

# Monetary Policy Redux

Final Exam Facts

News

Review

How does the Fed decide the appropriate setting for the federal funds rate?

Policy case studies.

Carolina Course Review

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# Final Exam Facts

Final Exam is December 18, noon-3:00 PM  
Only the college can excuse an absence from the final exam.

Those with excuses must present them to me by Wednesday, December 9.

The only makeup exam is December 19, 9:00 AM. Office hours for the final exam period have been posted on the web page.

Final comprises approximately 50 multiple choice questions (approximately 12,13,25).

Bring your UNC ID card. We will check ID. Bring a four function calculator if you wish.

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# Recovery

**The New York Times**

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December 5, 2009

OFF THE CHARTS

## The Jobless Rate May Have Hit Its Peak

By FLOYD NORRIS

The peak in unemployment in the United States has probably passed, according to one economic indicator that has proved reliable in all 10 previous recessions since World War II.

If it is correct, it indicates that the recovery from the 2007-9 recession will be very different from the "jobless" recoveries after the last two recessions, when the unemployment rate continued to rise for many months after the recession officially ended.

That indicator is part of the monthly survey done by the Institute for Supply Management, in which manufacturing companies are asked if their business is getting better or worse.

The data was released earlier this week, before the government reported on Friday that the unemployment rate had fallen to 10 percent in November, from 10.2 percent the previous month. If the indicator is accurate, the October figure will prove to be the high rate for this cycle.

Use Your Clickers  
to Answer  
the Following  
Graded Question.

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Beginning late in 2007, the Fed decided to stimulate the economy. To do so, the Fed \_\_\_\_\_ government bonds and \_\_\_\_\_ the Federal Funds Rate.

- A. Bought, Increased
- B. Sold, Increased
- C. Bought, Decreased
- D. Sold, Decreased

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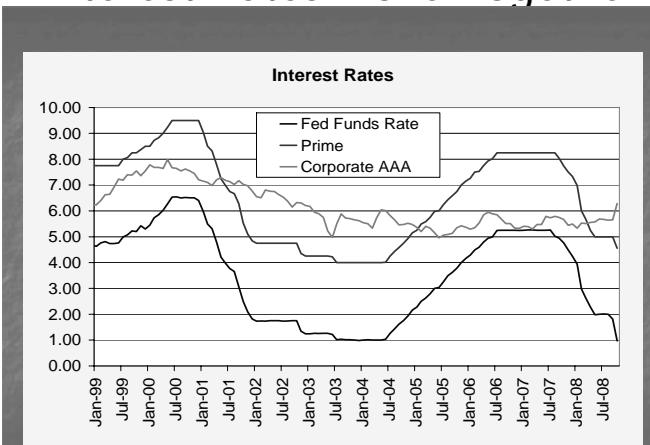
## How Does Monetary Policy Affect The U.S. economy?

When the Fed lowers (raises) the federal funds rate, other interest rates tend to fall (rise).

The Fed affects aggregate demand indirectly by changing the federal funds rate and indirectly changing the rates that effect borrowing decisions.

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## Interest Rates Move Together



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## Why Interest Rates Move Together

Other things equal...

Lenders want the highest possible rates.

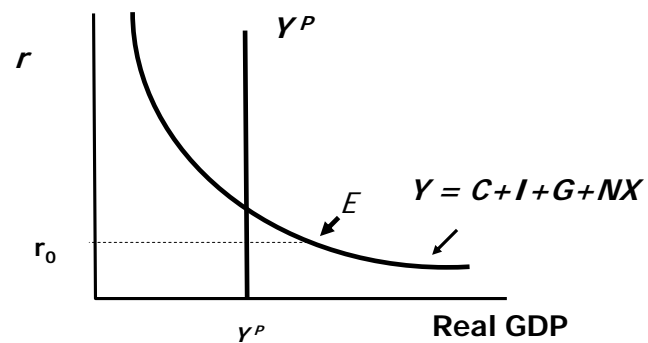
When the Fed lowers the Federal Funds rate it starts a chain reaction of lower rates as lenders move from lower-rate to higher-rate bonds.

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Use Your Clickers  
To Answer  
The Following  
Graded Question.

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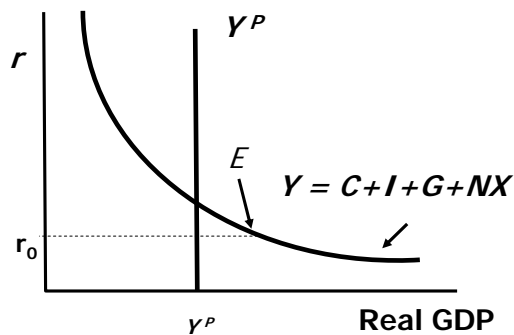
Suppose that the economy is operating at point E in the diagram.  
What should the Fed do?



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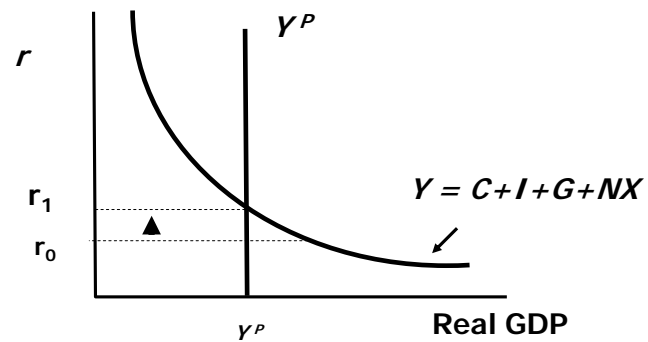
The Fed should \_\_\_ government bonds  
and thereby \_\_\_ the federal funds rate.

- A. Sell, Lower
- B. Buy, Lower
- C. Buy, Raise
- D. Sell, Raise



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Given the pictured scenario, the Fed should  
raise interest rates and lower demand.



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How does the Fed decide the appropriate setting for the federal funds rate?

1. The Fed assesses how the economy is doing presently.
2. The Fed estimates how the economy will do in the future.
3. The Fed compares its estimates with its goals for inflation and output growth.
4. If there is a gap between the goals and the estimates, the Fed will act.

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The policy process is harder to implement than it may appear

Estimates of future economic conditions contain errors.

The Fed may estimate the future course of the economy as accurately as possible and still be wrong.

A case in point is monetary policy in the 1970's.

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## Monetary Policy in the 1970's

The 1960's was a high growth decade.

The Federal Reserve forecast that the same high growth was possible for the 1970's.

When growth was slower than expected, the Fed lowered interest rates to stimulate the economy.

The result was an increase in the inflation rate—the onset of the Great American Inflation.

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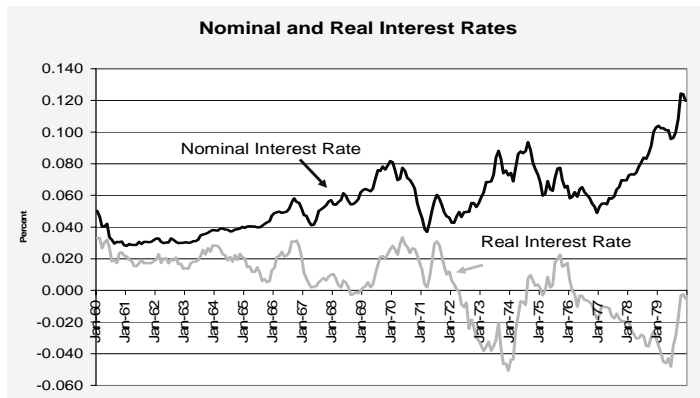
High growth in the 1960's led the Fed to forecast high growth in the 1970's

	1950s	1960s	1970s	1980s	1990s
<b>Real GDP Growth</b>					
Average	4.18	4.43	3.28	3.02	3.03
Standard deviation	3.89	2.13	2.80	2.68	1.56
<b>Inflation</b>					
Average	2.07	2.33	7.09	5.66	3.00
Standard deviation	2.44	1.48	2.72	3.53	1.12
<b>Unemployment</b>					
Average	4.51	4.78	6.22	7.27	5.76
Standard deviation	1.29	1.07	1.16	1.48	1.05

Note: Real GDP growth is the growth rate of inflation-adjusted gross domestic product from four quarters earlier. Inflation is the rate of change in the consumer price index over the previous 12 months. Unemployment is the monthly, seasonally adjusted percentage of the labor force without a job.  
Source: Department of Commerce, Department of Labor, and author's calculations.

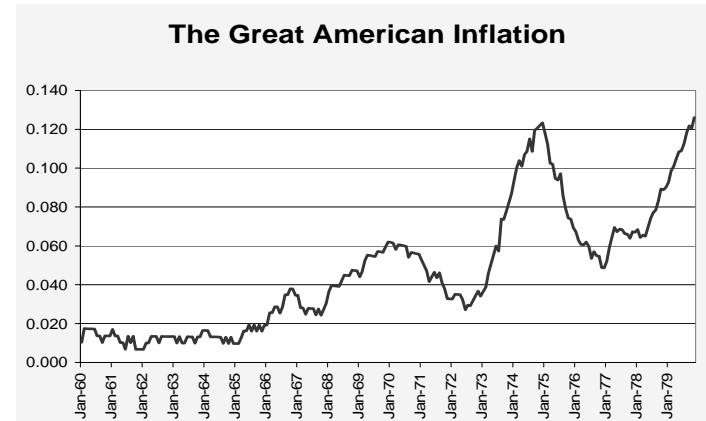
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When growth turned out to be slower than expected, the Fed stimulated the economy.



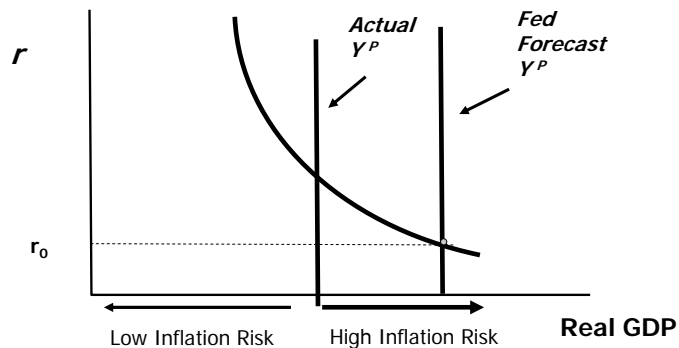
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The result was an increase in inflation



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Here is how we would use our model to explain the 1970's



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## Monetary Policy In 2001

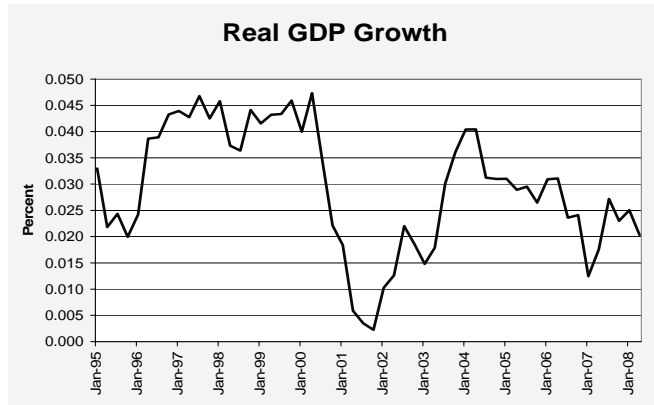
In March 2001, a recession began in the U.S.

On September 11, 2001, the attack on the World Trade Center shook American confidence and threatened to deepen the recession.

The Federal Reserve responded by lowering the Federal Funds rate.

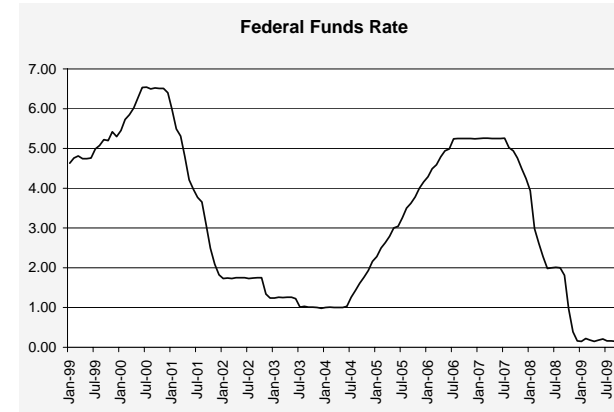
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## Real Growth Fell in 2001



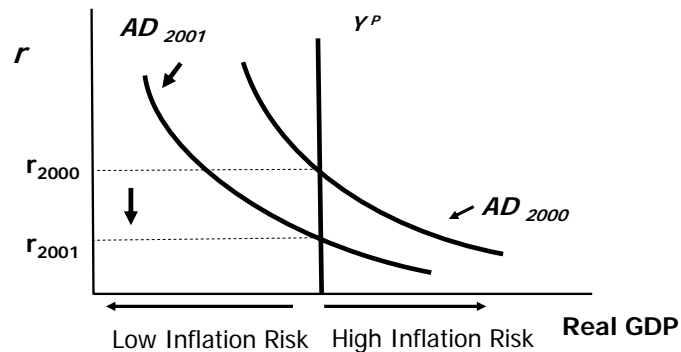
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## The Fed Responded with Stimulus



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Here is how we would use our model to explain Fed policy in 2001



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In 2004  
The Federal Reserve  
Reversed Course

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July 1, 2004

### THE RATE INCREASE; Fed's Statement Regarding Rates

Following is the text of a statement released by the Federal Reserve yesterday after the Fed's monetary policy panel, the Federal Open Market Committee, decided to raise its benchmark interest rates for the first time in four years.

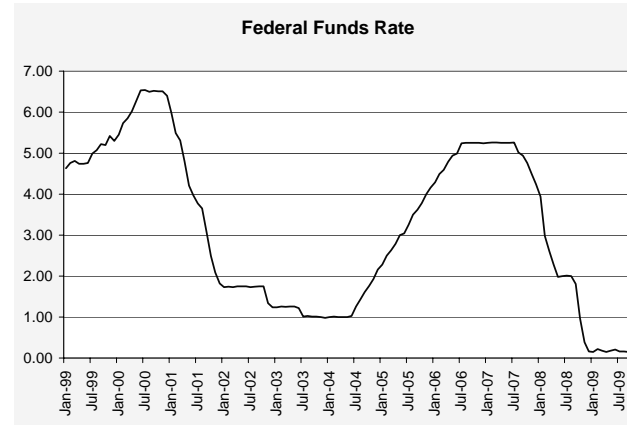
The Federal Open Market Committee decided today to raise its target for the federal funds rate by 25 basis points to 1.14 percent.

The committee believes that, even after this action, the stance of monetary policy remains accommodative and, coupled with robust underlying growth in productivity, is providing ongoing support to economic activity. The evidence accumulated over the inter-meeting period indicates that output is continuing to expand at a solid pace and labor market conditions have improved. Although incoming inflation data are somewhat elevated, a portion of the increase in recent months appears to have been due to transitory factors.

The committee perceives the upside and downside risks to the attainment of both sustainable growth and price stability for the next few quarters are roughly equal. With underlying inflation still expected to be relatively low, the committee believes that policy accommodation can be removed at a pace that is likely to be measured. Nonetheless, the committee will respond to changes in economic prospects as needed to fulfill its obligation to maintain price stability.

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### In 2004 the Fed began to steadily increase the Federal Funds Rate



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### Modeling the Current Recession

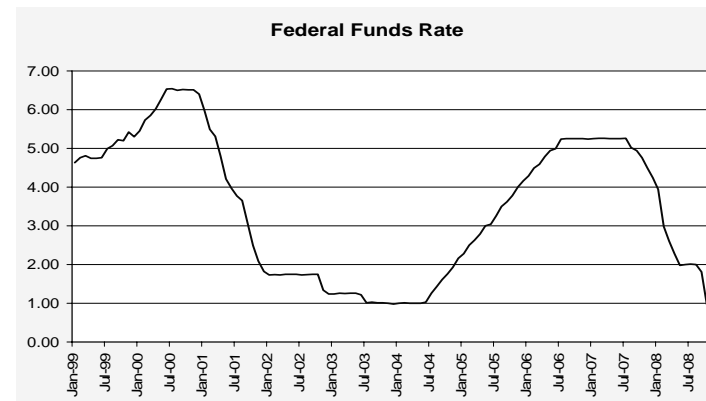
The fall in housing prices triggered the current recession.

The Fed initially responded with its traditional remedy—lower Federal Funds rates.

But banks and other lenders have been reluctant to lend even though the Fed has taken steps to provide them with cash.

Lowering the Federal Funds rate has been insufficient to provide the stimulus needed to return the economy to full employment.

### Since 2007, the Fed has lowered the Federal Funds Rate Several Times

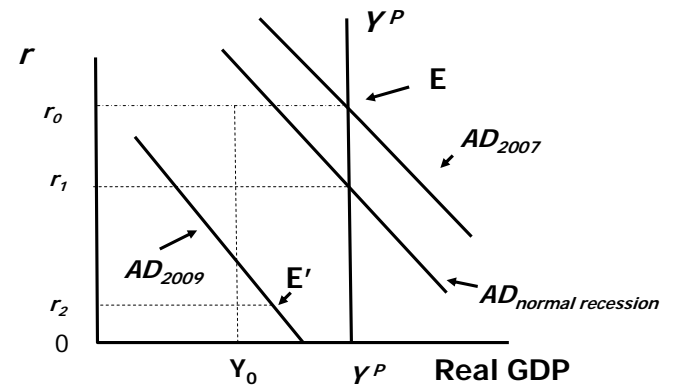


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Why Monetary Policy Did Not Work  
Banks Hold Excess Reserves Rather Than Lend

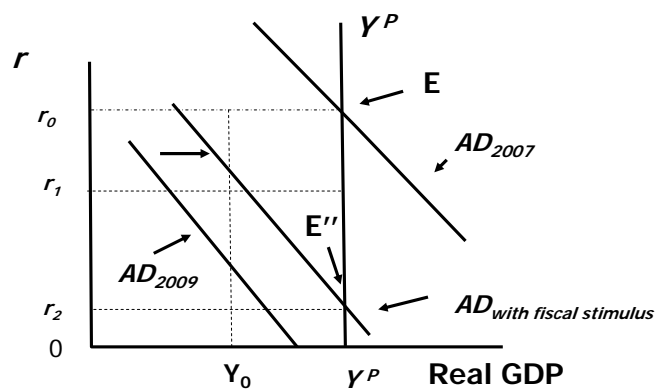
Aggregate Reserves of Depository Institutions Billions of Dollars		
	October, 2007	October, 2009
Total Reserves	42.5	1,056.4
Required Reserves	41.0	61.7
Excess Reserves	1.4	994.7

How our model would depict the recession of 2007



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Higher Government Spending and Lower Taxes can  
Stimulate Aggregate Demand



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The Econ 101 Team  
Asks You To Remember  
That

The best things in life aren't free.

Use Your Clickers  
To Answer  
The Following  
Non-Graded Question.

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Which statement best describes the technical performance of your clicker during the semester?

1. I had no technical difficulties with my clicker.
2. I had minor technical difficulties (eg batteries), that I handled easily on my own.
3. I had a major problem with my clicker that was my own fault (eg. getting it wet, losing it).
4. My clicker failed and had to be replaced through no fault of my own.
5. I had a different experience than any of the above.

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Department/Course/Section	Econ 101-008
Instructor	Michael Salemi
Course ID Number	12020032

Section F: Optional Questions

28. This course helped me to understand economic concepts that I can use throughout my life.
29. The use of clickers helped me to learn.
30. The instructor should continue to use the clickers in the future.
31. My recitations were conducted in a way that helped me learn economics.

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