OUTLINE — September 27, 2017

- Definitions of Wealth & Income
- Perfect Competition & Implications for Income
- Distribution of Income
- Explaining Income Distribution

- Plus slides we won't get to re: Wealth Distribution

Midterm 1 is tonight
Today's material will be on MT 2

Definitions of Wealth & Income

Wealth (or, Net Worth) = Assets – Liabilities	Income

Perfect Competition & Income

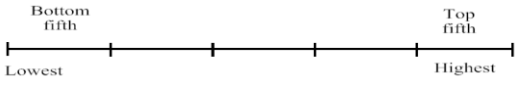
- In long run competitive equilibrium, profit = 0
  - Accounting profit = opportunity cost of labor & money
- Worker income depends upon "marginal revenue product" (MRP)
  - MRP = increase in total revenue from hiring 1 more worker
    - Depends upon [1] marginal product
      and [2] price of output
  - Assumes perfect competition in market for labor
    - Lots of workers, all exactly the same,
    - Lots of employers, none with large share of market
    - No barriers to entry or exit

Policy Implications

- If assumptions of perfect competition satisfied. . .
  - Resulting distribution of income reflects
    - Worker skills & talents
    - Output price
  - Policy implication: do nothing
- But are the assumptions of perfect competition applicable to markets for labor?
  - Lawyers?
  - CEOs?
  - Professors?

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

CEO to worker pay

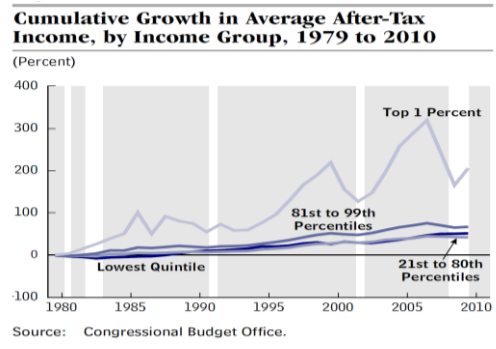
- http://www.epi.org/publication/ceo-pay-continues-to-rise/ and show video which is at
- https://youtu.be/zbH66lGRfiI

U.S. Household Income, 2016

	Lowest 20%	Second 20%	Third 20%	Fourth 20%	Top 20%
If even distribution	20%	20%	20%	20%	20%
Actual share in 2016					
Dollar cut-offs (rounded)					

Source: *https://www.census.gov/data/tables/2017/demo/income-poverty/p60-259.html*, Table A-2

Income growth by income group



Gini for U.S. Income Increasing

Gini coefficient, household income	
1970	
1990	
2000	
2016	

Source: *ttps://www.census.gov/data/tables/2017/demo/income-poverty/p60-259.html*, Table A-2

Gini coefficient, U.S., 1937-2004

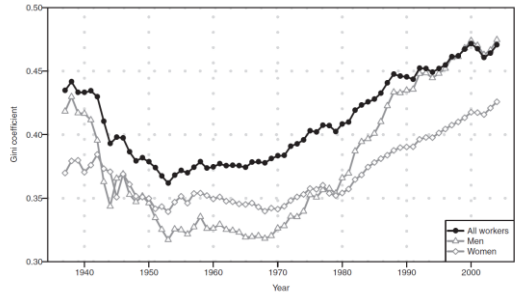
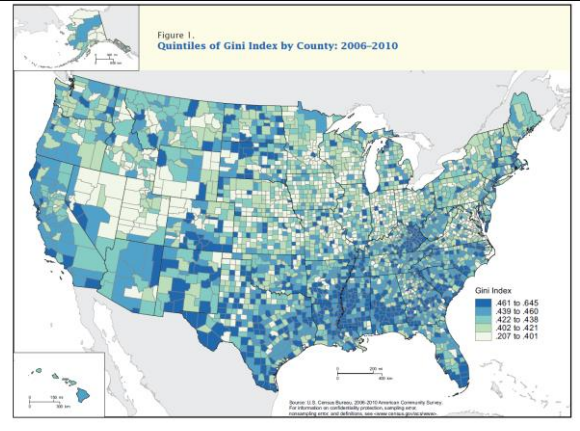
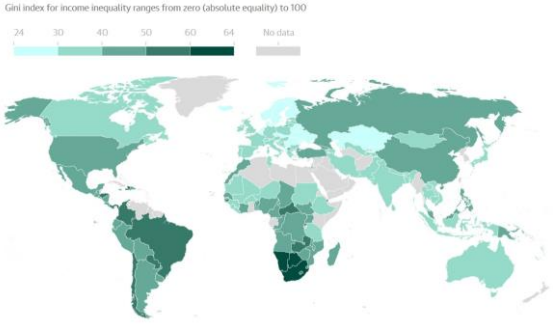


FIGURE I
Annual Gini Coefficients

Fig. 1. Income inequality in Europe and the United States, 1900 to 2010. The share of total income accruing to top decile income holders was higher in Europe than in the United States from 1900 to 1910; it was substantially higher in the United States than in Europe from 2000 to 2010. The series report decennial averages (1900 = 1900 to 1909, etc.) constructed using income tax returns and national accounts. See (24), chapter 9, Fig. 9.8. Series available online at piketty.pse.ens.fr/capital21c.



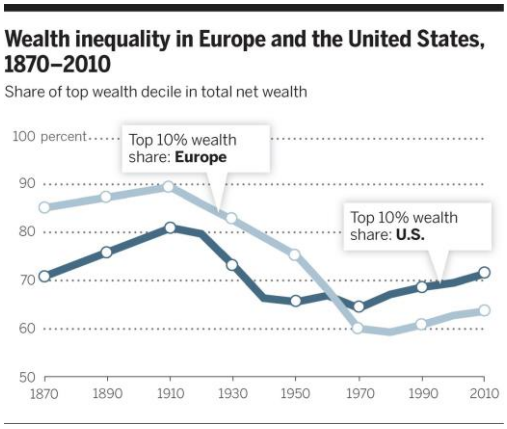
Gini coefficients by country



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.

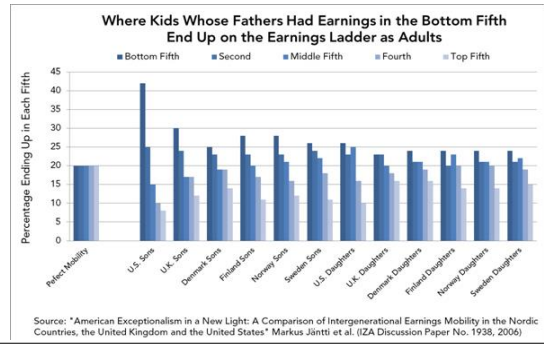
Wealth Gini: More Stable but Bigger

Source: Author's calculations based on the 1962 SFCC, the 1968 MESP (Wolff 1980), and the 1983, 1989, 1992, 1995, 1998, 2001, 2004, 2007, 2010, and 2013 SCP.



What about income mobility?

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



Source: "American Exceptionalism in a New Light: A Comparison of Intergenerational Earnings Mobility in the Nordic Countries, the United Kingdom and the United States" Markus Jäntti et al. (IZA Discussion Paper No. 1938, 2006)

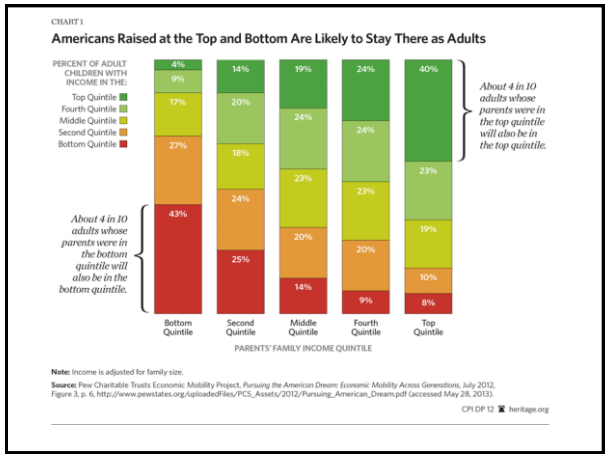
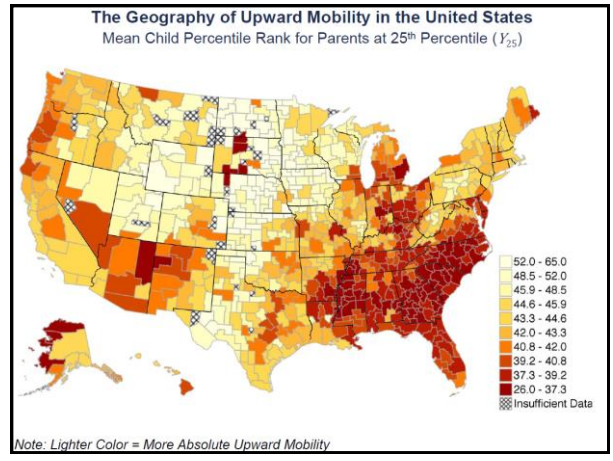


CHART 1
Americans Raised at the Top and Bottom Are Likely to Stay There as Adults
PERCENT OF ADULT CHILDREN WITH INCOME IN THE:
Top Quintile
Fourth Quintile
Middle Quintile
Second Quintile
Bottom Quintile
4%
9%
17%
27%
43%
14%
20%
18%
24%
25%
19%
24%
23%
20%
14%
24%
24%
23%
20%
9%
40%
23%
19%
10%
8%
About 4 in 10 adults whose parents were in the top quintile will also be in the top quintile.
About 4 in 10 adults whose parents were in the bottom quintile will also be in the bottom quintile.
Bottom Quintile
Second Quintile
Middle Quintile
Fourth Quintile
Top Quintile
PARENTS' FAMILY INCOME QUINTILE
Note: Income is adjusted for family size.
Source: Pew Charitable Trusts Economic Mobility Project, Pursuing the American Dream: Economic Mobility Across Generations, July 2012, Figure 3, p. 6, http://www.pewstates.org/uploadedFiles/PCS_Assets/2012/Pursuing_American_Dream.pdf (accessed May 28, 2013).
CPI DP 12 heritage.org


The Geography of Upward Mobility in the United States
Mean Child Percentile Rank for Parents at 25th Percentile (Y_{25})
52.0 - 65.0
48.5 - 52.0
45.9 - 48.5
44.6 - 45.9
43.3 - 44.6
42.0 - 43.3
40.8 - 42.0
39.2 - 40.8
37.3 - 39.2
26.0 - 37.3
Insufficient Data
Note: Lighter Color = More Absolute Upward Mobility

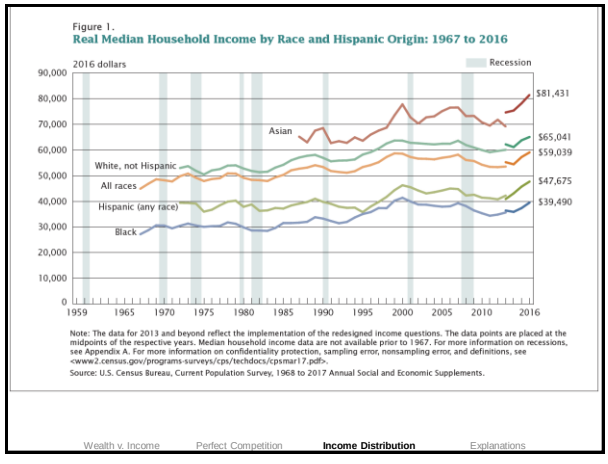
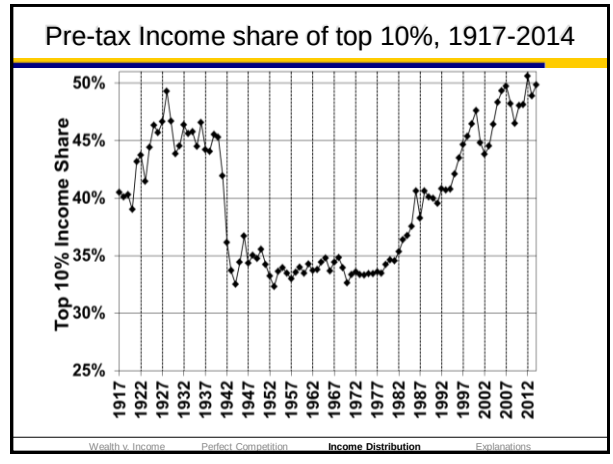
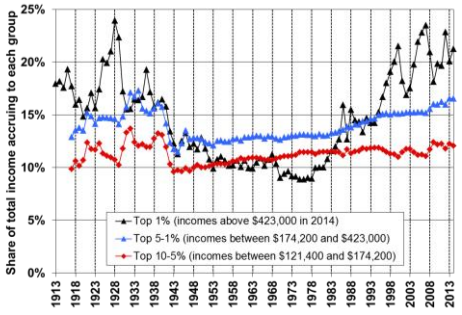


Figure 1.
Real Median Household Income by Race and Hispanic Origin: 1967 to 2016
2016 dollars
Recession
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Asian
White, not Hispanic
All races
Hispanic (any race)
Black
$81,431
$65,041
$59,039
$47,675
$39,490
1959
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2016
Note: The data for 2013 and beyond reflect the implementation of the redesigned income questions. The data points are placed at the midpoints of the respective years. Median household income data are not available prior to 1967. For more information on recessions, see Appendix A. For more information on confidentiality protection, sampling error, nonsampling error, and definitions, see <www2.census.gov/programs-surveys/cps/techdocs/cpsmar17.pdf>.
Source: U.S. Census Bureau, Current Population Survey, 1968 to 2017 Annual Social and Economic Supplements.


Pre-tax Income share of top 10%, 1917-2014
Top 10% Income Share
50%
45%
40%
35%
30%
25%
1917
1922
1927
1932
1937
1942
1947
1952
1957
1962
1967
1972
1977
1982
1987
1992
1997
2002
2007
2012

Breaking out top 10%, 1913-2014



Who are the top 1%

- Study based on 1979-2005 tax returns
  - Non-financial execs, managers, supervisors
  - Medical professionals
  - Financial professionals
  - Lawyers

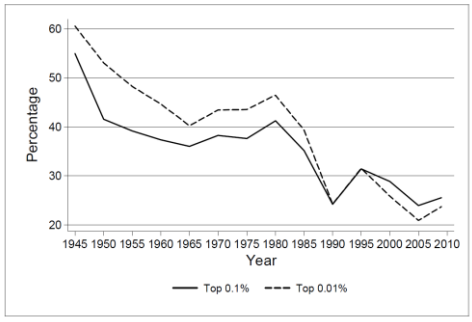
Why the rise in income for top 1%

- Increased labor income
  - "Superstars" reach wider audiences due to technological changes in mass media
    - Recent paper (see tweet from me): IT explains a lot
  - Very large pay increases for CEOs
  - In finance, deregulation and compensation for IPO risk

Why the rise in income for top 1%

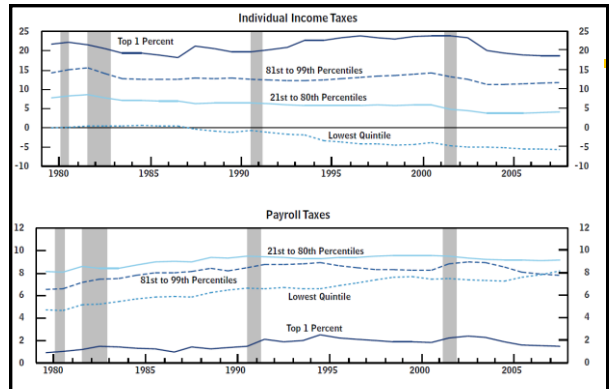
- Increased labor income
- Changes in government taxes and transfers
  - Overall, taxes and transfers lower Gini coefficient
  - But today, less equalizing than 30 years ago
    - Transfers through Medicare (health care, age 65+) benefit all
    - Less generous transfers to low-income households
   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

Average Tax Rates for Top 0.1%



Source: CRS calculations using Internal Revenue Service (IRS) Statistics of Income (SOI) information.

Note: The vertical axis is the average tax rate.



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?

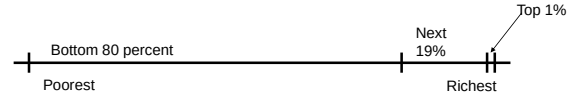
- Are there effects of an uneven distribution of income?
- Perhaps . . . But it's a new area of research
  - Income mobility easier when more even income distribution
  - Distribution of fiscal stimulus may matter
    - How much of a tax cut do people spend?
  - Political implications (beyond Econ 1 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?

Redistribution Debate

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

Distribution of Wealth in the U.S.

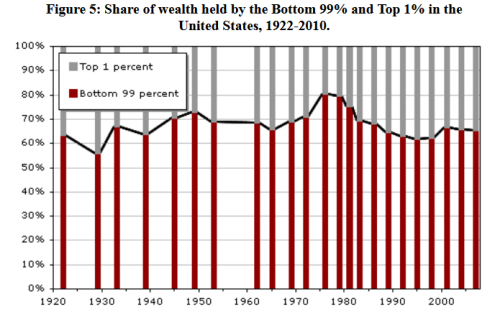
- Divide population into three groups:



Distribution of Wealth in the U.S.

- What share of total wealth was owned by each of the three groups in 2013?
  - Top 1% own 37% of total wealth
  - Next 19% own 52% of total wealth
  - Bottom 80% own 11% of total wealth
- How much wealth did they have?
  - Mean $ amount
    - Families in top 1% have $18.6 million of total wealth
    - Families in next 4% have $3.6 million of total wealth
    - Families in bottom 40% have negative net worth (- $11,000)

Extent of inequality is similar to 1920s



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

Sources

- *https://www.census.gov/data/tables/2017/demo/income-poverty/p60-259.html* for Income cutoffs, Gini coefficient
- http://www.cbo.gov/sites/default/files/44604-AverageTaxRates.pdf, for income growth by class
- http://www.epi.org/publication/ceo-pay-continues-to-rise/ for CEO:worker ratio
- Source: “EARNINGS INEQUALITY AND MOBILITY IN THE UNITED STATES: EVIDENCE FROM SOCIAL SECURITY DATA SINCE 1937,” by Wojciech Kopczuk, Emmanuel Saez, Jae Song, *QJE* February 2010 for Gini 1937-2004
- http://www.cbo.gov/sites/default/files/44604-AverageTaxRates.pdf for income growth by income group
- http://www.census.gov/hhes/www/income/data/historical/index.html for Gini Coefficient 1950-2014
- "Inequality in the Long-Run" by Emmanuel Saez & Thomas Piketty, *Science* 344, 2014, 838-843 for comparisons US & Europe
- http://www.census.gov/prod/2012pubs/acsbr10-18.pdf for Gini coefficients by US county
- http://en.wikipedia.org/wiki/List_of_countries_by_income_equality for Gini coefficients by country
- http://www.brookings.edu/research/articles/2011/11/09-economic-mobility-winship for mobility graph #1
- http://www.heritage.org/research/reports/2013/07/a-guide-to-understanding-international-comparisons-of-economic-mobility for mobility graph #2
- "Where is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States" with Raj Chetty, Nathan Hendren, and Patrick Kline, NBER Working Paper No. 19843, revised June 2014 forthcoming *Quarterly Journal of Economics* (Slides) (Website and Data) (Summary) (from Emmanuel Saez’s website)

Sources, continued

- "Income Inequality in the United States, 1913-1998" with Thomas Piketty, *Quarterly Journal of Economics*, 118(1), 2003, 1-39 (Longer updated version published in A.B. Atkinson and T. Piketty eds., Oxford University Press, 2007) (Tables and Figures Updated to 2014 in Excel format, June 2015) figure 1, from Emmanuel Saez's website http://eml.berkeley.edu/~saez/ for top income shares
- http://www.cbo.gov/sites/default/files/cbofiles/attachments/10-25-HouseholdIncome.pdf, pg 18-on, re why the rise in top incomes
- http://graphics8.nytimes.com/news/business/0915taxesandeconomy.pdf for average top 1% tax rates