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

Percent change from 4 quarters earlier

Average growth rate

## 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>2.27</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>
<tr>
<td>December 2007</td>
<td>June 2009</td>
<td>6.14</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. 10–15) 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 (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 relationship between changes in the index of leading economic indicators and changes in real GDP is far from exact, but the index does frequently appear to “lead” movements in GDP.

Source: Department of Commerce, Bureau of Economic Analysis, and The Conference Board.
Mistakes forecasting the 1982 recession
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 his work on 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 outcomes would have been different had actual policies not been used.
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
As discussed in the Chapter 18 of the text and in the previous two supplements, one view of politicians is that they have a short time horizon that coincides with the election cycle. According to this view, policies are designed to ensure reelection rather than with the long-term health of the economy in mind. If this view is correct, then one would expect to find similar patterns of macroeconomic policies regardless of which political party is in office.

But for the United States, data on real GDP growth suggest that the two political parties choose different macroeconomic policies. In other words, politicians are not simply opportunists trying to guarantee their reelection, but instead may be expressing the partisan preferences of their constituencies.

Table 1 shows economic growth in each of the four years of presidential administrations since 1948. Average growth in Republican administrations is quite a bit lower than in Democratic administrations during the first two years of a term, but then is higher in the last two years. In addition, negative growth typically occurs in the second year of a Republican administration, whereas growth is usually booming during the second year of a Democratic administration.

<table>
<thead>
<tr>
<th>Year of Term</th>
<th>President</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
<th>Fourth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Democratic Administrations</td>
<td>Truman</td>
<td>-1.5</td>
<td>13.4</td>
<td>5.5</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td>Kennedy/Johnson</td>
<td>6.4</td>
<td>4.3</td>
<td>5.2</td>
<td>5.1</td>
</tr>
<tr>
<td></td>
<td>Johnson</td>
<td>8.5</td>
<td>4.5</td>
<td>2.7</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>Carter</td>
<td>5.0</td>
<td>6.7</td>
<td>1.3</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Clinton I</td>
<td>2.6</td>
<td>4.1</td>
<td>2.3</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>Clinton II</td>
<td>4.4</td>
<td>5.0</td>
<td>4.7</td>
<td>2.9</td>
</tr>
<tr>
<td></td>
<td>Obama I</td>
<td>-0.2</td>
<td>2.7</td>
<td>1.7</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>Obama II</td>
<td>3.1</td>
<td>2.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>3.5</td>
<td>5.4</td>
<td>3.3</td>
<td>3.5</td>
</tr>
<tr>
<td>Republican Administrations</td>
<td>Eisenhower I</td>
<td>0.5</td>
<td>2.7</td>
<td>6.6</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>Eisenhower II</td>
<td>0.4</td>
<td>2.7</td>
<td>4.5</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>Nixon</td>
<td>2.1</td>
<td>-0.2</td>
<td>4.4</td>
<td>6.9</td>
</tr>
<tr>
<td></td>
<td>Nixon/Ford</td>
<td>4.0</td>
<td>-1.9</td>
<td>2.6</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>Reagan I</td>
<td>1.3</td>
<td>-1.4</td>
<td>7.8</td>
<td>5.6</td>
</tr>
<tr>
<td></td>
<td>Reagan II</td>
<td>4.3</td>
<td>2.9</td>
<td>4.4</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td>Bush (senior)</td>
<td>2.8</td>
<td>0.6</td>
<td>1.2</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>G.W. Bush I</td>
<td>0.2</td>
<td>2.0</td>
<td>4.4</td>
<td>3.1</td>
</tr>
<tr>
<td></td>
<td>G.W. Bush II</td>
<td>3.0</td>
<td>2.4</td>
<td>1.9</td>
<td>-2.8</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>2.1</td>
<td>1.1</td>
<td>4.2</td>
<td>3.1</td>
</tr>
</tbody>
</table>

Source: Bureau of Economic Analysis, U.S. Department of Commerce.
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.
Examples of time inconsistency

3. Aid is given to poor countries contingent on fiscal reforms.

   The reforms do not occur, but aid is given anyway, because the donor countries do not 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

Table 1  Inflation Targeting in Industrial Countries

<table>
<thead>
<tr>
<th>Country/Area</th>
<th>Current Target</th>
<th>Index Targeted</th>
<th>Who Sets Target?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>2–3%</td>
<td>CPI</td>
<td>Central Bank and Government</td>
</tr>
<tr>
<td>Canada</td>
<td>1–3%</td>
<td>CPI</td>
<td>Central Bank and Government</td>
</tr>
<tr>
<td>Euro-zone</td>
<td>Below but close to 2%</td>
<td>Harmonized Index of Consumer Prices</td>
<td>Central Bank</td>
</tr>
<tr>
<td>Israel</td>
<td>1–3%</td>
<td>CPI</td>
<td>Central Bank and Government</td>
</tr>
<tr>
<td>New Zealand</td>
<td>1–3%</td>
<td>CPI</td>
<td>Central Bank and Government</td>
</tr>
<tr>
<td>Sweden</td>
<td>2% (with small deviations permitted)</td>
<td>CPI</td>
<td>Central Bank</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2% (with permissible fluctuations of ±1%)</td>
<td>CPI</td>
<td>Government</td>
</tr>
<tr>
<td>United States</td>
<td>2%</td>
<td>PCE</td>
<td>Central Bank</td>
</tr>
</tbody>
</table>
Monetary policy rules

d. Target the Price Level

- Automatically reduce money growth whenever the price level rises above the target rate and vice versa.
- Some economists argued for this policy in response to concerns about deflation following the Great Recession.
Monetary policy rules

Inflation targeting differs from price level targeting: with price level targeting the central bank must correct its past mistakes, which can increase the volatility of prices. To illustrate, suppose that in year 1 country A chooses to target its price level for the next three years along the path detailed in Table 1, while country B chooses to target its inflation rate for the next three years at 2 percent. At first glance it might seem that these are identical targets. The price level target is based on a 2 percent year-by-year rise in prices. However, operationally the targets are different. Suppose that both countries meet their target for year 2. In country A the price level is 102 and in country B the inflation rate is 2 percent. The following year both countries overshoot their targets. In country A the price level rises to 108.1 while in country B the inflation rate is 6 percent. Prices in both countries rose by 6 percent between year 2 and year 3. The central bank of country A must act to bring the price level back to its target. Because the actual price level in year 3 is above the year 4 target level, the central bank must deflate. To meet its target in year 4, prices must fall by 1.8 percent. In contrast, the central bank of country B merely needs to reduce the inflation rate, bringing it back to the 2 percent target. In country A prices must fall; in country B the rise in prices must be reduced.

Table 1  Price Level Versus Inflation Targeting

<table>
<thead>
<tr>
<th>Year</th>
<th>Price Level Target</th>
<th>Inflation Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>102.0</td>
<td>2%</td>
</tr>
<tr>
<td>3</td>
<td>104.0</td>
<td>2%</td>
</tr>
<tr>
<td>4</td>
<td>106.1</td>
<td>2%</td>
</tr>
</tbody>
</table>
Monetary policy rules

- Assume central bank wants inflation at 2% per year.
- Suppose inflation falls to 1% per year for several years.
- Under inflation targeting, the central bank aims to return inflation to its 2% target.
- Under price level targeting, the central bank aims to return the price level to its target and allows inflation to rise above 2%.
- The chart assumes central bank allows 3% inflation until price level path is reached and 2% thereafter.
Monetary policy rules

Inflation Targeting vs. Price Level Targeting

Index, Year 1 = 100

Year

90 100 110 120 130 140 150 160 170

Index

1 3 5 7 9 11 13 15 17 19 21 23 25

Year

Inflation Targeting Policy
Price Level Targeting Policy
Price Level Target
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

Correlation = -0.84

Mankiw, *Macroeconomics*, 10e, © 2019 Worth Publishers
Growth and Central Bank Independence

Figure 1

Average Real GNP Growth
1955–1987

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.