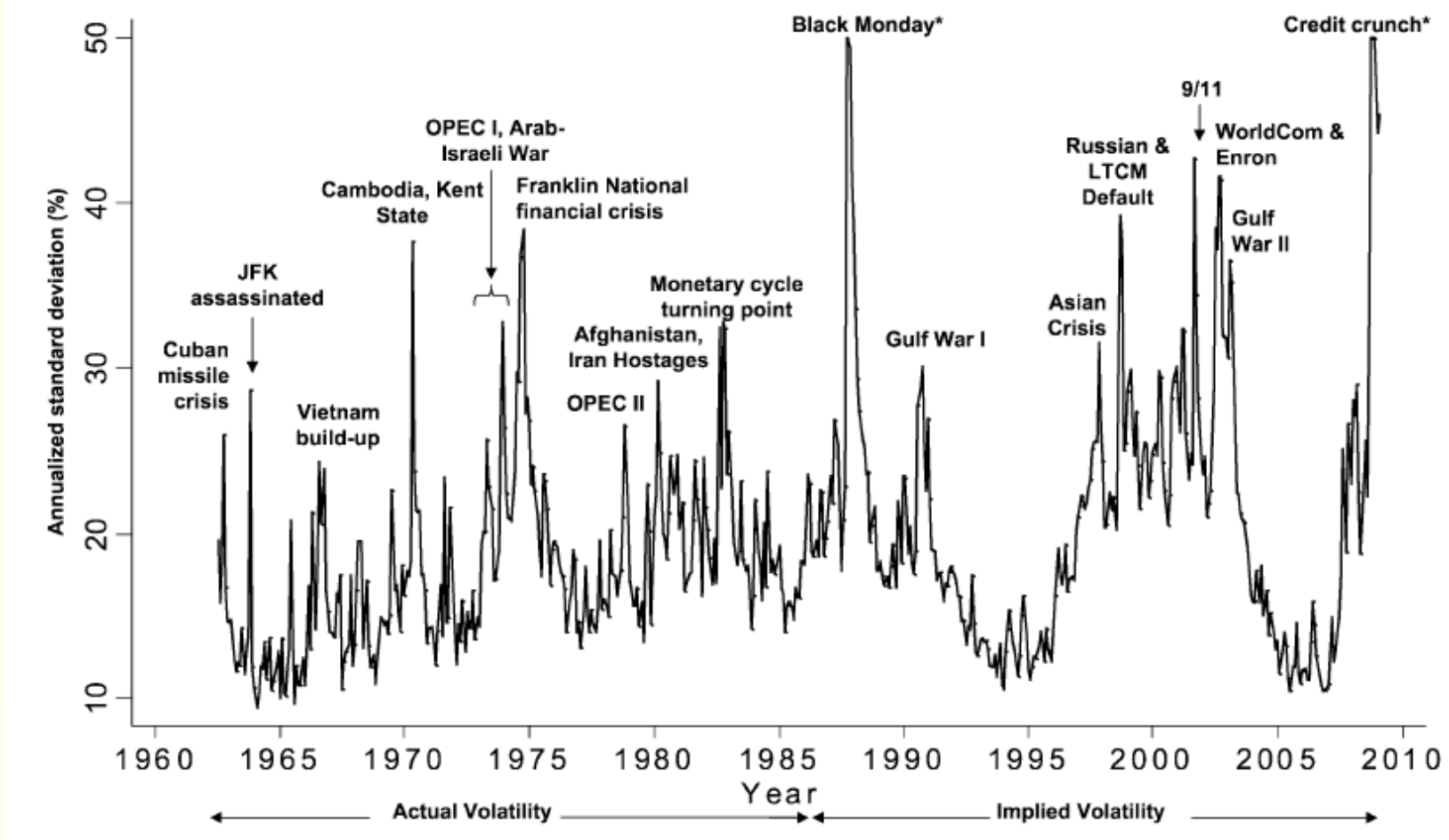
- Prediction (based on past experience): an increase in the money growth rate will reduce unemployment
- The Lucas Critique points out that increasing the money growth rate may raise expected inflation, in which case unemployment would not necessarily fall.

The Jury's Out…

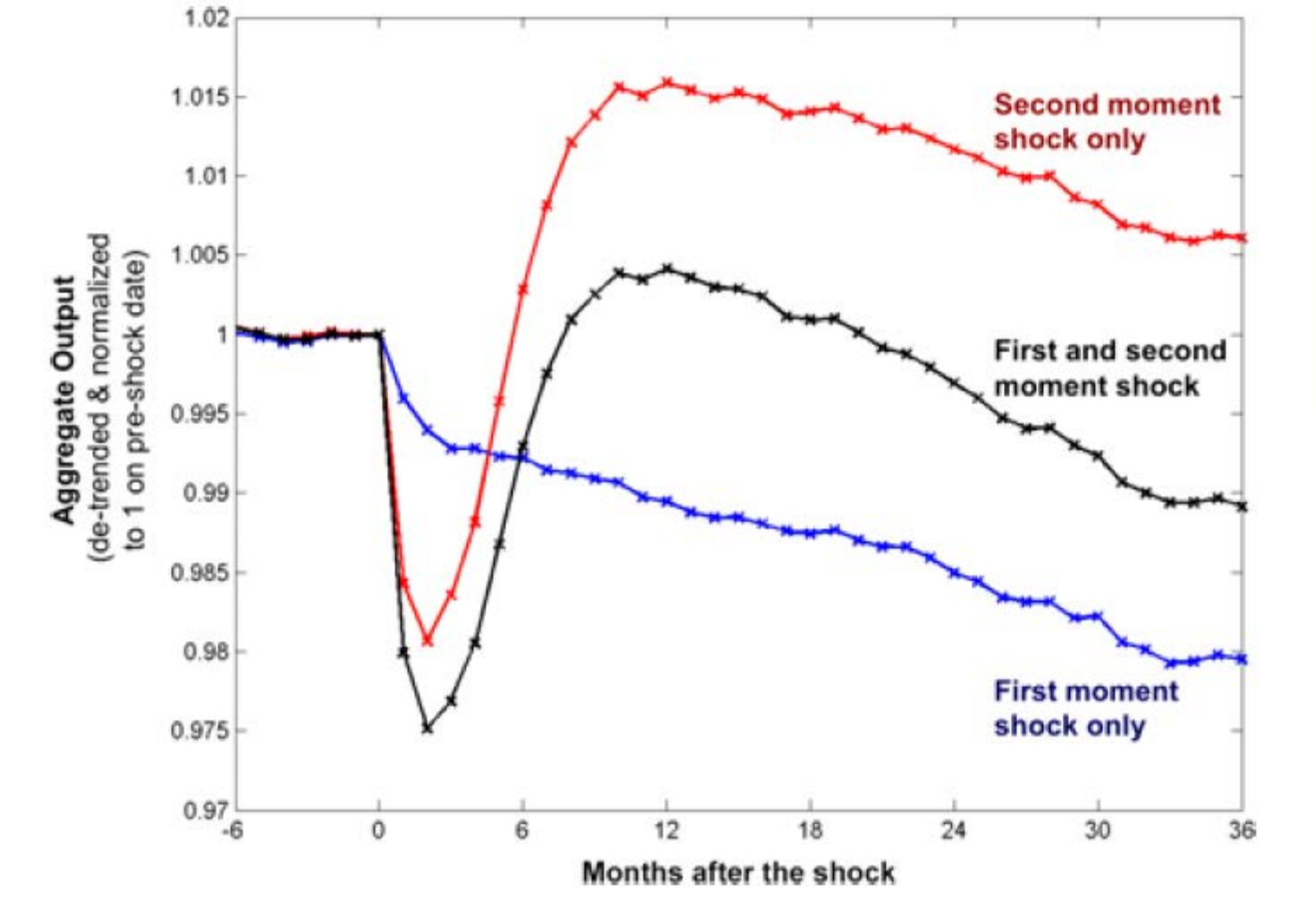
Looking at recent history does not clearly answer Question 1:

- It's hard to identify shocks in the data,
- and it's hard to tell how things would have been different had actual policies not been used (no *counter-factual* evidence)

Uncertainty: index



Uncertainty: aggregate effects



Question 2:

Should policy be conducted by rule or discretion?

Rules and Discretion: basic concepts

- **Policy conducted by rule (按规则实施）**: Policymakers announce in advance how policy will respond in various situations, and commit themselves to following through.
- **Policy conducted by discretion (斟酌处置、相机抉择）**:As events occur and circumstances change, policymakers use their judgment and apply whatever policies seem appropriate at the time.

Arguments for Rules

1. **Distrust of policymakers and the political process**
   - misinformed politicians
   - politicians' interests sometimes not the same as the interests of society

Arguments for Rules

2. The Time Inconsistency of Discretionary Policy

- def: A scenario in which policymakers have an incentive to renege on a previously announced policy once others have acted on that announcement.
- Destroys policymakers' credibility, thereby reducing effectiveness of their policies.

Examples of Time-Inconsistent Policies

To encourage investment, government announces it won't tax income from capital.

But once the factories are built, the gov't reneges in order to raise more tax revenue.

Examples of Time-Inconsistent Policies

To reduce expected inflation, the Central Bank announces it will tighten monetary policy.

But faced with high unemployment, Central Bank may be tempted to cut interest rates.

Examples of Time-Inconsistent Policies

Aid to poor countries is made contingent on fiscal reforms.

The reforms don’t occur, but aid is given anyway, because the donor countries don’t want the poor countries’ citizens to starve.

Monetary Policy Rules

a. Constant money supply growth rate

- advocated by *Monetarists*
- stabilizes aggregate demand only if velocity is stable

Monetary Policy Rules

a. Constant money supply growth rate

b. Target growth rate of nominal GDP

- automatically increase money growth whenever nominal GDP grows slower than targeted; decrease money growth when nominal GDP growth exceeds target.

Monetary Policy Rules

a. Constant money supply growth rate

b. Target growth rate of nominal GDP

c. Target the inflation rate

- automatically reduce money growth whenever inflation rises above the target rate.
- Many countries' central banks now practice inflation targeting, but allow themselves a little discretion.

Monetary Policy Rules

a. Constant money supply growth rate

b. Target growth rate of nominal GDP

c. Target the inflation rate

d. The “Taylor Rule”

Target short-term interest rate based on

- inflation rate
- gap between actual & full-employment GDP

The Taylor Rule

where:

$$r = 2 + 0.5\,(\pi - 2) - 0.5\,(\text{GDP Gap})$$

i = nominal interest rate

$r = i - \pi$ = real interest rate

$$\text{GDP Gap} = 100 \times \frac{\bar{Y} - Y}{\bar{Y}}$$

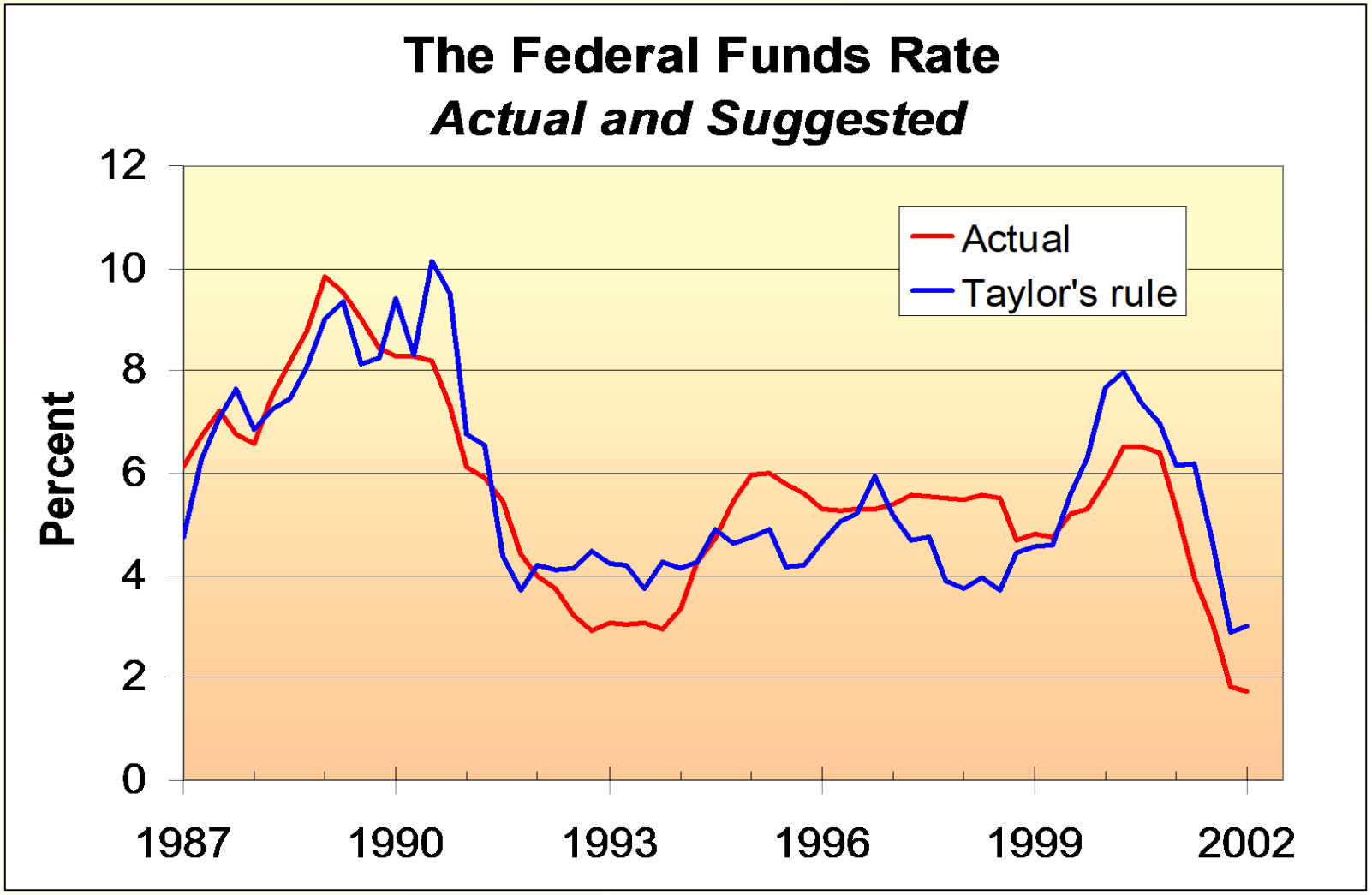
= the percent by which real GDP is below its natural rate

The Taylor Rule

$$r = 2 + 0.5\,(\pi - 2) - 0.5\,(\text{GDP Gap})$$

- If $\pi = 2$ and output is at its natural rate, then monetary policy targets the real interest rate at 2% (and the nominal rate at 4%).
- For each one-point increase in π, monetary policy is automatically tightened to raise the real interest rate by 0.5
- For each one percentage point that GDP falls below its natural rate, monetary policy automatically eases to reduce the real interest rate by 0.5.

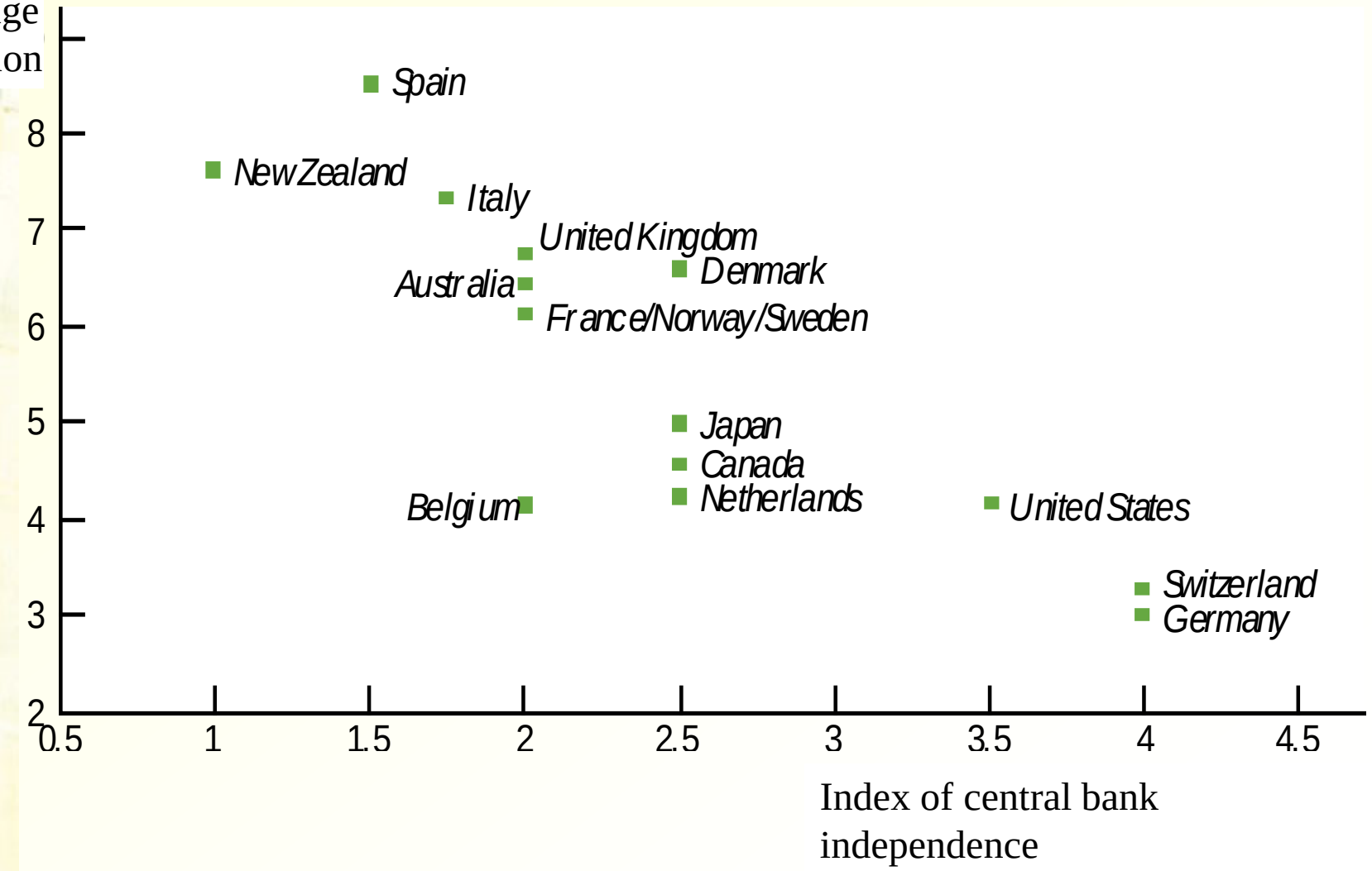
Did Alan Greenspan follow the Taylor Rule?



Central Bank Independence

- A policy rule announced by Central Bank will work only if the announcement is credible->free lunch
- Credibility depends in part on degree of independence of central bank.

Inflation and Central Bank Independence



Chapter summary

1. Advocates of active policy believe:
   - frequent shocks lead to unnecessary fluctuations in output and employment
   - fiscal and monetary policy can stabilize the economy
2. Advocates of passive policy believe:
   - the long & variable lags associated with monetary and fiscal policy render them ineffective and possibly destabilizing
   - inept policy increases volatility in output, employment etc.

Chapter summary

3. Advocates of discretionary policy believe:
   - discretion gives more flexibility to policymakers in responding to the unexpected
4. Advocates of policy rules believe:
   - the political process cannot be trusted: politicians make policy mistakes or use policy for their own interests
   - commitment to a fixed policy is necessary to avoid time inconsistency and maintain credibility