

CUPCAKES & GRAPHS: TEACHING INEQUALITY

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Graphs Are Great!

But we still need an even greater variety of modalities.

Interactive Lecture Demonstration

“Predict/Observe/Explain”

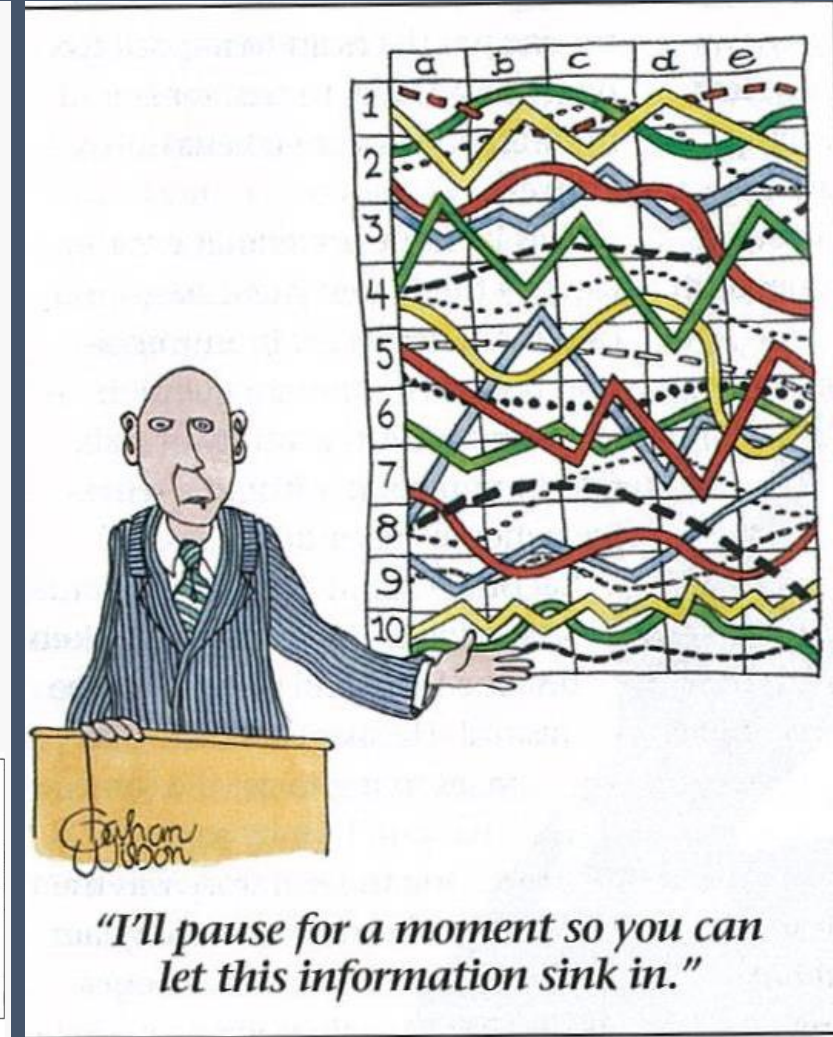
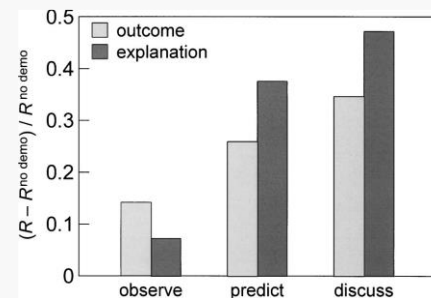
Mark Maier (2012) in International Handbook on Teaching and Learning Economics (Edited by Hoyt & McGoldrick)

See also <https://serc.carleton.edu/econ/demonstrations/index.html>



 **Starting Point:**
Teaching and Learning Economics

Crouch, et al. (2004) finds better retention when students also predict before, then discuss after the demonstration.



United States Inequality

5 Volunteers.

- Line up in a row
- Each student represents one quintile (20 percent) of the population

There are 10 desserts.

- Each represents one tenth of the annual income in the U.S.

How many cupcakes will each of the five individuals get from the poorest 20 percent to the richest 20 percent?

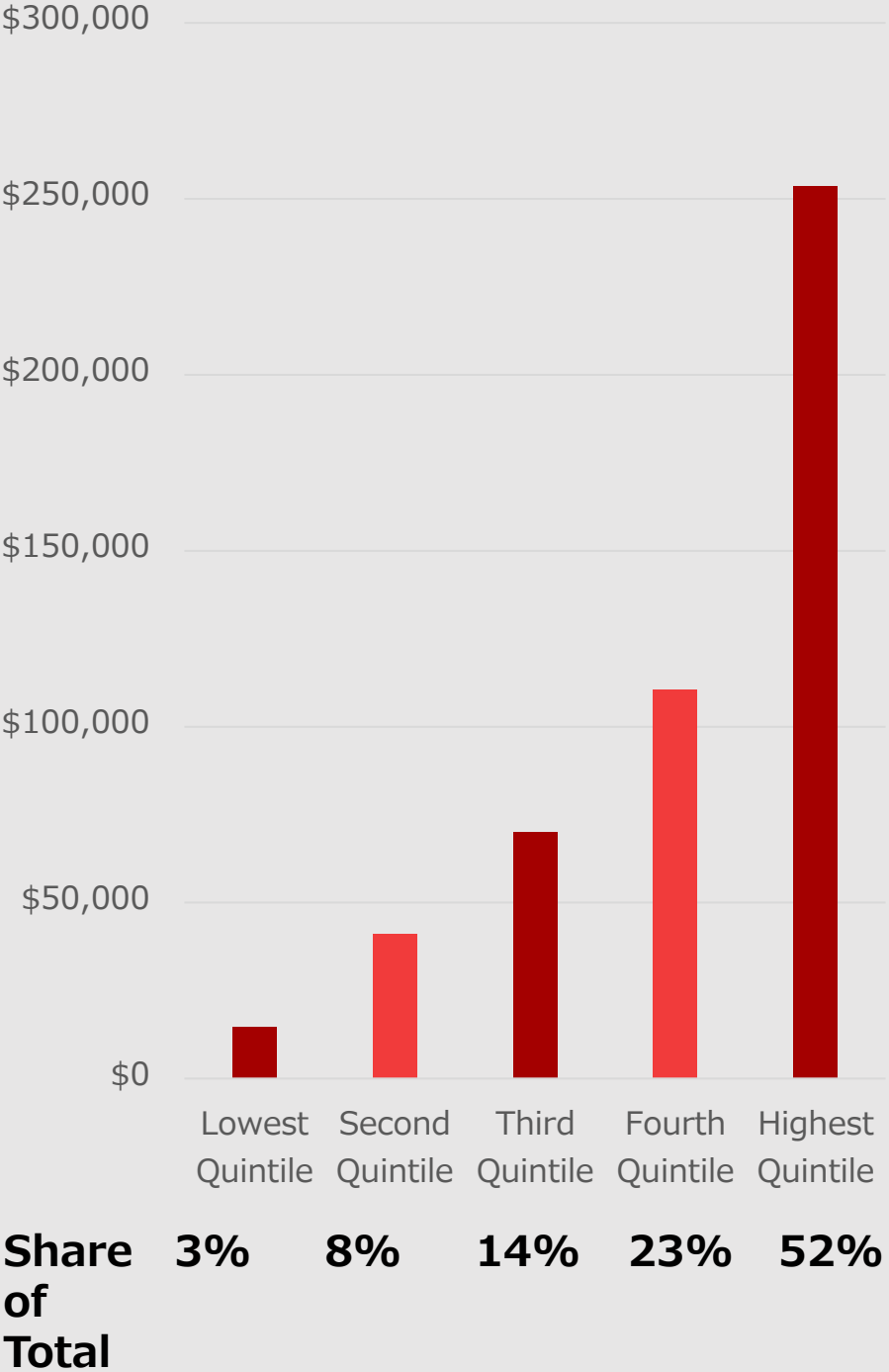
What are your predictions?



Source: US Census Bureau tables B19081 and B19082 for 2021

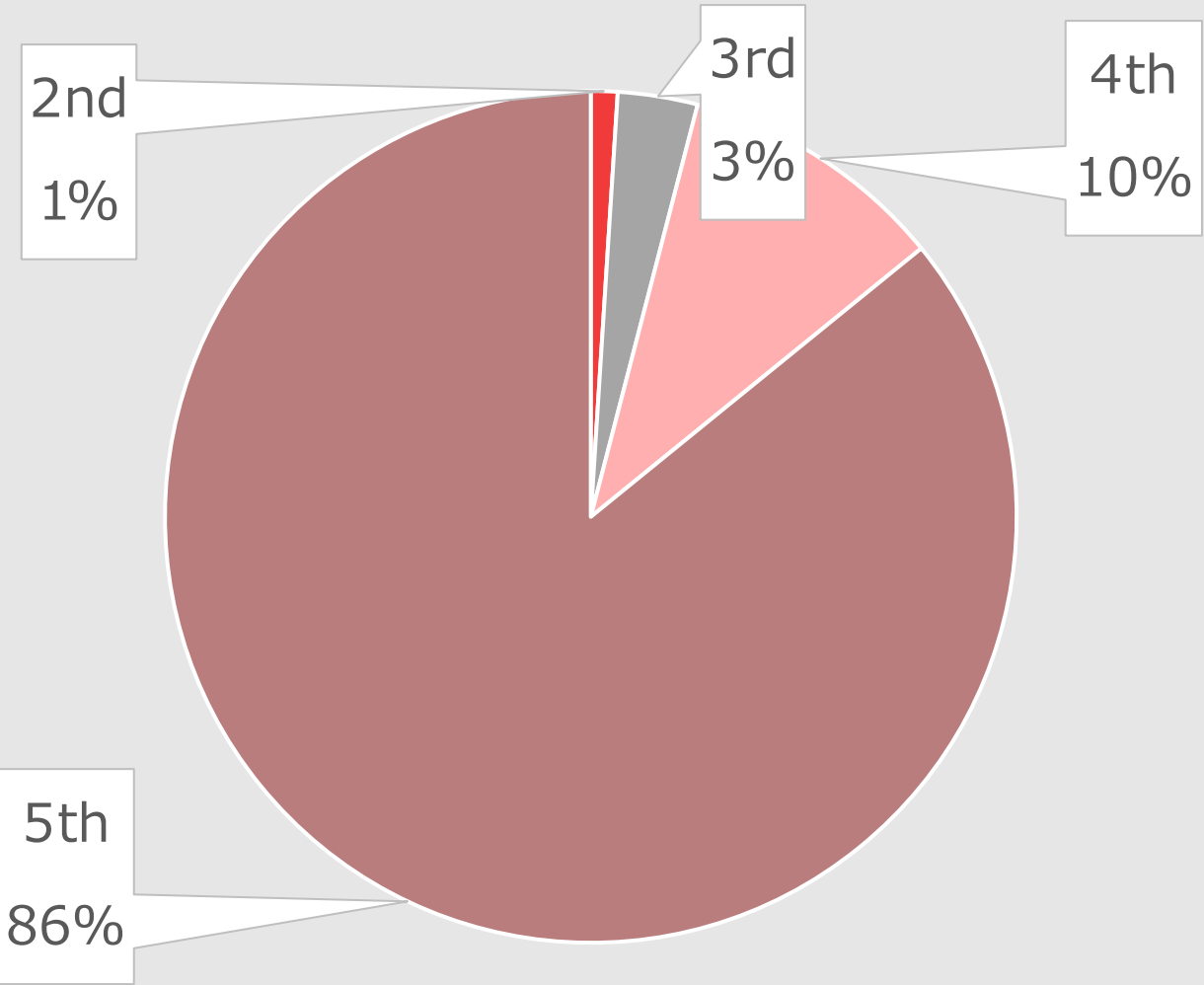
MEAN HOUSEHOLD INCOME PER QUINTILE

Tips:
Bring a butter knife.
Have pre-packaged treats.
Involve as much audience reaction as possible.



HOW DOES REALITY COMPARE TO YOUR INITIAL GUESS?

The top quintile has **50%**, while the bottom quintile has **less than 5%** of income.



Wealth Inequality



Now Return to Your Seats

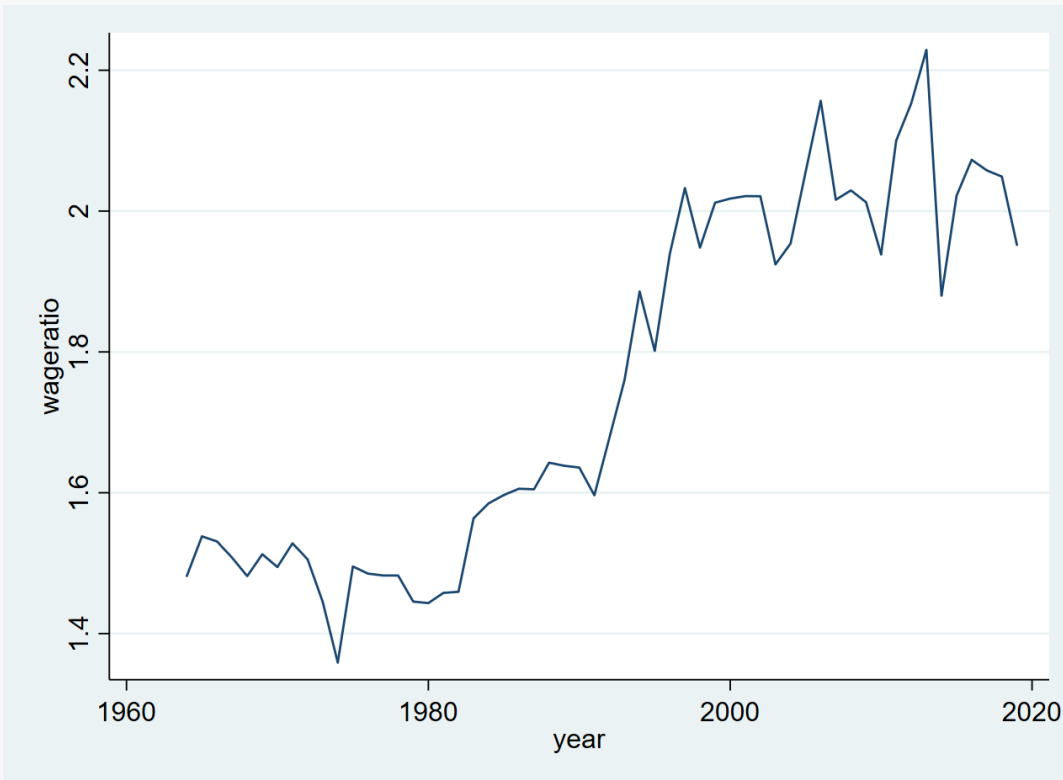
- Nearly always, the “wealthy” student voluntarily starts handing out or even tossing the surplus cupcakes to their neighbors and fellow students.
- Why did (or did not) you voluntarily redistribute your treats?
- More than they want
- Earned vs Endowed?
- Recognition of Luck
- Other students had none

**HOW DOES THIS
RELATE TO DOLLARS
AND THE RULES OF
SOCIETY?**

- Quality of schooling
- Formal & “school of life”
- Choice of occupation
- Choice of savings/investment
 - Work ethic
- Choice of risk (entrepreneurial)
 - Luck of those risks.
 - Luck of birth
- Life cycle (low income while young, higher incomes with experience)
- Does these phenomena have a large enough effect to **explain** the gap?
- What government **policies** can or should address these?

What do you believe causes income inequality?

Education



Explain It?

The average college wage is around **twice** the wage for non-college earners.

Policy?

Government spends considerable sums on education.

Maybe more; especially for lower income neighborhood schools.

What About Work Ethic?

Explain It?

Not a lot of hour variation.
 $4.4\text{hr}/42.2\text{hr}=0.10$

Policy?

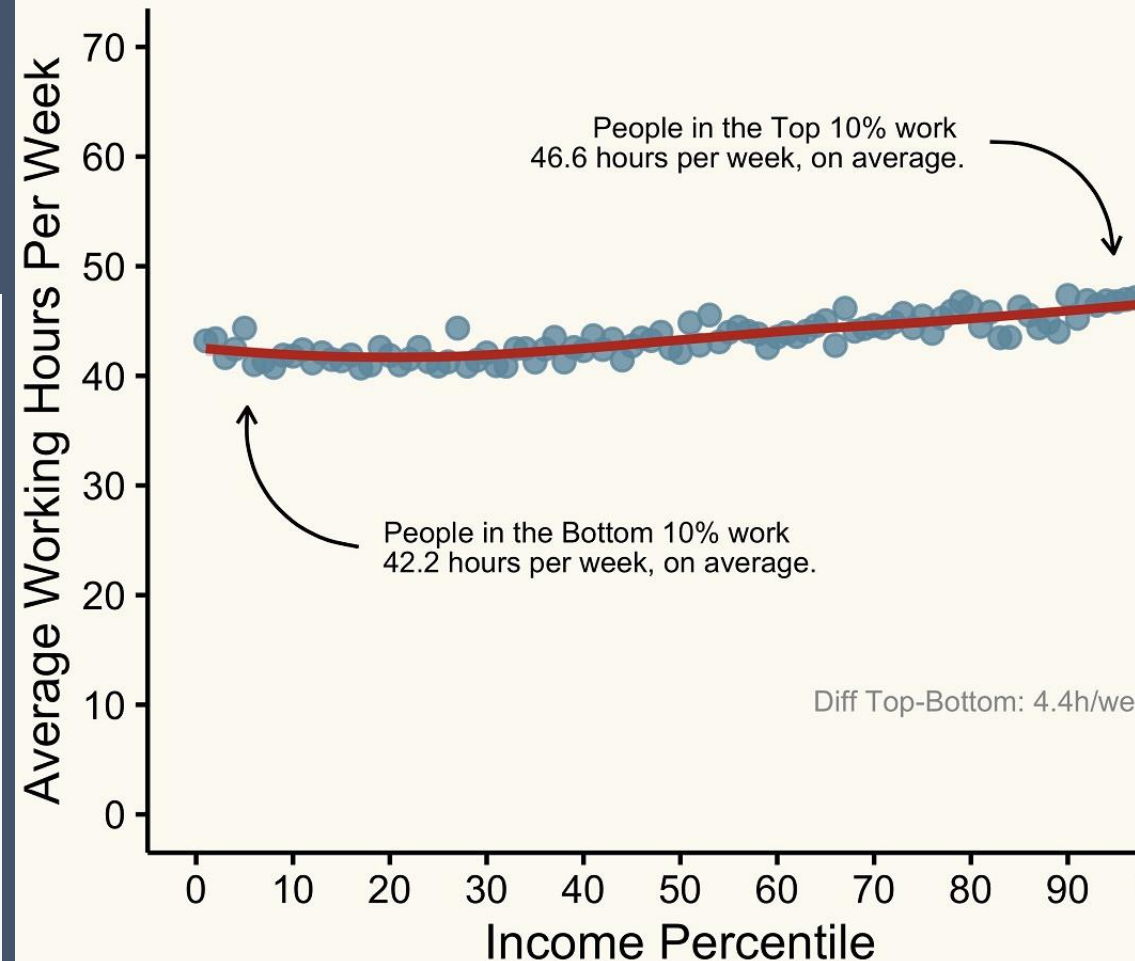
Overtime laws.

<https://www.visualcapitalist.com/cp/charted-actual-working-hours-of-different-income-levels/>

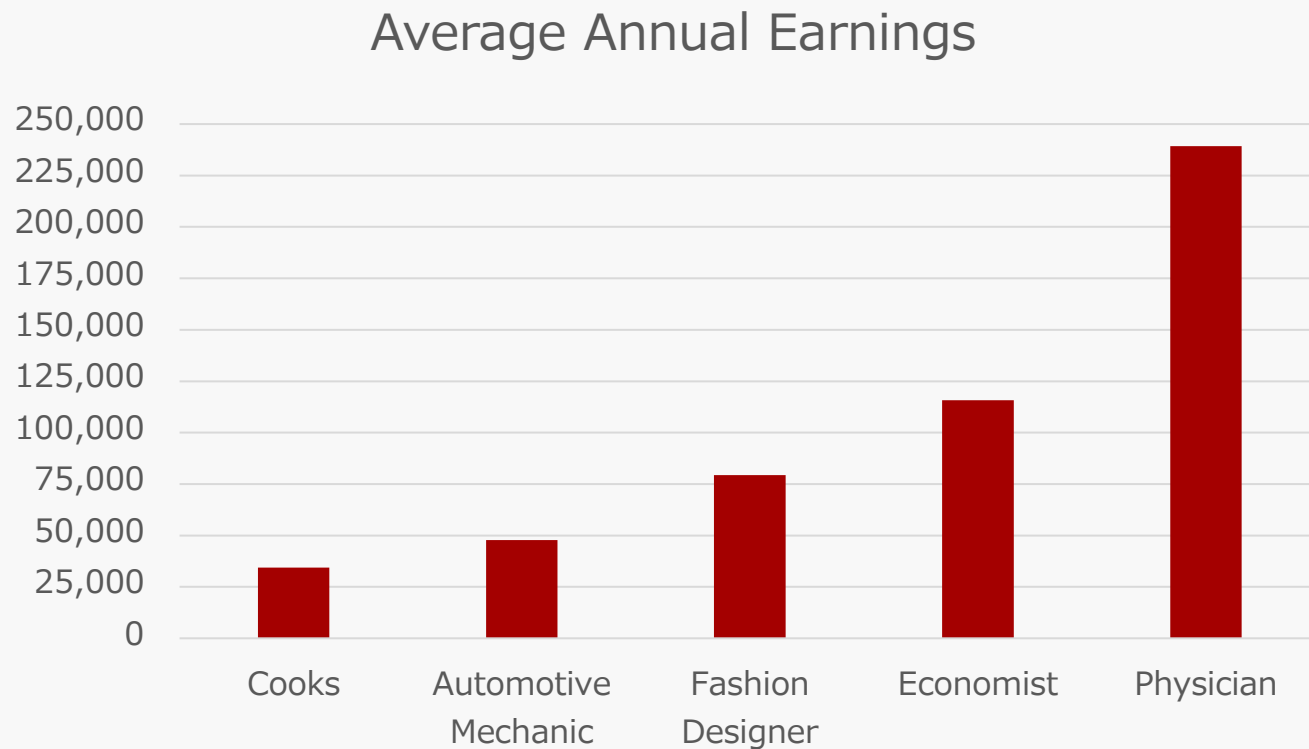
Working Hours by Income Level

Working hours are self-reported and reflect how much respondents 'actually' work in a week, including second/third jobs and overtime. Data from the United States for 8,234 respondents in the Current Population Survey (May 2022) working full-time (>35 hours/week).

Graph by: @rubenbmathisen (Twitter)



How Much Can Occupational Choice Explain Inequality?



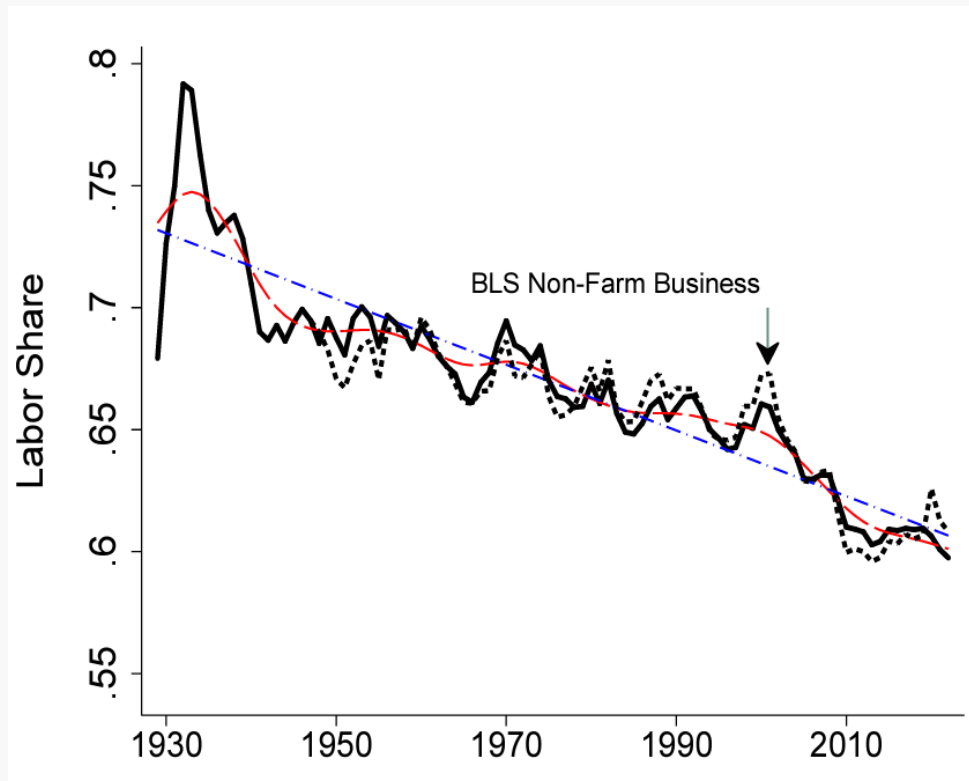
Explain It?

Avg physicians earn **6x** as much as the avg cook.

Policy?

Better K-12 education, to lower technical skill barriers.

Capital Investment Income vs Labor Wage Income



- The share of the economy's income going to labor has been declining.
- What is capital income?
- Everybody has labor, but does everyone have capital equally?

Policy?

Capital redistribution

Lower barriers to capital ownership
(housing first-time subsidies)

Always Stay Focused

Students cannot remember all the figures, numbers, details.

Stay focused on the key metric.

In this case:

Top quintile earns 50% of the income, bottom quintile earns less than 5%.

THANK YOU!

May your
desserts be
equitable!