

OUTLINE — October 10, 2018

- Concluding Thoughts on Micro half of course
- Overview of Macroeconomics
 - Growth of Total Output
 - Unemployment
 - Inflation
- Models of Macroeconomics
- Gross Domestic Product (GDP)

PS 2 due October 15/16 in section

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Concluding Thoughts on Micro

Wrapping up Micro Overview of Macro Measures of Macroeconomy Macro Models

Macroeconomics

- The economy as a whole
- Three main topics
 - (Long-run) Economic Growth
 - Unemployment
 - Inflation
- For each topic
 - Models
 - And then, Policy

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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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Total Output (GDP)

- Gross Domestic Product (GDP)
 - Estimate of \$ value of total amount of goods and services produced in any economy in a year
- Nominal versus Real

- Potential versus Actual

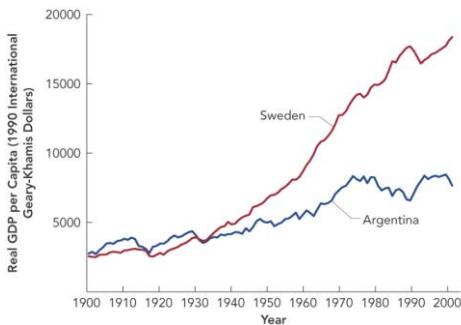
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Growth, Stagnation, or Decline



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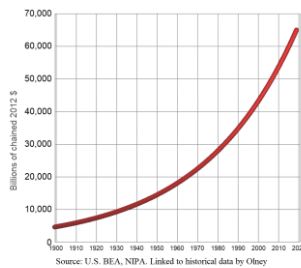
Comparing Growth & Stagnation



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U.S. economy: long-run growth

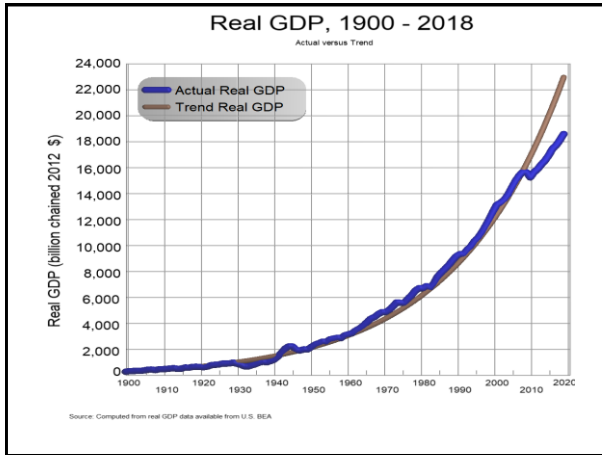
U.S. Standard of Living Trend, 1900-2018



Source: U.S. BEA, NIPA. Linked to historical data by Olney

- What drives long-run growth?
 - August 27 class!
- 1) Greater quantity of inputs
 - Labor, capital, land
- 2) Greater productivity of inputs

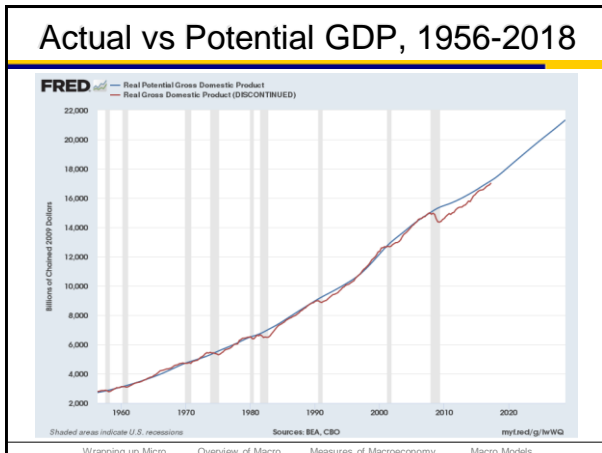
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Various definitions of "growth"

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

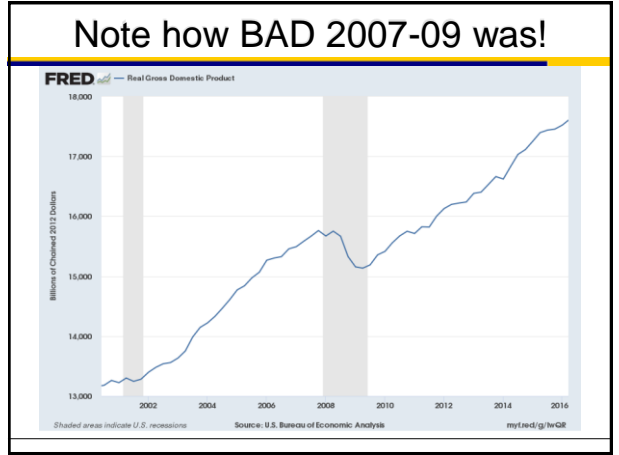
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Total Output in the Short Run

- Recession
- Depression
- Recovery
- Expansion

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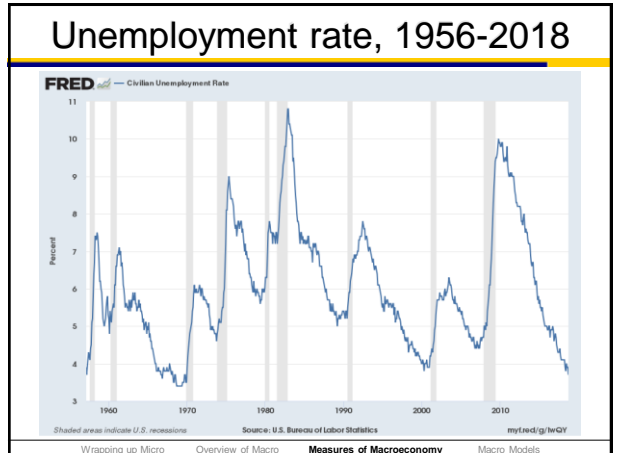


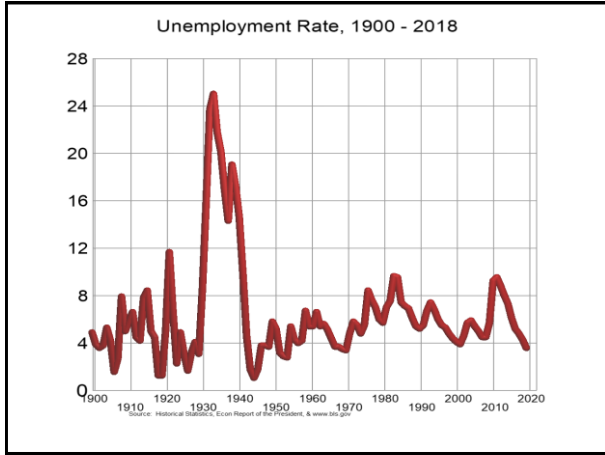
Unemployment

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




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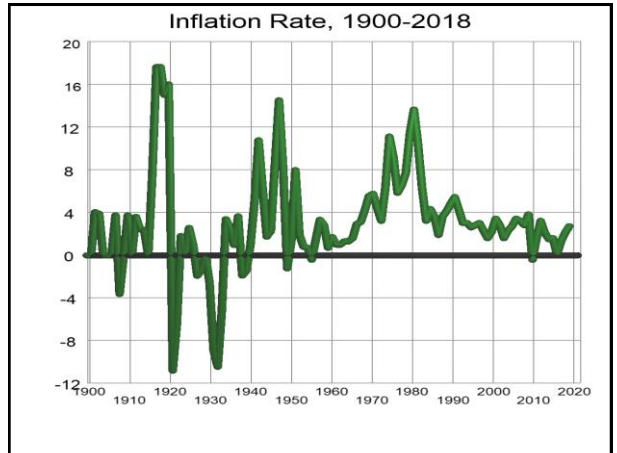
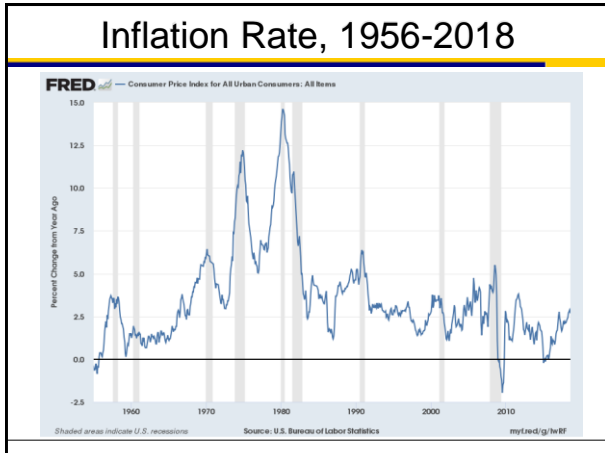




Definitions

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

Wrapping up Micro
Overview of Macro
Measures of Macroeconomy
Macro Models



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



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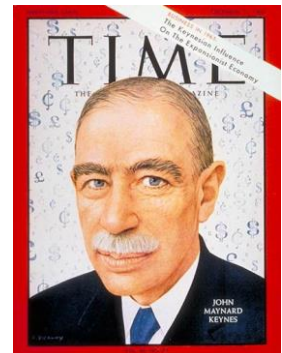
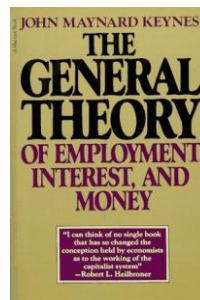
Why that model doesn't apply

- Which assumptions are not valid?

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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 19)
- *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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Gross Domestic Product (GDP)

- Employment depends upon output produced
 - How measure "output produced"?
 - With "gross domestic product" or GDP
- GDP = Total annual economic output in a nation
 - Output
 - Economic
 - In a nation
 - Annual
 - Total

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How compute GDP?

- GDP =
- Nominal GDP: use *current* prices
- Real GDP: use "*base year*" prices

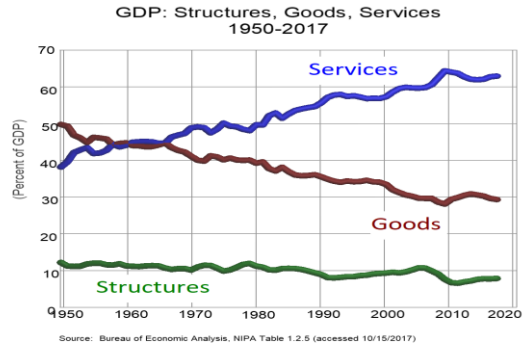
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How big is GDP?

- Nominal GDP in 2018: It was \$20.4 trillion
 - 20,400,000 million dollars
 - \$20,400,000,000,000
 - Per person (per capita), about \$62,500
- Data source: Bureau of Economic Analysis (www.bea.gov)

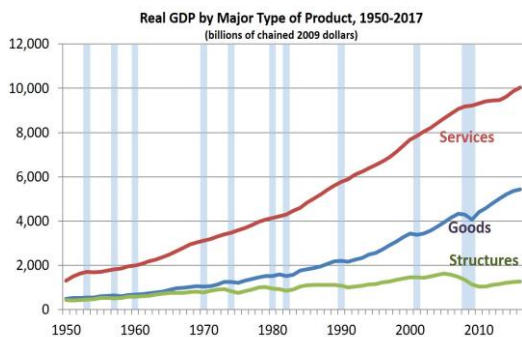
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What do we produce? (% share)



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What do we produce? (\$ value)



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Omissions from GDP

- Activities that generate output but are not counted in GDP

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