CHAPTER 14

Stabilization Policy

MACROECONOMICS SIXTH EDITION
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PowerPoint® Slides by Ron Cronovich

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In this chapter, you will learn…

…about two policy debates:

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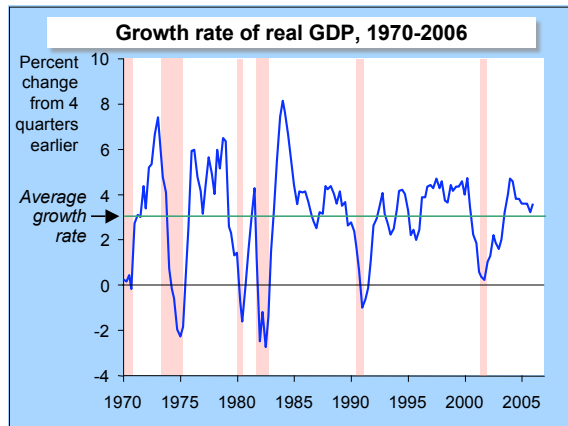2. Should policy be by rule or discretion?

Question 1:

Should policy be active or passive?

Growth rate of real GDP, 1970-2006

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

Arguments for active policy

- Recessions cause economic hardship for millions of people.
- The Employment Act of 1946:
  "It is the continuing policy and responsibility of the Federal Government to…promote full employment and production."
- The model of aggregate demand and supply (Chaps. 9-13) shows how fiscal and monetary policy can respond to shocks and stabilize the economy.

Arguments against active policy

Policies act with long & variable lags, including:

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, the policy may destabilize the economy.

Automatic stabilizers

- definition:
  policies that stimulate or depress the economy when necessary without any deliberate policy change.
- Designed to reduce the lags associated with stabilization policy.
- Examples:
  - income tax
  - unemployment insurance
  - welfare
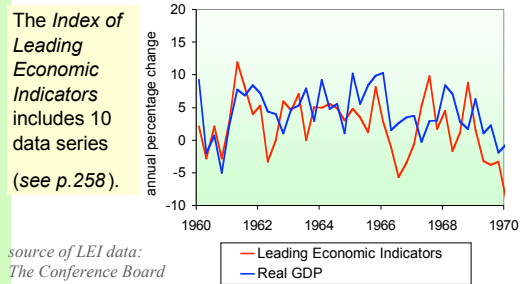
Forecasting the macroeconomy

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

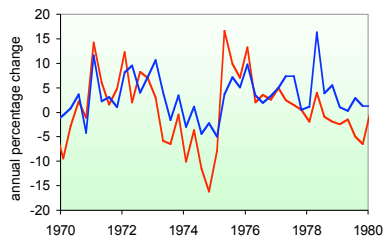Two ways economists generate forecasts:

- *Leading economic indicators*
  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
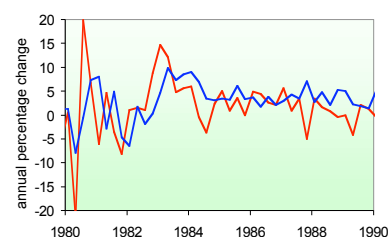
The LEI index and real GDP, 1960s

The *Index of Leading Economic Indicators* includes 10 data series

(*see p.258*).
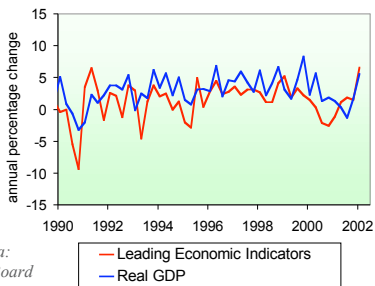

source of LEI data: The Conference Board

The LEI index and real GDP, 1970s

source of LEI data: The Conference Board

The LEI index and real GDP, 1980s

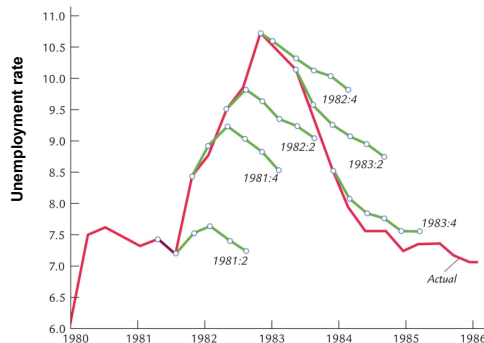*source of LEI data: The Conference Board*

The LEI index and real GDP, 1990s

annual percentage change

15
10
5
0
-5
-10
-15

1990 1992 1994 1996 1998 2000 2002

source of LEI data:
The Conference Board

— Leading Economic Indicators
— Real GDP

Mistakes forecasting the 1982 recession

Unemployment rate

11.0
10.5
10.0
9.5
9.0
8.5
8.0
7.5
7.0
6.5
6.0

1980 1981 1982 1983 1984 1985 1986

1982:4
1982:2
1983:2
1981:4
1983:4
1981:2
Actual

Forecasting the macroeconomy

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

> *The preceding slides show 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.

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.

- It's hard to tell how things would have been different had actual policies not been used.

Most economists agree, though, that the U.S. economy has become much more stable since the late 1980s…

The stability of the modern economy

Volatility of GDP

Volatility of Inflation
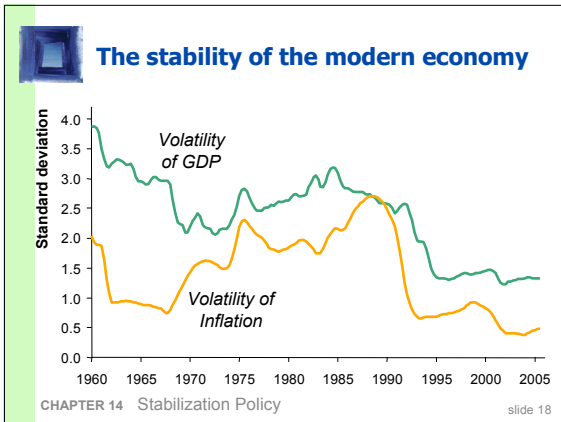
Question 2:

Should policy be conducted by rule or discretion?

Rules and discretion: Basic concepts

- *Policy conducted by rule:*
  Policymakers announce in advance how policy will respond in various situations, and commit themselves to following through.

- *Policy conducted by discretion:*
  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 inconsistency

1. To encourage investment, govt announces it will not tax income from capital.

   But once the factories are built, govt reneges in order to raise more tax revenue.

Examples of time inconsistency

2. To reduce expected inflation,
the central bank announces it will tighten
monetary policy.

But faced with high unemployment,
the central bank may be tempted to cut interest
rates.

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 the federal funds rate based on
  - inflation rate
  - gap between actual & full-employment GDP

The Taylor Rule

$$i_{ff} = \pi + 2 + 0.5(\pi - 2) - 0.5(\text{GDP gap})$$

where

i_{ff} = nominal federal funds rate target

$$\text{GDP gap} = 100 \times \frac{\overline{Y} - Y}{\overline{Y}}$$

= percent by which real GDP
is below its natural rate

The Taylor Rule

$$i_{ff} = \pi + 2 + 0.5(\pi - 2) - 0.5(\text{GDP gap})$$

- If $\pi = 2$ and output is at its natural rate, then fed funds rate targeted at 4 percent.

- For each one-point increase in π, mon. policy is automatically tightened to raise fed funds rate by 1.5.

- For each one percentage point that GDP falls below its natural rate, mon. policy automatically eases to reduce the fed funds rate by 0.5.

The federal funds rate: Actual and suggested
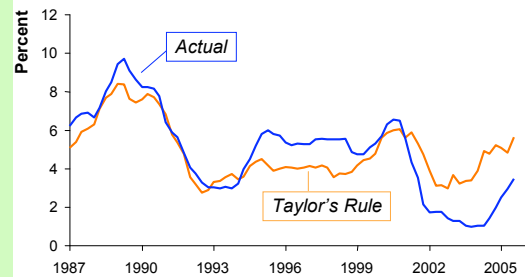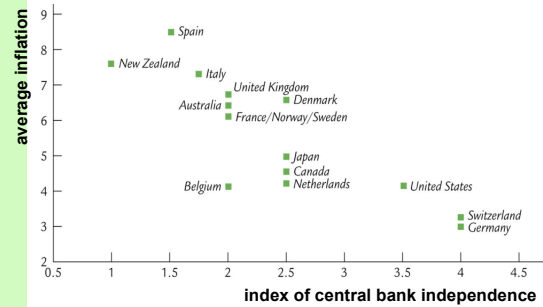

Central bank independence

- A policy rule announced by central bank will work only if the announcement is credible.

- 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

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