

## Stabilization Policy, Output, and Employment

**Full Length Text** — Part: 3 Chapter: 15  
**Macro Only Text** — Part: 3 Chapter: 15

To Accompany "Economics: Private and Public Choice 11th ed."  
James Gwartney, Richard Stroup, Russell Sobel, & David Macpherson  
Slides authored and animated by:  
James Gwartney, David Macpherson, & Charles Skipton

[Next page](#) ➔

Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---


---

---

---

---

---



## Economic Fluctuations -- *The Historical Record*

◀ [Jump to first page](#) ▶

Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---


---

---

---

---

---



## Economic Fluctuations -- *the Historical Record*

- Historically, the United States has experienced substantial swings in real output.
- Before the Second World War, year-to-year changes in real GDP of 5% to 10% were experienced on several occasions.
- During the last five decades, the fluctuations of real output have been more moderate.

◀ [Jump to first page](#) ▶

Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---

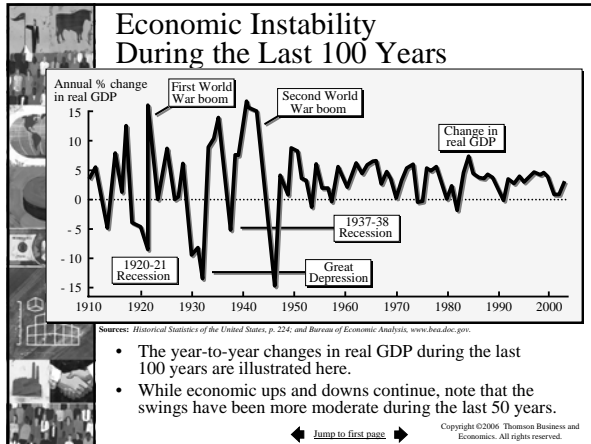
---

---

---

---

---



---

---

---

---

---

---

---

---

---

---

### Can Discretionary Policy Promote Economic Stability?

◀ [Jump to first page](#) ▶

Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---

---

---

---

---

---

---

---

### The Goals of Stabilization Policy

- Economists of almost all persuasions favor the following goals:
  - a stable growth of real GDP
  - a relatively stable level of prices
  - a high level of employment (*low unemployment*)
- But there is disagreement about how these goals can be achieved.

◀ [Jump to first page](#) ▶

Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---

---

---

---

---

---

---

---

### Activist and Non-activist Views

- If monetary and fiscal policies could inject stimulus during economic slowdowns and apply restraint during inflationary booms, this would help reduce the ups and downs of the business cycle.
- **Activists believe** that policy-makers can respond to changing economic conditions and institute policy in a manner that will promote economic stability.
- **Non-activists argue** that discretionary use of monetary and fiscal policy in response to changing economic conditions is likely to do more harm than good.
- Both activists and non-activists recognize that conducting macro policy in a stabilizing manner is not an easy task.

[◀ Jump to first page ▶](#)
Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---

---

---

---

---

---

---

---

### Practical Problems with Discretionary Monetary Policy

- The **time lag problem**: It takes time to identify when a policy change is needed, additional time to institute the policy change, and still more time before the change begins to exert an impact on the economy.
- The **forecasting problem**: Because of the time lag problem, policy makers need to know what economic conditions will be like 12 to 24 months in the future. But, our ability to forecast future economic conditions is limited.
  - Forecasting tools like the index of leading indicators can help, but they sometimes give incorrect signals.
- The **political problem**: Policy changes may be driven by political considerations rather than stabilization needs.

[◀ Jump to first page ▶](#)
Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---

---

---

---

---

---

---

---

### Index of Leading Indicators

- The **Index of Leading Indicators** is a composite statistic based on 10 key variables that generally turn down prior to a recession and turn up before the beginning of an expansion.
- It is used to forecast the future for policy makers, but is an imperfect forecasting device.
- While it correctly forecast each of the 7 recessions during the 1959-2004 period it forecast 5 recessions that did not occur.
- The index predicts with variable advance notice. The arrows below show how far ahead the index predicted recession.

[◀ Jump to first page ▶](#)
Source: <http://www.globalindicators.org/> Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---

---

---


---

---

---

---

---



**Questions for Thought:**

1. Why are macro policymakers interested in the index of leading indicators?
2. "Because policy changes exert an impact on the economy only after a period of time and forecasting is an imprecise science, trying to stabilize the economy with macroeconomic policy is likely to do more damage than good." Would an activist agree with this statement? Would a non-activist?
3. What are some of the practical problems that limit the effectiveness of discretionary macro economic policy as a stabilization tool?

◀ [Jump to first page](#) ▶ Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---


---

---

---

---

---



**Two Theories of How Expectations are Formed**

◀ [Jump to first page](#) ▶ Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---


---

---

---

---

---



**Two Theories of How Expectations are Formed**

- **Adaptive Expectations:**  
Individuals form their expectations about the future on the basis of data from the recent past.
- **Rational Expectations:**  
assumes people use all pertinent information, including data on the conduct of current policy, in forming their expectations about the future.

◀ [Jump to first page](#) ▶ Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---

---

---

---

---

---

### Adaptive Expectations Theory

Actual rate of inflation (%)

Expected rate of inflation (%)

Time period

- According to the *adaptive expectations hypothesis*, what actually occurs during the most recent period (*or set of periods*) determines an individual's future expectations.
- So, the expected future rate of inflation lags behind the actual rate by one period as expectations are altered over time.

◀ [Jump to first page](#) ▶

Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---

---

---

---

---

---

---

---

### Rational Expectations Theory

- Under *rational expectations*, rather than simply assuming the future will be like the immediate past, people also consider the expected effects of changes in policy.
  - Policy changes cause people to alter their expectations about the future.
- With rational expectations, the forecasts of individuals will not always be correct, but people will not continue to make the same type of errors. Thus, the errors of rational decision makers will be random.
  - The errors will not exhibit a systematic pattern. For example, people will not systematically under estimate (*or over estimate*) the effects of inflationary policies.

◀ [Jump to first page](#) ▶

Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---

---

---

---

---

---

---

---

### The Major Differences Between the Two Theories

- If adaptive expectations theory is correct, people will adjust more slowly.
  - For example, with adaptive expectations, when expansionary policy leads to inflation, there will be a significant time lag (*maybe a few years*), before people come to expect the inflation and incorporate it into their decision making.
- Systematic errors will occur under adaptive expectations, but not rational expectations.
  - For example, when the inflation rate is rising, decision makers will systematically tend to underestimate the future rate of inflation under adaptive expectations, but not under rational expectations.

◀ [Jump to first page](#) ▶

Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---

---

---

---

---

---

---

---

## Macro Policy Implications of Adaptive and Rational Expectations

[◀ Jump to first page](#)    Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---

---

---

---

---

---

## The Implications of Adaptive & Rational Expectations

- With *adaptive expectations*, an unanticipated shift to a more expansionary policy will temporarily stimulate output and employment.
- With *rational expectations*, decision-makers do not make systematic errors and therefore the impact of expansionary policies is unpredictable.
- Both expectations theories indicate that sustained expansionary policies will lead to inflation without permanently increasing output and employment.

[◀ Jump to first page](#)    Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---

---

---

---

---

---

## Stimulus with Adaptive Expectations

- Under *adaptive expectations*, anticipation of inflation will lag behind its actual occurrence.
- Thus, a shift to a more expansionary policy will increase *aggregate demand* (to  $AD_2$ ) and lead to a temporary increase in GDP (to  $Y_2$ ) and modest increase in prices (to  $P_2$ ).

[◀ Jump to first page](#)    Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---

---

---

---

---

---

### Stimulus with Rational Expectations

- Under *rational expectations*, decision makers expect the inflationary impact of a demand-stimulus policy.
- Thus, while the more expansionary policy does increase *aggregate demand* (to  $AD_2$ ), resource prices and production costs rise just as rapidly (thereby shifting  $SRAS_1$  to  $SRAS_2$ ).
- Prices increase but real output does not (even in the short run).

◀ [Jump to first page](#) ▶

Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---

---

---

---

---

---

---

---

### The Phillips Curve: The 1960s versus Today

◀ [Jump to first page](#) ▶

Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---

---

---

---

---

---

---

---

### Phillips Curve View of the 1960s & 70s

- A curve indicating the relationship between the rates of inflation and unemployment is known as the *Phillips curve*.
- In the 1960s, most economists thought that there was a trade-off between inflation and unemployment – that a lower rate of unemployment could be achieved if we were willing to tolerate a little more inflation.
  - This view provided the foundation for the inflationary policies of the 1970s.
  - But the inflation of the 1970s led to high rates of both inflation and unemployment.
  - The early Phillips curve view was fallacious because it ignored the role of expectations.

◀ [Jump to first page](#) ▶

Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---

---

---

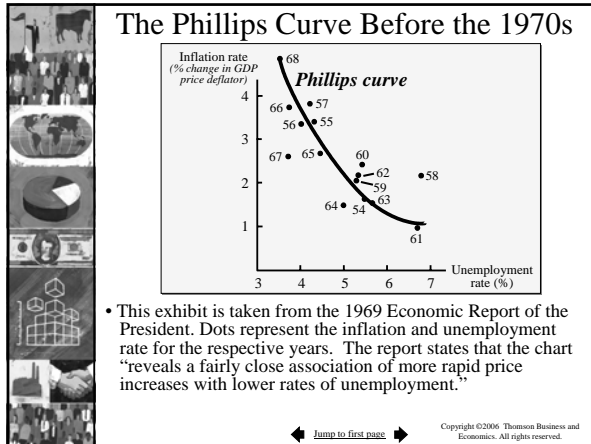
---

---

---

---

---




---

---

---

---

---

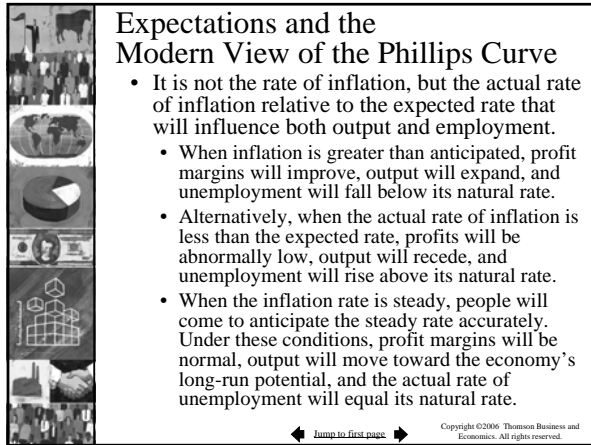
---

---

---

---

---




---

---

---

---

---

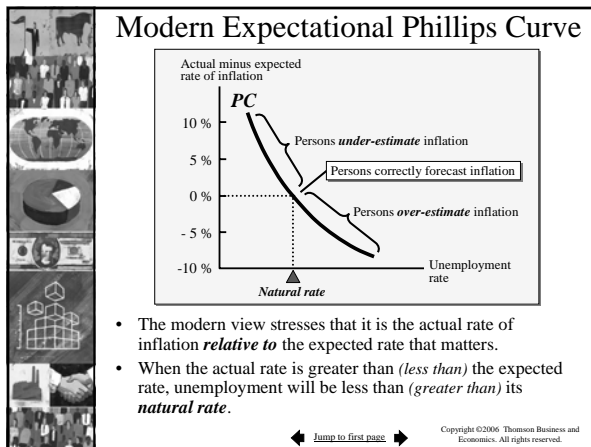
---

---

---

---

---




---

---

---

---

---

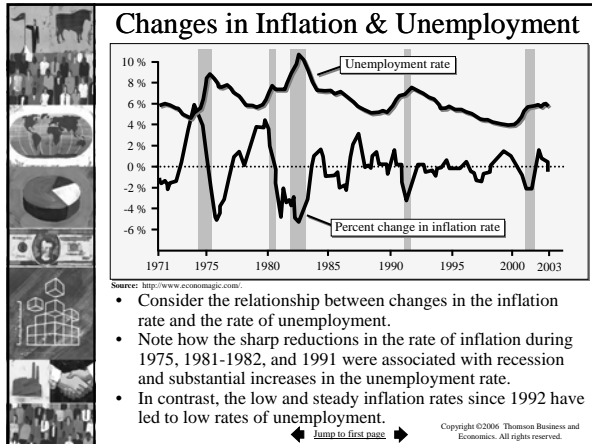
---

---

---

---

---



---

---

---

---

---

---

---

---

**The Modern Consensus View**

Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---

---

---

---

---

---

**The Modern Consensus View**

- There are four major elements of the modern consensus view:
  - Demand stimulus policies cannot reduce the rate of unemployment below the natural rate – at least not for long.
  - Wide swings in both monetary and fiscal policy should be avoided.
  - Using discretionary fiscal policy as an effective stabilization tool is impractical, particularly in countries like the United States.
  - Monetary policy should focus on price stability.

Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---


---

---

---

---

---



### Key to Prosperity: Price Stability

- Monetary policy that provides approximate price stability (*persistently low rates of inflation*) is the key to sound stabilization policy.
- Modern living standards are the result of gains from trade, specialization, division of labor, and mass production processes. Price stability and the smooth operation of the pricing system will facilitate the realization of these gains.
- In contrast, high and variable rates of inflation create uncertainty, distort relative prices, and reduce the efficiency of markets.

◀ [Jump to first page](#) ▶

Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---


---

---

---

---

---



### The Recent Record of Stability

◀ [Jump to first page](#) ▶

Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---


---

---

---

---

---



### The Increased Stability of the U.S. Economy

- During the 1980s and 1990s, macro policy (*particularly monetary policy*) focused on keeping the inflation rate low.
- As the year-to-year changes in the inflation rate were reduced, so too were the ups and downs of the business cycle.
- Most economists believe that the increased stability of the last two decades is primarily the result of the more stable policies of the Federal Reserve (the Fed).

◀ [Jump to first page](#) ▶

Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---

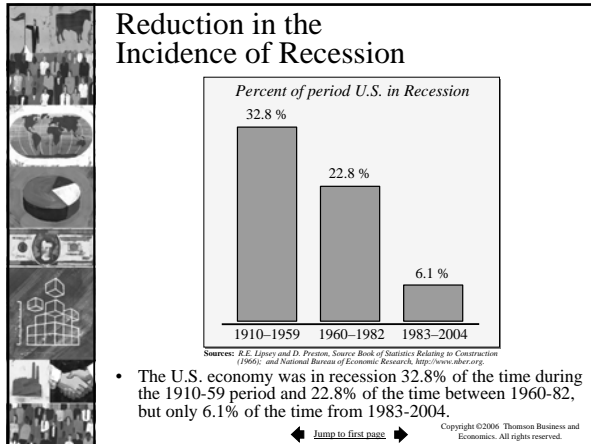
---

---

---

---

---



---

---

---

---

---

---

---

---

**Questions for Thought:**

1. "Under the adaptive expectations hypothesis, a shift to a more expansionary monetary policy will increase the real rate of output in the short run, but not in the long run." Is this statement *true*? Would it be *true* under the rational expectations hypothesis?
2. "If monetary policy keeps the rate of inflation low (for example, 2%) and the low rate is maintained over a lengthy period of time, the rate of unemployment will be approximately equal to the economy's natural rate of unemployment."  
-- Is this statement *true*?

◀ [Jump to first page](#) ▶

Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---

---

---

---

---

---

**Questions for Thought:**

3. Suppose that the inflation rate had been constant at approximately 2% during the last several years. However, monetary policy has become substantially more expansionary during recent months. How will this shift to a more expansionary monetary policy affect the expected rate of inflation under the adaptive expectations hypothesis? Under the rational expectations hypothesis?
4. Is discretionary fiscal policy likely to be an effective stabilization tool in a country like the United States? Why or why not?

◀ [Jump to first page](#) ▶

Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---


---

---

---

---

---



**Questions for Thought:**

5. Are the following statements true or false?

- a. In the long run, the primary impact of expansionary monetary policy will be on real output and employment rather than the general level of prices.
- b. Economic fluctuations would be both less common and less severe if monetary policy kept the rate of inflation low and (*approximately*) constant.
- c. Once people come to expect a given rate of inflation, the inflation will neither stimulate real output nor reduce unemployment.

[◀ Jump to first page ▶](#) Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---


---

---

---

---

---



**Questions for Thought:**

6. What was the dominant view of the Phillips curve during the 1960s? Was this view correct? Did this view exert an impact on macro policy? How does the modern view differ?

7. Are the following statements true or false?

- a. Decision makers are likely to underestimate sharp and abrupt reductions in the inflation rate.
- b. Demand stimulus policies introduce inflation without permanently reducing unemployment.
- c. Demand stimulus policies that result in inflation that is higher than anticipated will temporarily reduce unemployment below the natural rate.

[◀ Jump to first page ▶](#) Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---


---

---

---

---

---



**End  
Chapter 15**

[◀ Jump to first page ▶](#) Copyright ©2006 Thomson Business and Economics. All rights reserved.

---

---

---

---

---

---

---

---