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?

Increase in unemployment during recessions

<table>
<thead>
<tr>
<th>peak</th>
<th>trough</th>
<th>increase in no. of unemployed persons (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1953</td>
<td>May 1954</td>
<td>2.11</td>
</tr>
<tr>
<td>Aug 1957</td>
<td>April 1958</td>
<td>2.77</td>
</tr>
<tr>
<td>April 1960</td>
<td>February 1961</td>
<td>1.21</td>
</tr>
<tr>
<td>December 1969</td>
<td>November 1970</td>
<td>2.01</td>
</tr>
<tr>
<td>November 1973</td>
<td>March 1975</td>
<td>3.58</td>
</tr>
<tr>
<td>January 1980</td>
<td>July 1980</td>
<td>1.68</td>
</tr>
<tr>
<td>July 1981</td>
<td>November 1982</td>
<td>4.08</td>
</tr>
<tr>
<td>July 1990</td>
<td>March 1991</td>
<td>1.67</td>
</tr>
<tr>
<td>March 2001</td>
<td>November 2001</td>
<td>1.50</td>
</tr>
</tbody>
</table>

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).

The LEI index and real GDP, 1970s

The LEI index and real GDP, 1980s
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.*

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 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 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...
CHAPTER 14 Stabilization Policy

slide 18

The stability of the modern economy

<table>
<thead>
<tr>
<th>Standard deviation</th>
<th>Volatility of GDP</th>
<th>Volatility of Inflation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>0.5</td>
<td>1.0</td>
</tr>
<tr>
<td>0.5</td>
<td>1.0</td>
<td>1.5</td>
</tr>
<tr>
<td>1.0</td>
<td>1.5</td>
<td>2.0</td>
</tr>
<tr>
<td>1.5</td>
<td>2.0</td>
<td>2.5</td>
</tr>
<tr>
<td>2.0</td>
<td>2.5</td>
<td>3.0</td>
</tr>
<tr>
<td>2.5</td>
<td>3.0</td>
<td>3.5</td>
</tr>
<tr>
<td>3.0</td>
<td>3.5</td>
<td>4.0</td>
</tr>
</tbody>
</table>


CHAPTER 14 Stabilization Policy

slide 19

Question 2:

Should policy be conducted by rule or discretion?

CHAPTER 14 Stabilization Policy

slide 20

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.

CHAPTER 14 Stabilization Policy

slide 21

Arguments for rules

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

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.

CHAPTER 14 Stabilization Policy

slide 22

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.
CHAPTER 14 Stabilization Policy

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.

CHAPTER 14 Stabilization Policy

Monetary policy rules

a. Constant money supply growth rate
   - Advocated by monetarists.
   - Stabilizes aggregate demand only if velocity is stable.

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.

CHAPTER 14 Stabilization Policy

Monetary policy rules

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.

d. The Taylor rule:
   - Target the federal funds rate based on
     - inflation rate
     - gap between actual & full-employment GDP

CHAPTER 14 Stabilization Policy

The Taylor Rule

\[ i_t = \pi + 2 + 0.5(\pi - 2) - 0.5(GDP\ gap) \]

where

\[ i_t = \text{nominal federal funds rate target} \]

\[ GDP\ gap = 100 \times \frac{\bar{y} - y}{\bar{y}} \]

= percent by which real GDP is below its natural rate
The Taylor Rule

\[ i_t = \pi + 2 + 0.5(\pi - 2) - 0.5(\text{GDP gap}) \]

- If \( \pi = 2 \) and output is at its natural rate, then fed funds rate targeted at 4 percent.
- For each one-point increase in \( \pi \), 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.

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.

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
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