OUTLINE — October 16, 2019

- Labor Market (most of this is left to Chap. 9)
- Income & Wealth Distribution
  - Tax Policy
- Overview of Macro

PS3 due Gradescope & bcourses, Thurs 10/24 8 pm

Perfect Competition & Income

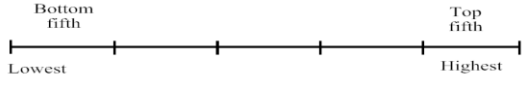
- In perfect competition, worker income depends upon "marginal revenue product" (MRP)
  - MRP = increase in total revenue from hiring 1 more worker
    - Depends upon [1] marginal product (= marginal return) and [2] price of output
  - Assumes perfect competition in market for labor
    - Lots of workers, all exactly the same,
      - So, no discrimination (legal or illegal) by employers
    - Lots of employers, none with large share of market
    - No barriers to entry or exit

Policy Implications

- If assumptions of perfect competition are satisfied. . .
  - Resulting distribution of income reflects
    - Worker skills & talents
    - Output price
  - Policy implication: no market intervention called for
- But are the assumptions of perfect competition applicable to markets for labor?
  - Hardly

Distribution of Income

- Divide population into fifths:



- Gini Coefficient: A measure of evenness of distribution
  Gini = 0 means perfectly **equal** distribution
  Gini = 1 means perfectly **un**equal distribution

Choose a Country to Live In : You don't know what income group you'll be in. You have a 20% chance of being in the richest 20%, a 20% change of being in the poorest 20%, an 0.1% chance of being in the top 0.1%, and so on.

	A	B	C	D	E
Income per person per year					
In top 0.1%	$1,122,000	$404,000	$424,000	$459,000	$379,000
In top 20%	$47,300	$27,900	$28,600	$31,100	$13,400
Mean	$20,400	$16,200	$16,000	$15,800	$4,200
In bottom 20%	$5,300	$7,800	$8,500	$5,900	$500
Life expectancy from birth	77 yrs	75.5 yrs	80.5 yrs	79 yrs	67 yrs
Deaths before age 5 (per 1,000 newborns)	8	6	5	7	40
Gini coefficient of income inequality	0.408	0.247	0.249	0.315	0.600

U.S. Household Income, 2018

	Lowest 20%	Second 20%	Third 20%	Fourth 20%	Top 20%
If even distribution	20%	20%	20%	20%	20%
Actual share in 2018					
Dollar cut-offs (rounded)					

Source: *https://www.census.gov/library/publications/2019/demo/p60-266.html* , Tables A-3 & A-4

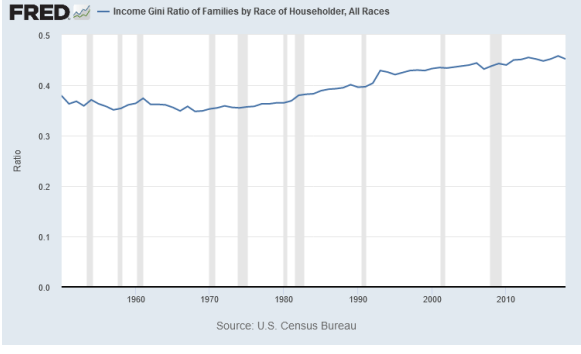
"income" is money income before taxes & transfers

Gini for U.S. Income Increasing

Gini coefficient, household income	
1970	
1990	
2000	
2018	

Source: *https://www.census.gov/library/publications/2019/demo/p60-266.html*, Table A-3

Gini, Household Income, 1950-2018



Gini coefficient, U.S., 1937-2004

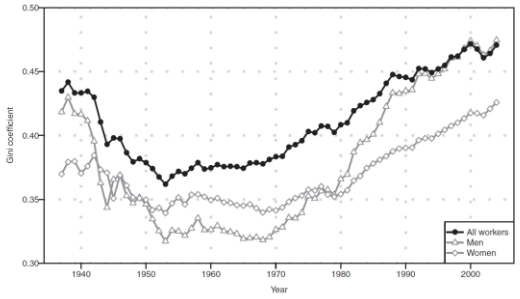
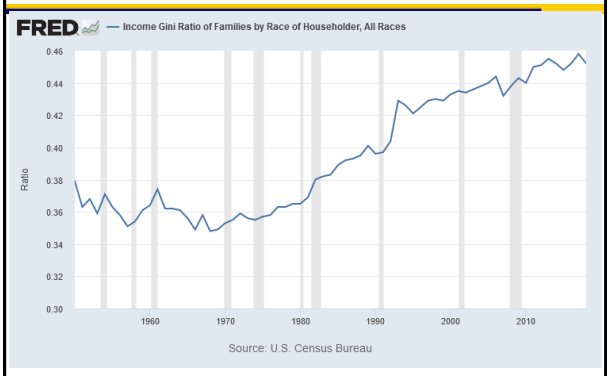
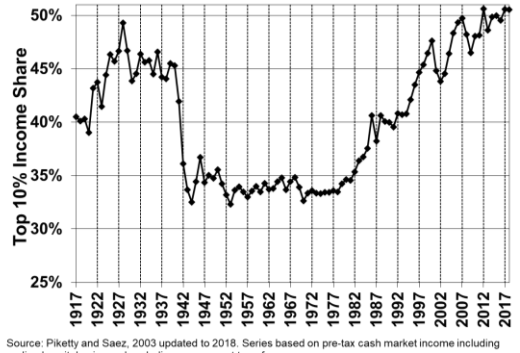


FIGURE I
Annual Gini Coefficients

Gini, Household Income, 1950-2018

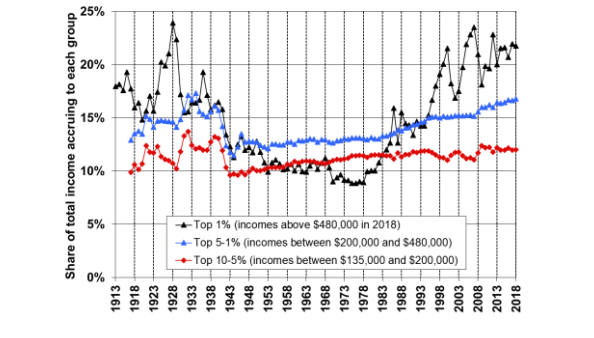


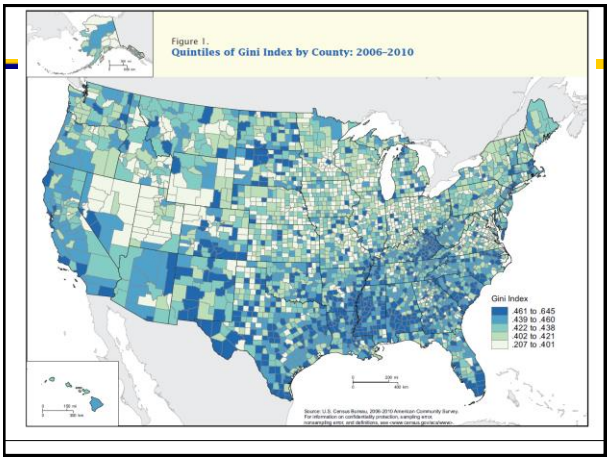
Pre-tax Income share of top 10%, 1917-2018

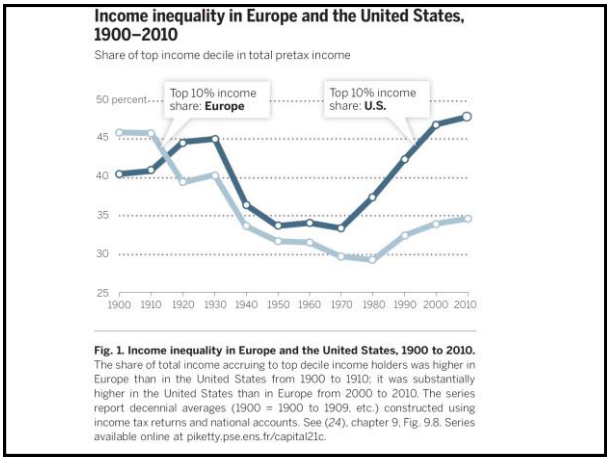


Source: Piketty and Saez, 2003 updated to 2018. Series based on pre-tax cash market income including realized capital gains and excluding government transfers.

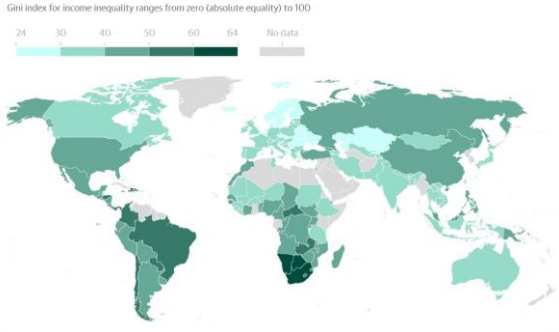
Breaking out top 10%, 1913-2018





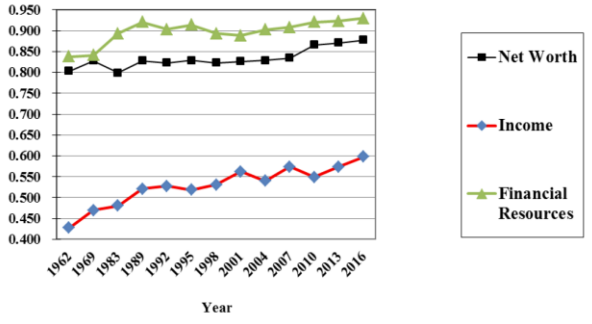


Income Gini coefficients by country



Source: https://www.theguardian.com/inequality/datablog/2017/apr/26/inequality-index-where-are-the-worlds-most-unequal-countries, from World Bank data. Years vary, most are late 2000s.

Wealth Gini: More Stable, Much Bigger



Source: http://www.nber.org/papers/w24085

Wealth Inequality in U.S.

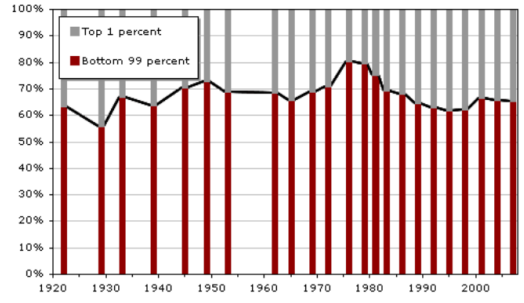
	1962	1983	2001	2016
Net Worth (000s, 2016 $)				
Median	57	80	100	78
Mean	214	313	515	668
% with NW ≤ 0	18	15	18	21
Financial Resources (primarily excludes home)				
Median	15	17	31	15
Mean	170	227	405	542
% with NW ≤ 0	26	26	26	30

Distribution of Wealth in the U.S.

- What share of total wealth was owned by each of the three groups in 2016?
  - Top 1% own 40% of total wealth
  - Next 19% own 50% of total wealth
  - Bottom 80% own 10% of total wealth
- How much wealth did they have?
  - Mean $ amount
    - Families in top 1% have average $26.4 million of total wealth
    - Families in next 4% have average $4.5 million of total wealth
    - Families in bottom 40% have average net worth < 0 (- $9,000)

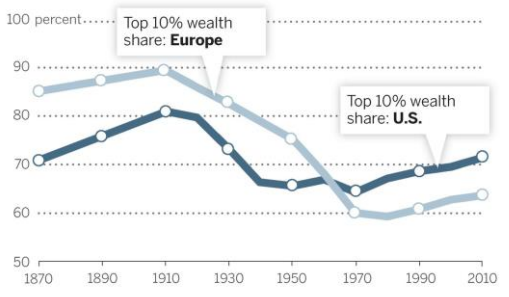
US Wealth inequality is similar to 1920s

Figure 5: Share of wealth held by the Bottom 99% and Top 1% in the United States, 1922-2010.

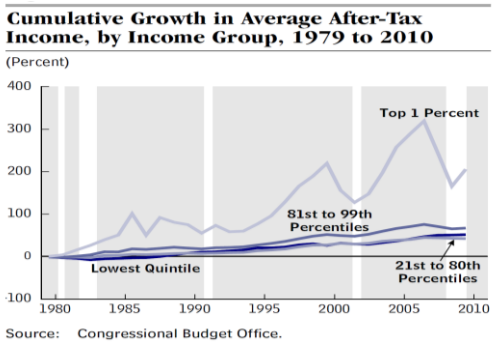


Wealth inequality in Europe and the United States, 1870–2010

Share of top wealth decile in total net wealth

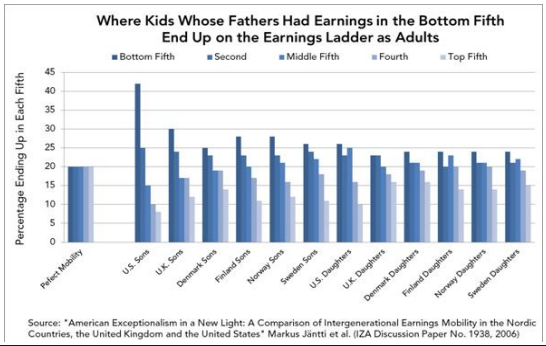


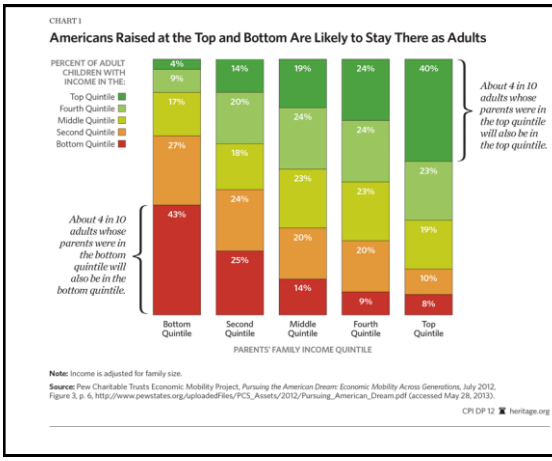
Income growth by income group

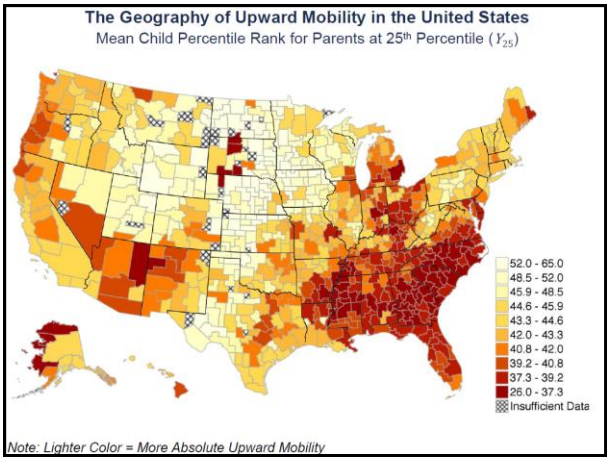


What about income mobility?

Popular image: America as "land of opportunity"; "Pursuing the American Dream"







Why the rise in income for top 1%

- Increased labor income
  - "Superstars" reach wider audiences due to technological changes in mass media
  - Very large pay increases for CEOs
  - In finance, deregulation and compensation for IPO risk

Why the rise in income for top 1%

- Increased labor income
- Changes in government taxes and transfers
  - Overall, taxes and transfers lower Gini coefficient
  - But today, less equalizing than 30 years ago
    - Transfers through Medicare (health care, age 65+) benefit all
    - Less generous transfers to low-income households
    - Taxes have become less progressive
      - Shift from income to payroll taxes

US Tax Policy

- https://twitter.com/gabriel_zucman/status/1181169045694869504

Explaining Distribution of Wealth

- Area of ongoing research
- Distribution reflects

  [1] Additions to wealth (saving out of income)
  - The higher a family's income, the more likely they are to save

  [2] Rate of return on wealth
  - The higher a family's wealth, the higher their average rate of return

Does cutting top-tier taxes spur growth?

- Apparently not
- Reduction in top tier tax rates
  - Little effect on saving, investment, or productivity growth
  - Does increase income inequality
    - Source: Congressional Research Service, report 9/14/12
- Cutting taxes
  - Lower 90% will increase spending → creates jobs
  - Top 10% *shift* spending, don't *increase* spending → no net job creation
    - Source: Owen Zidar (UC Berkeley Ph.D., Chicago Business School faculty)

Does distribution matter?

- Are there effects of an uneven distribution of income?
- Perhaps . . . But it's a relatively new area of research
  - Income mobility easier when more even income distribution
  - Distribution of fiscal stimulus may matter
    - How much of a tax cut do people spend?
  - Monetary policy impacts vary with income class
  - Political implications (beyond Econ 1 scope)
    - How well democracy functions
    - Ease of implementing change desired by (lower income) majority?
  - Sociological implications (also beyond our scope)
    - How well do groups interact when there are big disparities?
    - Social cohesion (cf, impact of disparities in SF housing crisis)

Redistribution Debate

- How evaluate arguments?
- Depends on
  - your goals
  - assumptions about source of differences

Macroeconomics

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

New meanings of “short” & “long”

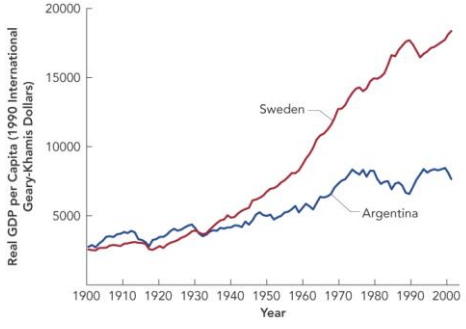
- In micro, *precise definitions*
  - Short run = so short that the firm can’t change amount of capital (K)
  - Long run = long enough that the firm can exit or enter or change K
- In macro, *not-so-precise*
  - Long run = decade-to-decade (10 years)
    OR generation-to-generation (20-25 years)
  -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

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
- Per capita

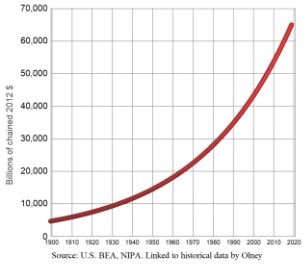
Growth, Stagnation, or Decline

Comparing Growth & Stagnation



U.S. economy: long-run growth

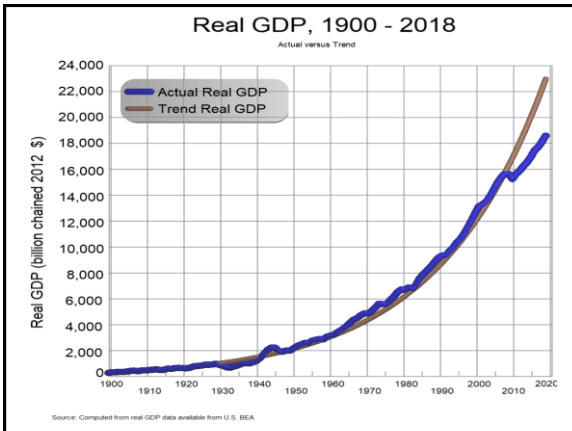
U.S. Standard of Living Trend, 1900-2018



- What drives long-run growth?
  - September 4 class!

1) Greater quantity of inputs
   - Labor, capital, land
2) Greater productivity of inputs

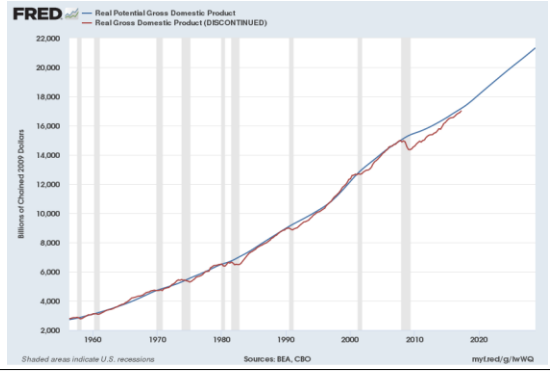
Real GDP, 1900 - 2018



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.

Actual vs Potential GDP, 1956-2018

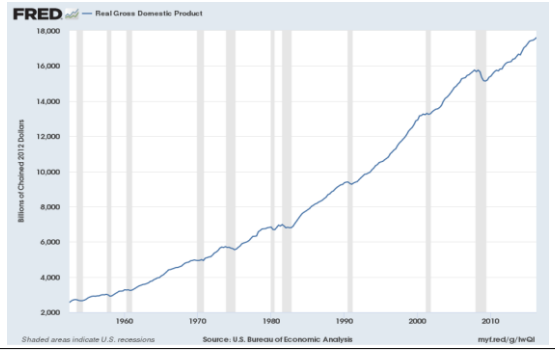
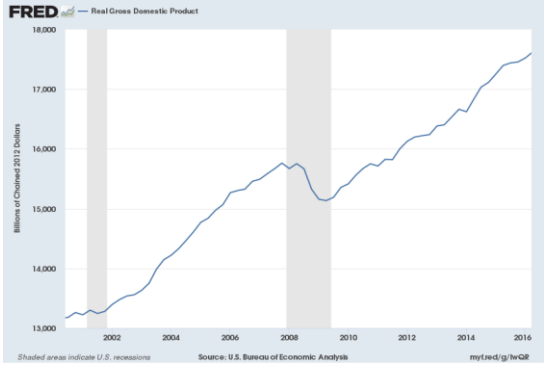


Total Output in the Short Run

- Recession
- Depression
- Recovery
- Expansion

Real GDP, 1955 – 2018

Shaded areas = recessions



Note how BAD 2007-09 was!