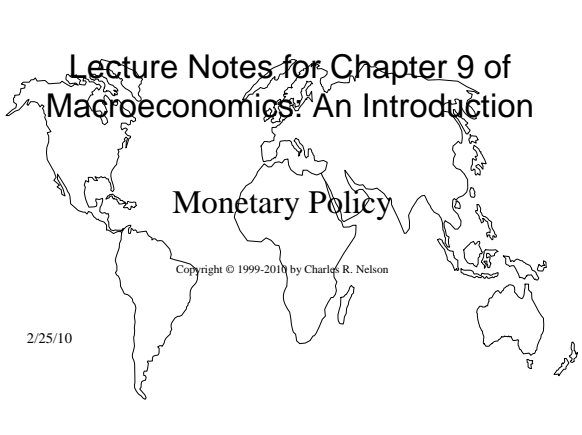


Lecture Notes for Chapter 9 of  
Macroeconomics: An Introduction

Monetary Policy

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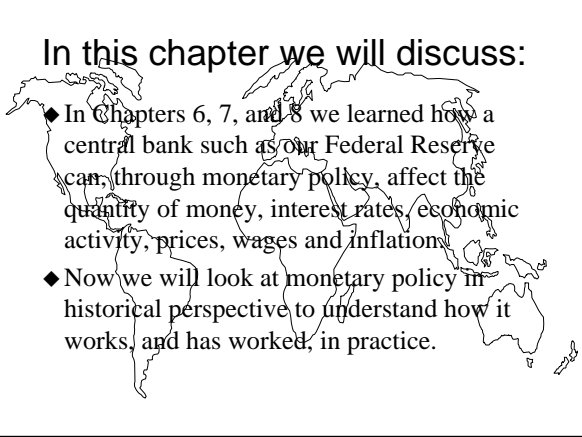
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In this chapter we will discuss:

- ◆ In Chapters 6, 7, and 8 we learned how a central bank such as our Federal Reserve can, through monetary policy, affect the quantity of money, interest rates, economic activity, prices, wages and inflation.
- ◆ Now we will look at monetary policy in historical perspective to understand how it works, and has worked, in practice.



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Today, the Fed is news...

- ◆ Media hang on every word of Chair Bernanke for clue to next policy move!
- ◆ Fed played central role in response to financial crisis and moves to end recession.
- ◆ Public concerned about both lingering recession and threat of inflation ahead.
- ◆ It was not always so!



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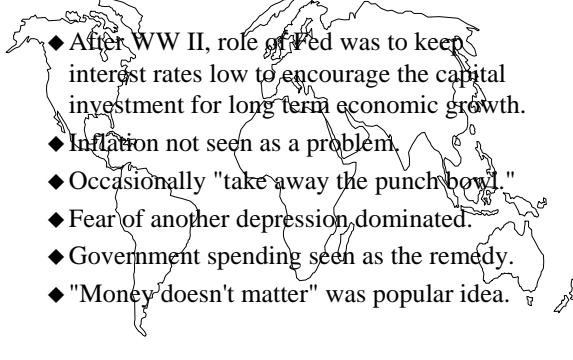
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### US Monetary Policy - A History



- ◆ After WW II, role of Fed was to keep interest rates low to encourage the capital investment for long term economic growth.
- ◆ Inflation not seen as a problem.
- ◆ Occasionally "take away the punch bowl."
- ◆ Fear of another depression, dominated.
- ◆ Government spending seen as the remedy.
- ◆ "Money doesn't matter" was popular idea.

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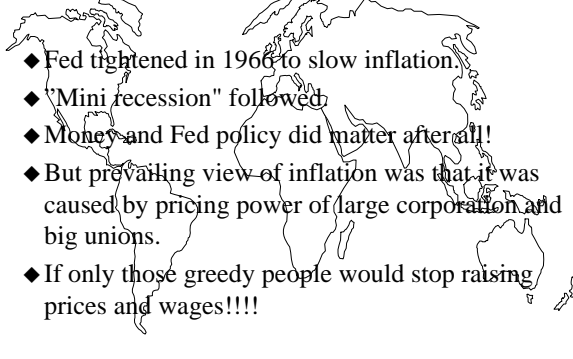
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### Then inflation started in mid 1960s



- ◆ Fed tightened in 1966 to slow inflation.
- ◆ "Mini recession" followed.
- ◆ Money and Fed policy did matter after all!
- ◆ But prevailing view of inflation was that it was caused by pricing power of large corporation and big unions.
- ◆ If only those greedy people would stop raising prices and wages!!!!

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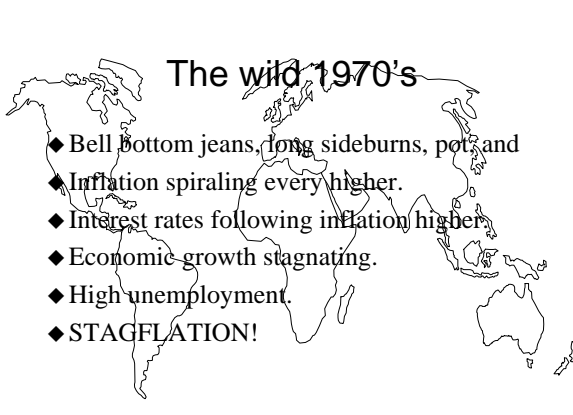
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### The wild 1970's



- ◆ Bell bottom jeans, long sideburns, pot, and
- ◆ Inflation spiraling ever higher.
- ◆ Interest rates following inflation higher.
- ◆ Economic growth stagnating.
- ◆ High unemployment.
- ◆ STAGFLATION!

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### Was Fed policy to blame?

- ◆ Intense debate over role of Fed ensued
- ◆ Was money growth causing inflation?
- ◆ Could inflation be stopped by wage and price controls? Pres. Ford's WIN program.
- ◆ Repeated failure to stop inflation undermined confidence in the Fed.
- ◆ By 1979, few economists doubted failure of Fed played major role in stagflation.

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### The Volcker Era

- ◆ Pres. Carter appointed Paul Volcker as Fed Chair in 1979.
- ◆ Former Pres of Fed Reserve Bank of NY, Volcker had credibility on Wall St.
- ◆ Announced Fed would slow money growth, no matter how high interest rates went.
- ◆ Double-dip recession of 1980-82 ensued.
- ◆ But inflation abated and growth resumed.

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### Greenspan and the 'Great Moderation'

- ◆ Alan Greenspan, formerly a Wall St consultant, succeeded Volcker in 1987.
- ◆ He inherited a healthy economy, low inflation, low interest rates, low unemployment.
- ◆ For almost 20 years we enjoyed era of stability, known as the Great Moderation.

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### A 'National Treasure'

- ◆ First act was to avert crisis in 1987 crash.
- ◆ Greenspan became revered as a wizard.
- ◆ He quickly moved interest rates up or down in response to any apparent threat of recession or inflation.
- ◆ It seemed he could do no wrong.
- ◆ Bernanke stepped into very large shoes when he took over in 2006!

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### Monetary history in a picture.

- ◆ Short run: M1 & T Bill move opposite directions
- ◆ But over 1960-1979, both trended upward.
- ◆ Paradox of monetary policy!
- ◆ Fed failed to keep interest rates low by creating M too fast!
- ◆ Wide fluctuations in M1 growth and T bill show Greenspan's activist style!

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### Two big debates:

- ◆ Should the Fed use money growth or interest rates as its primary policy 'target'?
- ◆ Should the Fed keep money growth at a steady non-inflationary rate, or try to 'fine-tune' the economy, like Greenspan?

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**Money Growth target has problems.**

- ◆ Money demand  $k(t)$  changes due to
  - ATM machines, “sweep accounts.”
  - dollar holdings abroad.
  - short term “noise” in  $k$  for many reasons.
- ◆ What is right  $M\%$  when  $k$  is changing?

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**Interest Rate Target has problems too!**

- ◆ What is the ‘right’ level of interest rates?
- ◆ People do not like to see higher interest rates (most are borrowers), so it is hard for Fed to raise rates when it should.
- ◆ That is what happened in the 1970’s, the Fed did not raise rates fast enough to stop inflation build-up. It always chickened out.

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**Second debate:  
‘Rules vs. Discretion’**

- ◆ Should Fed follow a simple rule,
- ◆ or actively manage policy to combat recession and inflation?

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### Why not a policy rule?

- ◆ Advantage: everyone would see what the policy is and can make plans accordingly.
- ◆ Builds credibility for Fed policy.
- ◆ If public realizes Fed will fight inflation, there will be no inflation!
- ◆ But which rule?
- ◆ In crisis, would you follow rule or use your discretion in light of current facts?

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### Why not discretion?

- ◆ Shouldn't you do what is best, always?
- ◆ But who is 'you'? Whose discretion?
- ◆ Greenspan used discretion and seemed to know just what to do, but crisis followed.
- ◆ Is a system that relies on judgment of one person a good system?
- ◆ If so, dictatorship would be great! (It isn't!)

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### The 'Monetarist' Rule

- ◆ Milton Friedman advocated steady money growth consistent with low inflation.
- ◆ Motivated by dismal record of Fed in mismanaging economy in 1970s.
- ◆ Monetarists said the Fed can't "fine tune".
- ◆ But steady M% insures price stability.
- ◆ Critics argued Fed should respond to recession!

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## ME & Jimmy at the Seven-Eleven



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## The Taylor Rule

- ◆ Why not reduce Greenspan to a formula??
- ◆ The Taylor Rule was proposed by John Taylor of Stanford U. in 1993.
- ◆ It describes how successful central banks behave:
- ◆ Raise rates in response to inflation, and lower them in response to negative gap between actual and potential real GDP.

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## Here is Taylor's recipe:

- ◆ The Fed controls the Fed Funds rate.
- ◆ That averages about 2% plus inflation (Fisher hypothesis)
- ◆ Express output gap in %, multiply by .5 that means cut interest rate in recession.
- ◆ Now set a target inflation rate, say 2%, and multiply difference between actual and target by .5. Simmer for 2 hours.

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**Now add up all the components:**

- ◆ The Taylor rule tells the Fed to set the Federal Funds rate at:

$$\text{Fed Funds} = 2\% + P\% + .5 * (\text{Output Gap}) + .5 * (P\% - 2\%)$$

- ◆ What does it say now, in 2010: P% is about 2%, Gap is about -7%, so
- ◆ Fed Funds = 2% + 2% - 3.5% + 0% = .5%!  
About where it is now!

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**Credibility**  
**key to effective monetary policy!**

- ◆ Do people believe Fed will stick to non-inflationary policy?
- ◆ If so, it is easy to control inflation.
- ◆ If not, Fed has harder job.
- ◆ Greenspan's success due in large part to belief that he would keep inflation low
- ◆ Would a Taylor-type rule help credibility?

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**Fed credibility now under attack!**

- ◆ From Congress who would like to assert control over monetary policy.
- ◆ Bernanke weakened by bitter reappointment debate in early 2010.
- ◆ Doubt about success in ending recession.
- ◆ Fear that attempt to stimulate economy with very low interest rates and money growth will be overdone, leading to inflation!

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### What monetary policy cannot do

- ◆ It cannot raise level of economic growth for more than a short time.
- ◆ It cannot lower unemployment below 'natural rate' for more than a short time.
- ◆ It can give us low inflation!

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### The "Phillips Curve" and How It Disappeared

- ◆ Phillips noticed U & wages negatively correlated in the UK.
- ◆ Some saw "cruel choice" between unemployment and inflation.
- ◆ Inflation sold as tonic for economic growth

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### Then the Phillips "curve" becomes a spiral.

- ◆ As the Fed tried first to fight unemployment and then inflation,
- ◆ it created a rising spiral of inflation and unemployment in the 1970s

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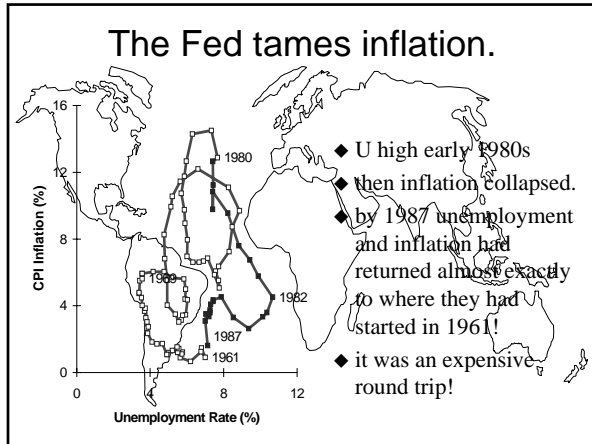
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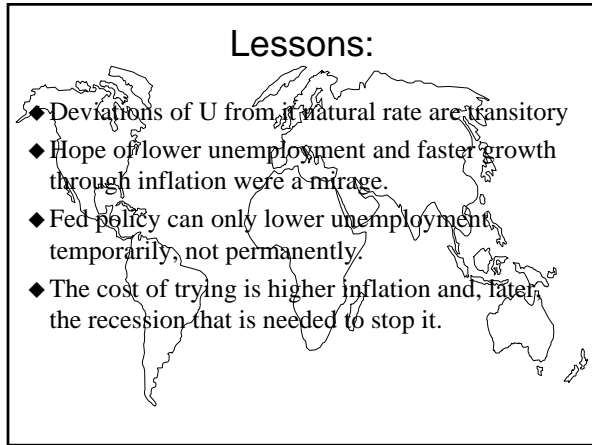
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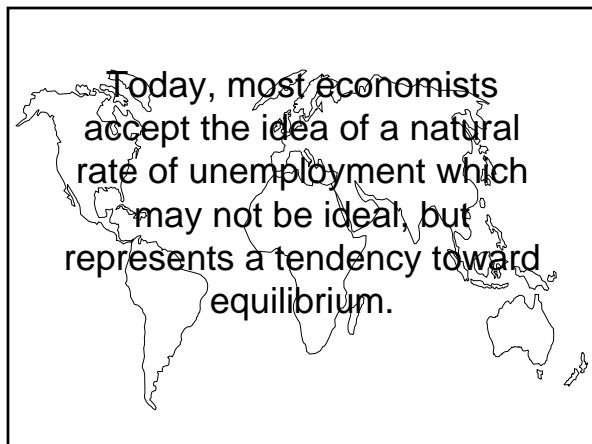
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**But can't we somehow reduce unemployment?**



- ◆ By expanding economic opportunity
- ◆ By investing in
  - education,
  - job training,
  - technology,
- ◆ A free and open economy.

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***THE END!***



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