

## OUTLINE — October 11, 2017

- Behavioral Economics Clicker Q's
- Overview of Macroeconomics
  - Growth of Total Output
  - Unemployment
  - Inflation
- Models of Macroeconomics

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*PS 2 due today/tomorrow in section*  
*PS 3 distributed; due Mon/Tues 10/23-10/24 in section*

## Behavioral Economics

- A *very broad* overview . . .
- Economic models characterized by
  1. Question
  2. Simplifications
  3. Assumptions about behavior
- Interested?
  - *Econ 119 (Psych & Econ)*
  - *Econ 138 (Behavioral Econ)*

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## Example: Risk Aversion

- Two payouts, both with same mean (6.50).

Die roll	Payout A	Payout B
1	0	7
2	4	5
3	8	9
4	15	6
5	3	4
6	9	8

- Which would you prefer? A? B? Click C for "either"

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## Example: Loss Aversion

- Two payouts, both with same mean (6.17) & SD (10).

Die roll	Payout A	Payout B
1	-5	0
2	10	10
3	15	25
4	-8	0
5	10	1
6	15	1

- Which would you prefer? A? B? Click C for "either"

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## Example: Loss Aversion

- Do people hate losses more than they like wins?
- If so, implications for risk-taking behavior.
  - You own a stock that you bought for \$50 / share and it is now selling for \$30 / share.
  - You bought a house for \$800,000. If you sold it now, you'll only get \$600,000. You've been offered a new job at a good salary that is 1,000 miles away.

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## Example: Hyperbolic Discounting

- How patient are you?

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## Macroeconomics

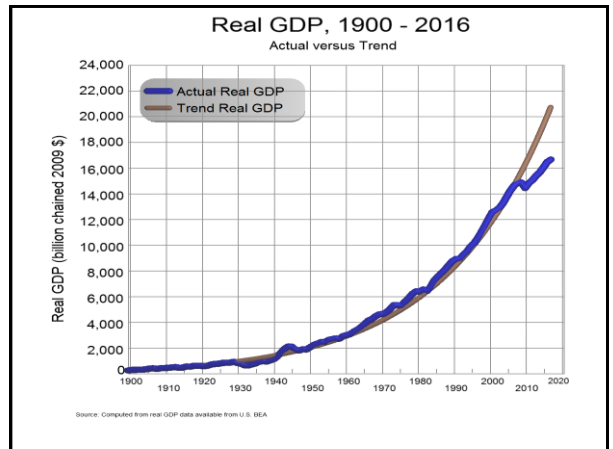
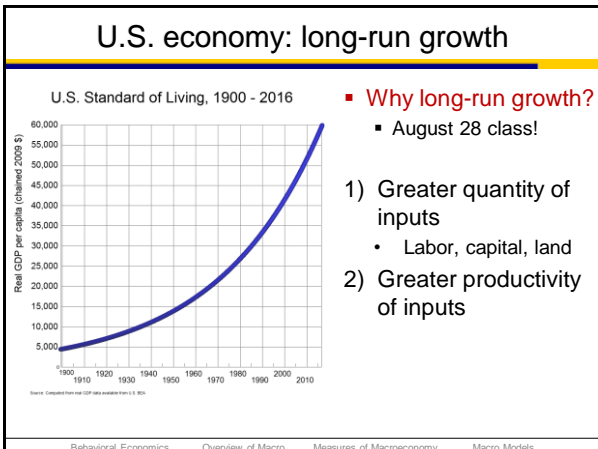
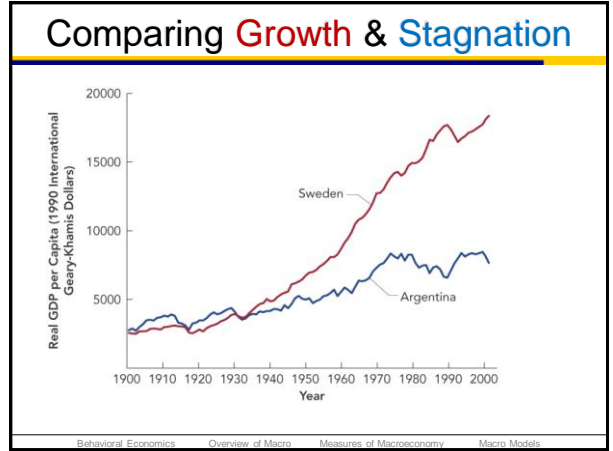
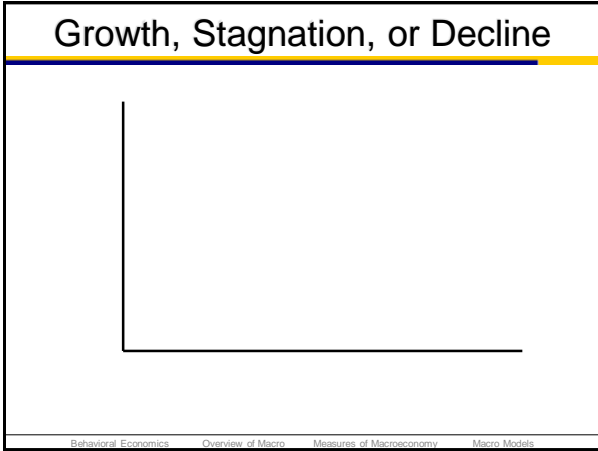
- The economy as a whole
- Three main topics
  - (Long-run) Economic Growth
  - Unemployment
  - Inflation

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## New meanings of “short” & “long”

- In **micro**, *precise definitions*
  - Short run = so short that the firm can't change amount of capital (K)
  - Long run = long enough that the firm can exit or enter or change K
- In **macro**, *not-so-precise*
  - Long run = decade-to-decade (10 years)  
OR generation-to-generation (20-25 years)
  - Short run = a couple of years or so, maybe more

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## Various definitions of "growth"

- Context matters . . . A lot.
- "Economic growth" can mean . . .
  - . . . Long-run increases in potential GDP
  - . . . Long-run increases in actual GDP
  - . . . Short-run increases in actual GDP

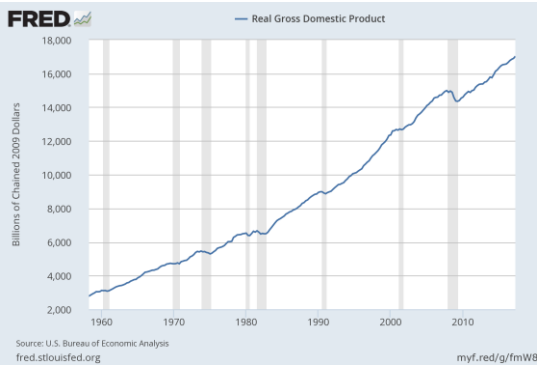
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## Total Output in the Short Run

- Recession
- Depression
- Recovery
- Expansion

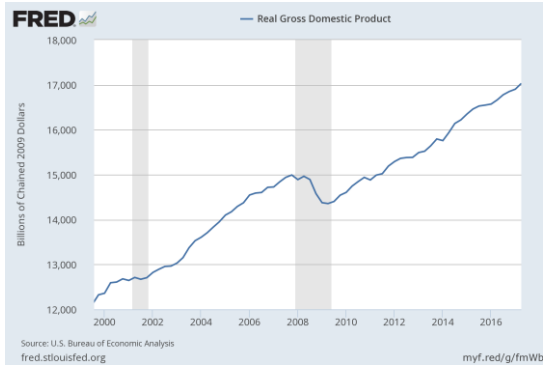


## Shaded areas = recessions



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## Note how BAD 2007-09 was!



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## Unemployment

- Out of work and
- Looked for work in the last 4 weeks



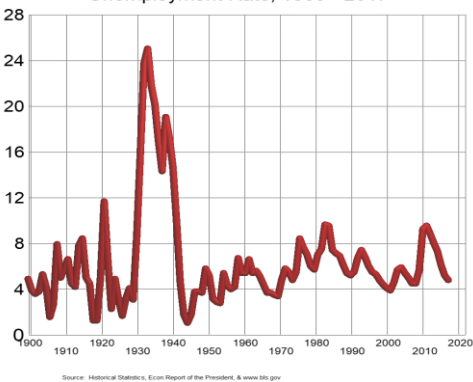
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## Shaded areas = recessions



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Unemployment Rate, 1900 - 2017

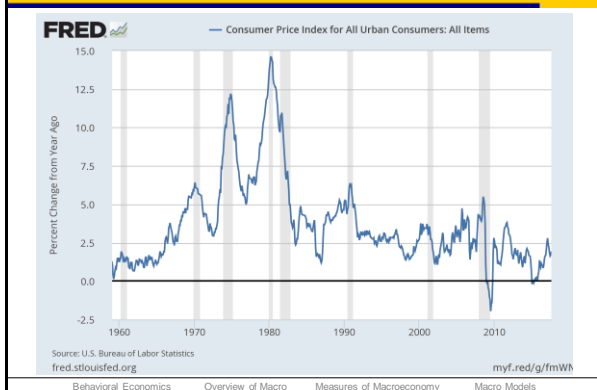


## Definitions

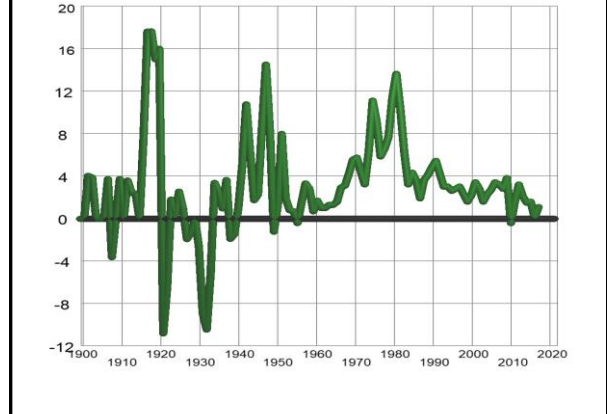
- Price Level (P):
- Inflation
- Stagflation
- Disinflation
- Hyperinflation
- Deflation

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## Shaded areas = recessions



## Inflation Rate, 1900-2017

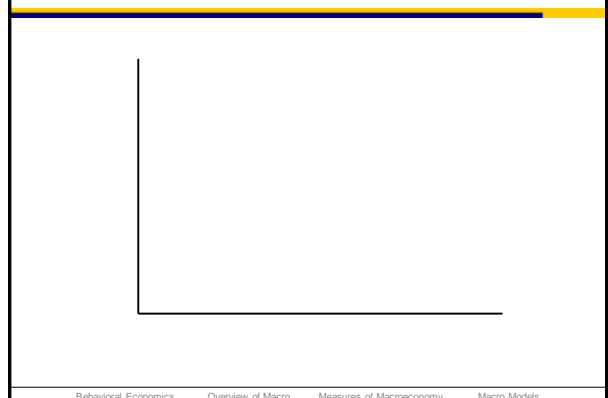


## Recall: Economic Models

- Models are how economists answer questions
- Each model is characterized by
  1. Question
  2. Simplifications or Abstractions
  3. Assumptions about Behavior
- Change assumption → Change model
- To evaluate policy, compare policy's results with the **counterfactual** (what result would have been in absence of policy), not with the past
- Formulate the counterfactual by using models

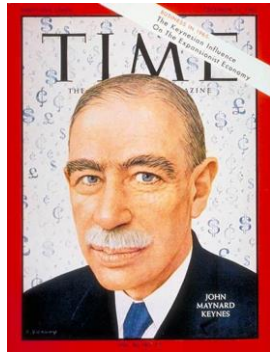
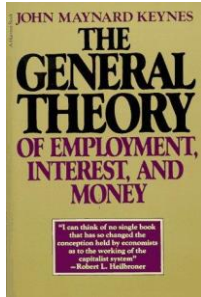
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## Pre-1930s Model: "The" Labor Market



## What Determines Unemployment?

- John Maynard Keynes



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## What Determines Unemployment?

- John Maynard Keynes
- Unemployment* is determined by *employment* which is determined by *output produced* which is determined by *aggregate demand* for output
- Key idea:  
*Someone will hire you if they can sell what you produce*

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## What about inflation?

- Phillips Curve (return to this: November 20)
- Prices & inflation* depend upon *Costs of production* which depend upon *Supply & Demand for inputs* which depend upon *Expectations of prices* and *Productivity of inputs* and *Amount of output produced*

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