Economics 1: Introduction to Economics

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Review

April 20, 2016 8-9 AM
Wheeler Auditorium, U.C. Berkeley

To Your i>Clickers

- How many exams do you have?:
    A. 0
    B. 1
    C. 2
    D. 3
    E. 4 or more

To Your i>Clickers

- How many papers > 7pp. do you have?:
  - A. 0
  - B. 1
  - C. 2
  - D. 3
  - E. 4 or more

Time to Start the Review

- The calculations you will need to know how to do—and what the symbols in them mean
- And we are going to go backward in time
  1. Macroeconomics
  2. Economic growth and national income accounting
  3. Political economy
  4. Microeconomics
  5. History and moral philosophy

Macroeconomics: To Your i>Clickers

- Which of these relationships is a piece of "aggregate supply"?:
  A. $\pi = E(\pi) + \beta(Y\text{-}Y^*)/Y$ :: inflation (π) is equal to expected inflation ($E(\pi)$) plus a slope parameter (β) times how much potential output (Y^*) is below or above actual output (Y)
  B. $Y = C + I + NX + G$ :: GDP (Y) is equal to consumption spending by households (C) plus investment spending by businesses (I) plus net exports (NX) plus government purchases (G)
  C. $P = E(P) + \beta(Y\text{-}Y^*)/Y$ :: The price level (P) is equal to expected price level (E(P)) plus a slope parameter (β) times how much potential output (Y^*) is below or above actual output (Y)
  D. (A) and (C)
  E. (A), (B), and (C)

Macroeconomics: To Your i>Clickers

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Macroeconomics: To Your i>Clickers II

- When actual GDP (Y) is a little bit above potential GDP (Y*), we expect inflation (π) to increase:
    A. rapidly but temporarily
    B. we don’t: we expect inflation to fall
    C. slowly, steadily, and inexorably
    D. slowly and hesitantly, with lots of ups and downs
    E. rapidly and for a sustained period of time

Macroeconomics: To Your i>Clickers II

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Macroeconomics: To Your i>Clickers III

- In the aggregate-demand income-expenditure equation:
  - $Y = \mu \times [c_0 + I_0 + NX] + \mu \times G - (\mu I_r) \times r$
- μ is:
  A. a measure of the inequality of income
  B. zero unless the economy is such that interest rates are at their zero lower bound
  C. the risk premium on government debt
  D. the marginal propensity to consume—how much of an extra dollar of income the typical consumer spends buying things for the household
  E. the Keynesian multiplier that tells us by what factor changes in basic spending flows are amplified in their effects on GDP by correlated changes in consumption in the same direction

Macroeconomics: To Your i>Clickers III

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Macroeconomics: To Your i>Clickers IV

- In the aggregate-demand national income identity:
  - Y = C + I + NX + G
- the five symbols are, in order:

  A. GDP, household consumption spending, the interest rate controlled by the Federal Reserve, income inequality, private debt

  B. GDP, the money stock, business investment spending, net exports, government purchases

  C. GDP, household consumption spending, business investment spending, the animal spirits of investors, government purchases

  D. GDP, household consumption spending, business investment spending, net exports, government purchases

  E. GDP, household consumption spending, the interest rate controlled by the Federal Reserve, net exports, the long-term government debt

Macroeconomics: To Your i>Clickers IV

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E. GDP, household consumption spending, the interest rate controlled by the Federal Reserve, net exports, the long-term government debt

Macroeconomics: To Your i>Clickers V

- Consider the equation:
  - $r = i + \tau + \rho - \pi$
- summarizing the relationship between the long-term risky real interest rate that matters for business investment spending (r), the short term safe nominal interest rate that the Federal Reserve controls (i), the *term premium* financiers demand in order to hold long-term rather than short-term debt (τ), the *risk premium* financiers demand in order to hold risky rather than safe government debt (ρ), and the inflation rate (π).
- In this equation:

  A. the terms i and τ tend to move in the same direction, with movements in i dominating
  B. the terms τ and π tend to move in the same direction by the same amount, thus neutralizing each other
  C. the terms i and τ tend to move in opposite directions, with movements in τ dominating
  D. the terms i and τ tend to move in opposite directions, with the movements in i dominating.
  E. the terms τ and ρ tend to move in the same direction, reinforcing each other

Macroeconomics: To Your i>Clickers V

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  - $r = i + \tau + \rho - \pi$
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Administrivia

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You Still Need to Register Your i>Clickers If Your i>Clicker IDs Are

- 36a97ce3
- 42d370e1
- 4319a7fd
- 45260A69
- 46111047
- 417fa57b

- Please do so…

- Or if your scores appear wrong:
  - In my 55 years I have learned: do not trust databases

Aggregate Supply: Inflation, Unemployment, and GDP

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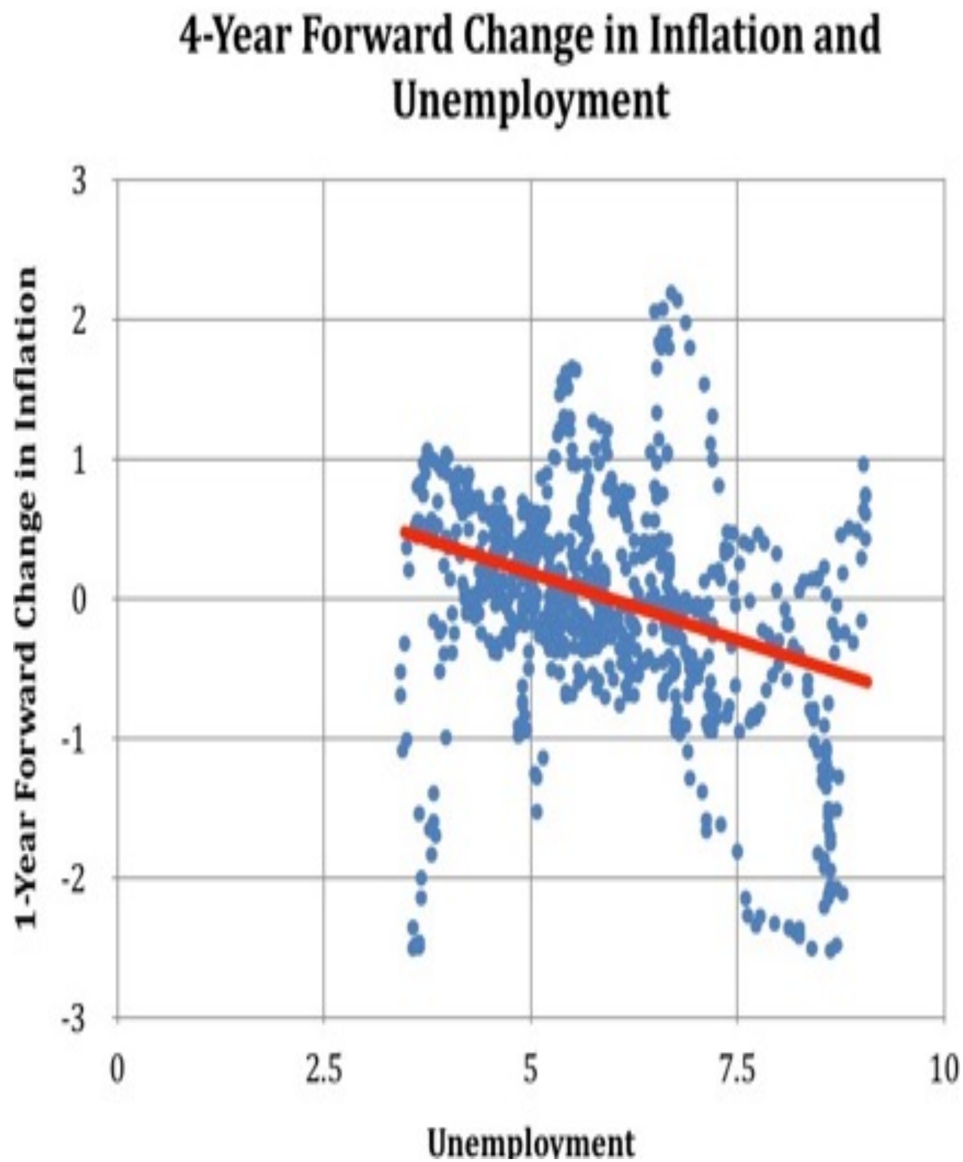
Unemployment and Inflation

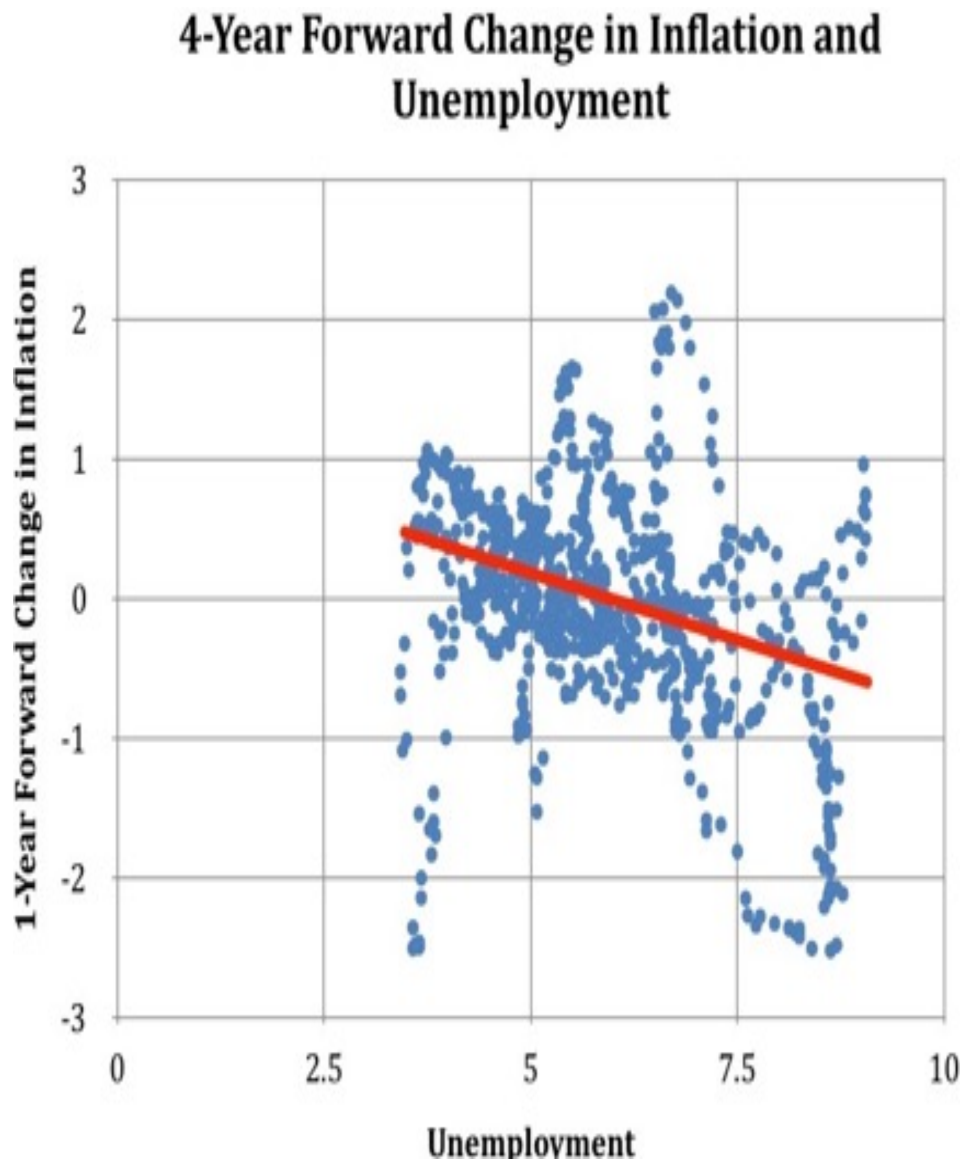
Unemployment and Inflation in the Longer Run…

- The 1970s and the 1980s in the lower right and upper middle…
- The 1950s and the late 2000s in the lower left and upper right
- But a negative unemployment-change in inflation relationship is the way to bet if you are patient…



Rules of Thumb

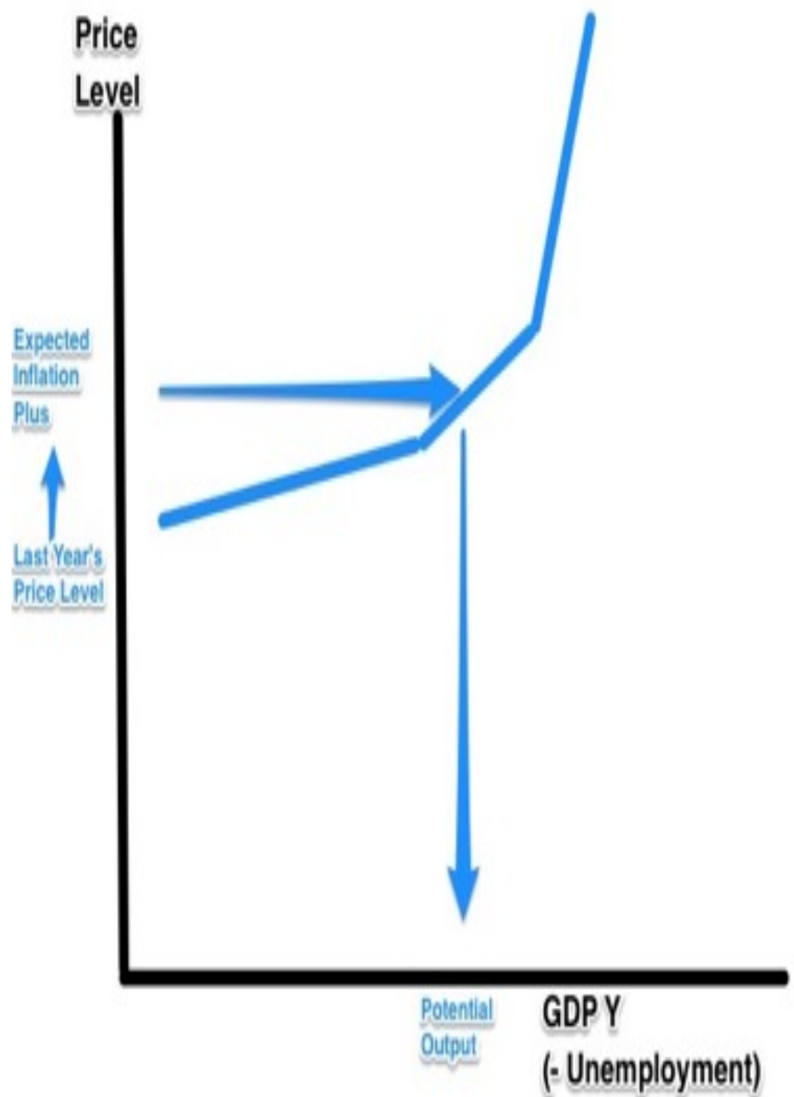
- Unemployment 1%-pt above average means Y 2%-pts below potential GDP
- Reduce (raise) real GDP below (above) potential output by 1%-pt and keep it down (up) for 5 years, and inflation will fall (rise) by 1%-pt
- But other, bigger things than movements along this "Phillips Curve" may well be happening to prices—like the 1970s



The Consensus Model of Aggregate Supply

- Where actual inflation is expected inflation—we call that "potential output" or "potential GDP" is the sweet spot…
- Supply shocks and confidence losses can both cause large upward shifts in aggregate supply
- It is the proper business of the Federal Reserve (and the rest of the government)
  - through proper adjustment of G
  - and proper influencing of r through i
- to hit that sweet spot…

- $Y = \mu \times [c_0 + I_0 + NX] + \mu \times G - (\mu I_r) \times r$



Private-Sector Shocks to the Economy

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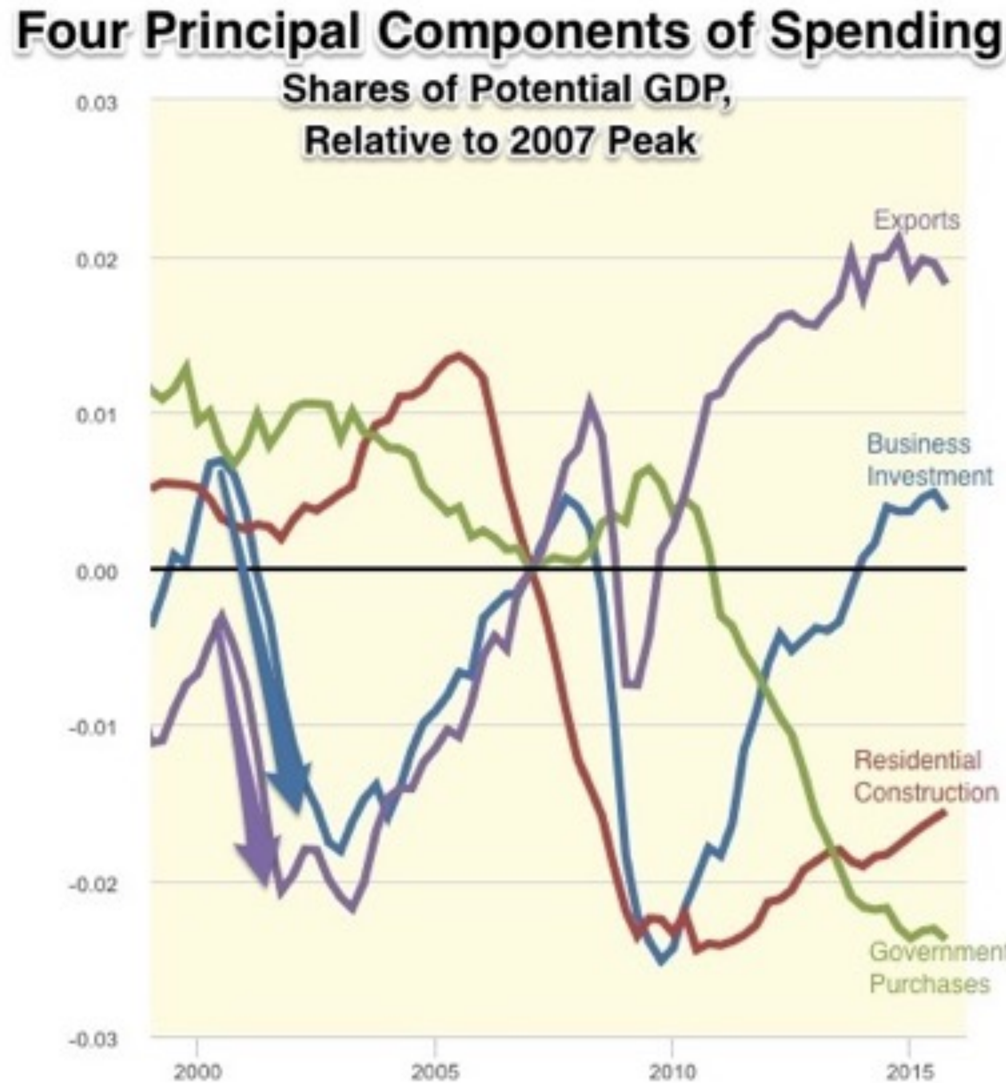
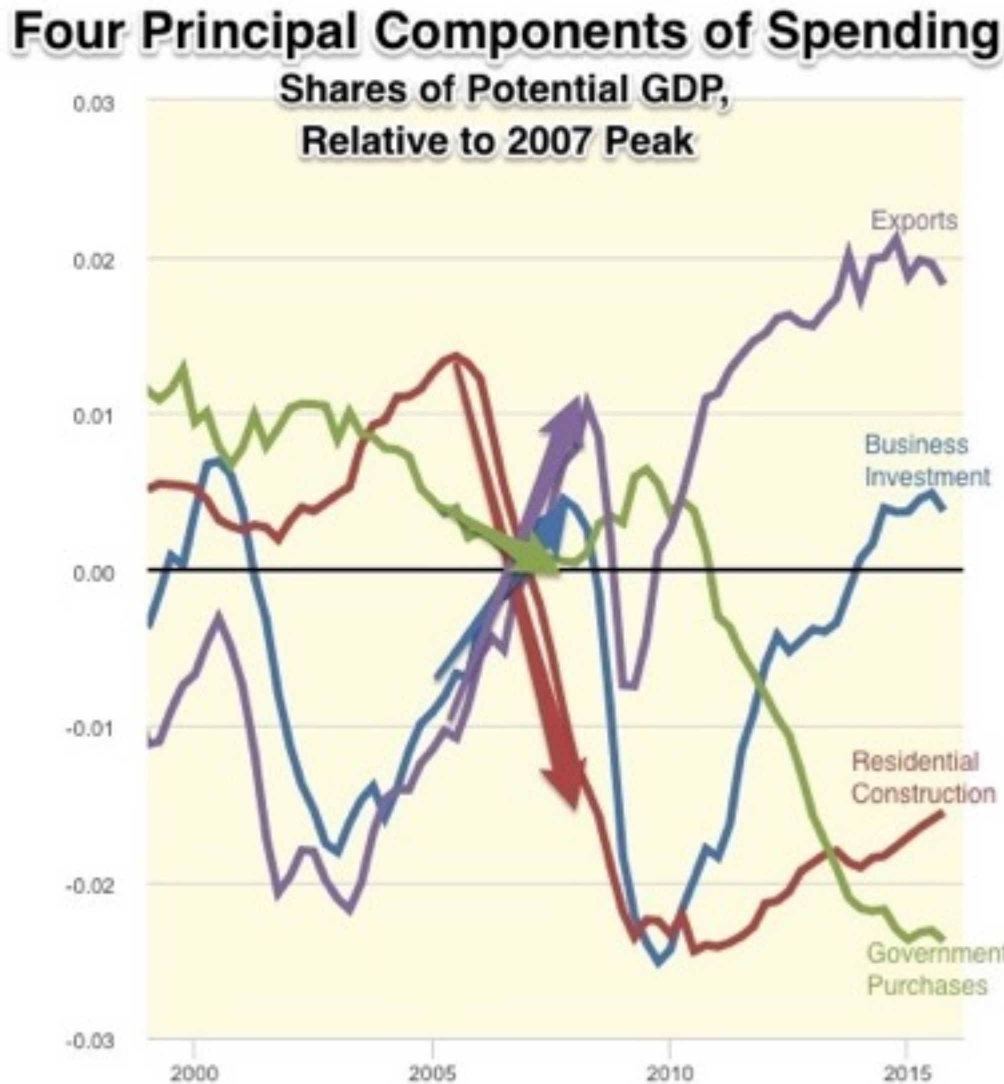
Shocks to the Economy 2000-2002

- The collapse of the dot-com bubble
- A then-$12T level of annual GDP
- Investment plus net exports fall by 3% of GDP—by $360B



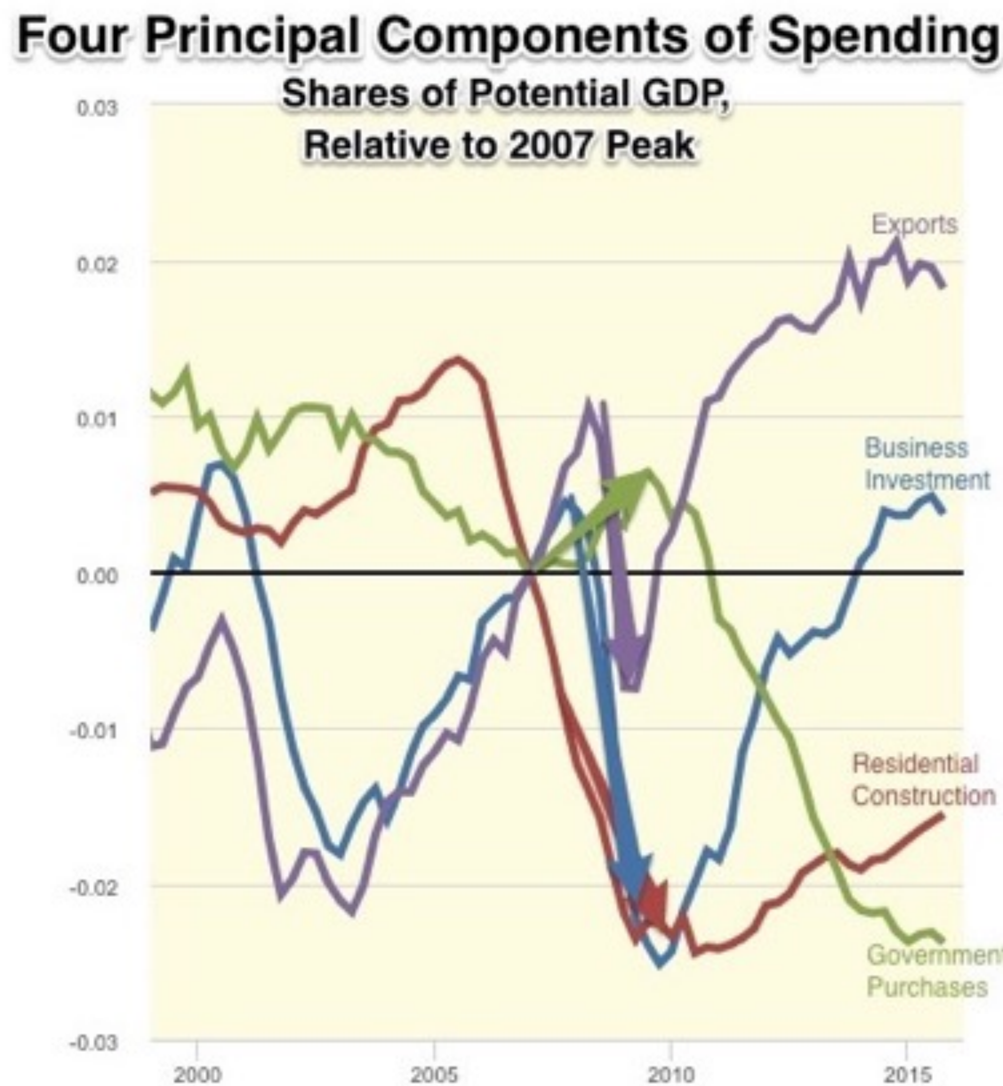
Shocks to the Economy 2005-2007

- The collapse of the housing bubble
- A then-$15T level of annual GDP
- Residential investment falls by 3% of GDP—by $450B
- But, aided by Federal Reserve interest-rate forbearance, business investment and exports take up the slack



Shocks to the Economy 2008-2009

- The financial crisis and what followed
- Exports down by $250B
- Business investment down by $350B
- Residential investment down by $250B
- Total shock: $850B
- In a $15,000B annual GDP Y economy



Objectives of Macroeconomic Policy

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Unemployment and Inflation

Market Failure 10: Aggregate Demand

- General gluts—an excess demand for money, and an excess supply of pretty much everything else
- Their counterpart: a great inflation—too much money chasing two few goods
- There is a demand for money, and:
  - The private sector cannot create supply money when it is “in request”, for when it is in request is when the credit-worthiness of private-sector agents is in doubt…
  - The private sector cannot extinguish money save through inflation
    - Inflation as disease and as cure

Market Failure 10: Aggregate Demand II

- General gluts and great inflations
- $Y = \mu[c_0 + I_0 + NX] + \mu G + \mu I_r r$
- $r = i + \rho + \tau - \pi$
- Shocks:
  - Shocks to spending: consumer confidence, animal spirits, foreign demand for exports
  - Shocks to interest rates—to the *risk premium* and to the *term premium*
  - Shocks to the inflation rate from supply disturbances
- Fill in the troughs: match Y to potential output Y*

What Is the Aim of Macroeconomic Policy?

- To smooth out the business cycle
- Things that the Federal Reserve takes as its objectives:
  - Price stability
  - Maximum feasible employment
  - Moderate long-term interest rates
  - Financial stability

Macroeconomic Policy Issues

- Balance between fiscal policy and monetary policy
  - Both when expansionary policy is needed, and when contractionary policy is needed
  - What should one set of policymakers do when they other set are falling down on their job?
- Tools in emergencies
- Actions to reduce the magnitudes of shocks to private-sector spending
- How soon will recovery “come of itself”?
- What are the dangers of doing more harm than good by policy activism?

John Maynard Keynes in 1924

- The individualistic capitalism of today, precisely because it entrusts savings to the individual investor and production to the individual employer, *presumes* a stable measuring rod of value, and cannot be efficient—perhaps cannot survive—without one…

John Maynard Keynes in 1924 II

- Rising prices [inflation] and falling prices [deflation] each have their characteristic disadvantage. The Inflation which causes the former means Injustice to individuals and to classes—particularly to investors; and is therefore unfavorable to saving. The Deflation which causes falling prices means Impoverishment to labor and to enterprise by leading entrepreneurs to restrict production, in their endeavor to avoid loss to themselves; and is therefore disastrous to employment…

John Maynard Keynes in 1924 III

- Inflation is unjust and Deflation is inexpedient. Of the two, perhaps deflation is the worse; because it is worse, in an impoverished world, to provoke unemployment than to disappoint the *rentier.* But it is not necessary that we should weigh one evil against the other. It is easier to agree that both are evils to be shunned…

John Maynard Keynes in 1924 IV

- Those who are not in favor of drastic changes in the existing organization of society believe that [our current economic] arrangements, being in accord with human nature, have great advantages. But they cannot work properly if the money, which they assume as a stable measuring-rod, is undependable. Unemployment, the precarious life of the worker, the disappointment of expectation, the sudden loss of savings, the excessive windfalls to individuals, the speculator, the profiteer--all proceed, in large measure, from the instability of the standard of value…