go over test [show overhead slide with stats]

note at this point that 50% of your grade has yet to be determined (2 problem sets at 5% each, book review at 10%, final at 30%)

will start sign-ups for final times on Wednesday

let's review recent macroeconomic history and then consider a set of macro policy goals: macro stabilization and promotion of overall growth; growth, reduction of unemployment, controlling inflation (deflation, hyperinflation)

look at recent GDP growth history and current inflation

current inflation rate:
http://www.bls.gov/cpi/

update output gap figure:

lots of interesting hyperinflation examples
http://en.wikipedia.org/wiki/Hyperinflation
Macroeconomic Policy

- Recent U.S. macroeconomic history
- Macroeconomic policy goals
- Alternative growth paths

Recent U.S. macroeconomic history

- Growth, but with fluctuations
- Concerns over growth rate
- Reduced fluctuations—until 2008

The Great Depression

- A worldwide event (1929-1933)
- Caused a revolution in macroeconomic thinking
- Until then, the prevailing theory held that no government intervention was necessary; capitalist economies were self-correcting

John Maynard Keynes (1883-1946)

The General Theory of Employment, Interest, and Money (1936)
### Keynesian Economics
- Economies do not naturally gravitate to smooth growth and low unemployment.
- Pessimistic outlooks can lead to drops in AD and thus a lasting contraction.
- Thus, there is a role for government intervention to hasten expansion through increasing government spending and thus increasing AD.

### Postwar expansion and stagflation
- Up to 1973, the economy grew with mild business cycles.
- 1973-1980 inflation was rising; unemployment was rising as well (both rising = stagflation).
- Renewed interest in AS and supply-side shocks.

### The Inflation Rate in the United States since 1870

#### Reaganomics
- Short recession in early 1980s.
- Expansion with low inflation for rest of the decade.
- Recession in early 1990s.
- Interest in manipulating tax code so as to stimulate AS increases.
- Alan Greenspan begins reign as Fed Chair in 1987.

#### Clintonomics
- Strong growth through late 1990s.
- Low inflation, low unemployment.
- Focus on government deficit reduction.
- Greenspan continues his reign.

#### Bushonomics
- 2001 recession: first recession in 10 years; only eight months long.
- Focus on tax cuts in 2001-2003 to stimulate AD increases.
- Wars in Iraq and Afghanistan increased government spending.
- Greenspan continues his reign until 2006; then Bernanke appointed as Fed Chair.
- 2008 financial crisis and recession.
Obamanomics

- Ongoing recession
- Economic stimulus program
- Quantitative easing
- Moving out of the recession: What’s next?

Macroeconomic Policy Goals

- High and steady economic growth
- Low unemployment
- Low inflation

Actual vs. Potential GDP

- potential GDP = real GDP that would be produced if all resources (including the labor force) are fully employed
- thus it is a measurement of productive capacity, while actual GDP is based on utilized capacity
- growth of potential GDP depends on:
  - growth rate of labor force
  - growth rate of capital stock
  - rate of technological progress

Unemployment (and Employment)

- Unemployment’s costs
- Types of unemployment
- What is full employment?

Unemployment’s costs

- population = labor force + not in labor force
- labor force = employed + unemployed
- unemployment rate
  = number of unemployed people/labor force
- measures unused productive capacity which can never be recovered (time-specific)
- unlike unused physical capital, disuse probably increases depreciation of human capital
Unemployment’s costs (cont.)

- Unemployment costs are not fully shared
- Serious personal problem for the unemployed
  - Forgone income (UI programs help)
  - Psychological distress
  - Loss of skills
- Other groups of people besides the unemployed are also not fully utilized:
  - Discouraged workers
  - Underemployed
  - Those employed, but not utilizing their training

Types of Unemployment

- Frictional
- Structural
- Cyclical

What is full employment?

- The economy is said to be at full employment when the only unemployment is frictional
- This is also often characterized as the employment level where there is no pressure on wages to rise or fall
- Probably in the 3-4% range for the unemployment rate

Inflation (vs. Deflation; vs. Stable Prices)

- Redistributive impacts
- Measurement distortion
- Transactions and uncertainty costs
- Hyperinflation

Redistributive impacts

- Pure anticipated inflation has no effect
- Unanticipated inflation affects people differently
  - Borrowers win, lenders lose
  - Flexible contracts neutral, fixed contracts lose
- Relative price changes affect people differently
  - Services, health care, and energy prices are rising more
  - Food, manufactured goods prices are rising less
  - Overall, wages have risen by more than the cost of living

Measurement distortion

- Inflation requires us to differentiate between real and nominal values
  - Real vs. nominal GDP
  - Real vs. nominal factor payments
  - Wages
  - Interest rates
  - Rent
- E.g., the real interest rate = the nominal interest rate - the inflation rate
- This makes it difficult to compare amounts over time and space
Transactions and Uncertainty Costs

- "Menu costs" of having to adjust prices
- Flexible vs. fixed contracts; affects which side of the contract bears the uncertainty
- May reduce willingness to enter into long-term contracts
- Thus pure, anticipated, steady, low inflation imposes fewer costs than unbalanced, unanticipated, variable, high inflation

Hyperinflation

- No precise definition
- Useful guideline: monthly inflation rate of over 50%
- May be caused by government printing too much money; also forces the government to print more (higher denomination) money
- Raises transactions costs, including menu costs, enormously

Hyperinflation (cont.)

- Famous historical cases (and maximum daily inflation rates):
  - Germany (1920-23): 21%
  - Hungary (1945-46): 207%
  - Many Latin American countries in the 1980s (spurred calls for dollarization in some cases)
  - Zimbabwe (2006-09): 98%

- Countries experiencing hyperinflation often revalue their currencies; e.g. in Argentina in 1992, 1 new peso = 100 billion old (pre-1983) pesos
- Zimbabwe actually gave up their currency

Hyperinflation (cont.)

- Here is a Yugoslavian 500 billion dinar note, circa 1993, the final result of the Yugoslavian hyperinflation

Alternative Growth Paths

- Shifts of the Aggregate Supply curve
- Adjusting recessionary gaps
- Adjusting inflationary gaps
- Stagflation
- A growing economy
- A role for stabilization policy

Shifts of the AS curve

- Along the AS curve, costs of production are constant
- Changes in production shift AS
  - The wage rate
  - The interest rate
  - Prices of other inputs (materials, energy)
  - Technology and productivity
  - Available supplies of labor and capital
- The last two changes shift potential GDP as well
Shifts of the AS curve (cont.)

- In the long run (however long that takes), shifts in SRAS will move the economy to its long-run equilibrium (potential GDP)
- We can think of potential GDP as the long-run AS curve (LRAS curve)

Adjusting recessionary gaps

- When (cyclical) unemployment exists, if wages fall, SRAS will shift outward towards LRAS
- Once full employment is attained, this process will stop

The Elimination of a Recessionary Gap

Adjusting recessionary gaps (cont.)

- But wages don’t always fall, or fall only slowly
- Why are they so “sticky” downwards?
  - institutional rigidities
  - psychological resistance
- How long are we willing to wait for the adjustment to occur?

Adjusting inflationary gaps

- When actual GDP > potential GDP, labor is in short supply and wages rise
- If wages rise, SRAS will shift inward towards LRAS
- Employment falls back to the full employment level, at which point the process will stop

The Elimination of an Inflationary Gap
100-54=46  class range
82  class median
88-73=15  class inter-quartile range
80  class mean
10  class standard deviation

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