

Studying Social Inequality with Data Science

INFO 3370 / 5371
Spring 2024

Welcome!

Lecture today draws on [Jencks \(2002\)](#). After class,

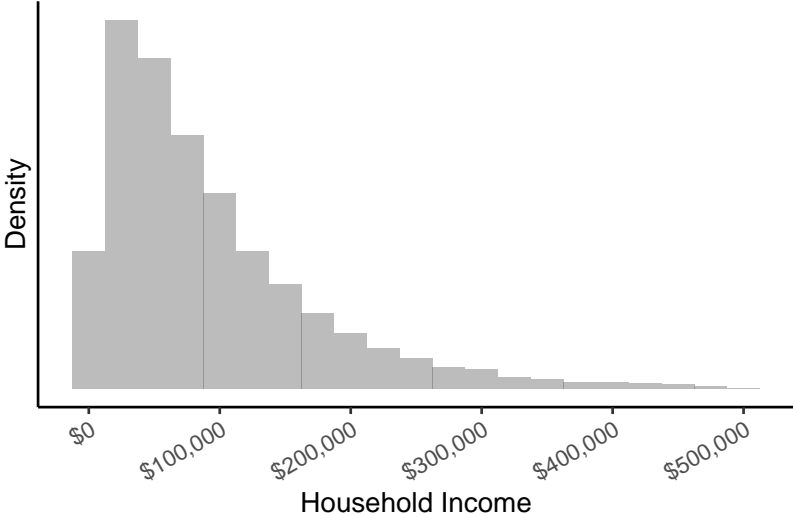
— read p. 49–53

— complete the very brief Problem Set 0 by Wednesday 5pm

Quantitative evidence about
inequality

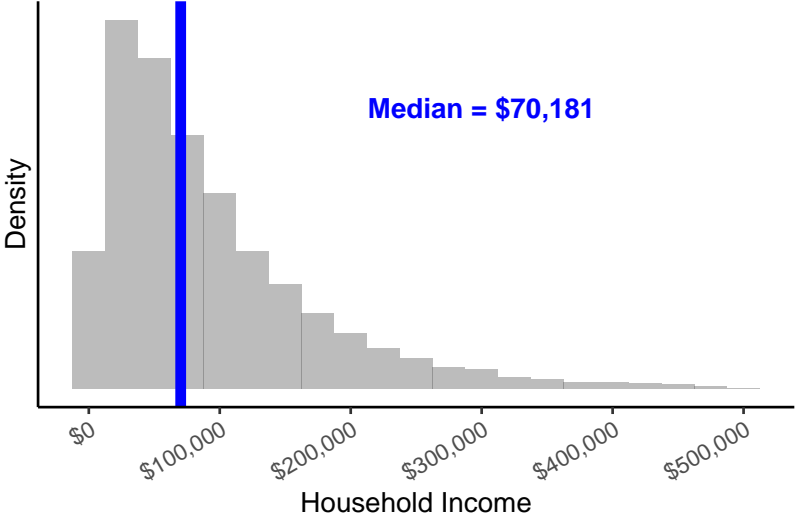
U.S. Household Income Distribution

2022 Annual Social and Economic Supplement to the Current Population Survey



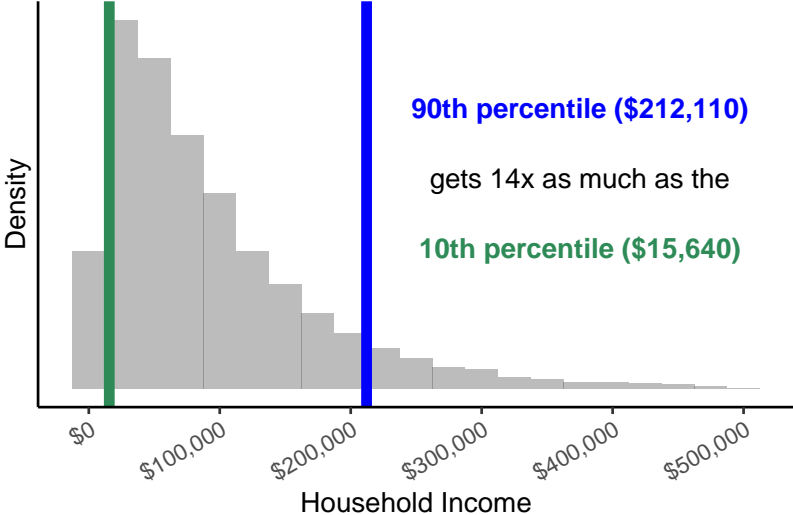
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U.S. Household Income Distribution

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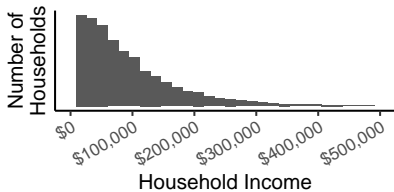


Normative arguments about
inequality

Activity. Which income distribution would you prefer? Why?

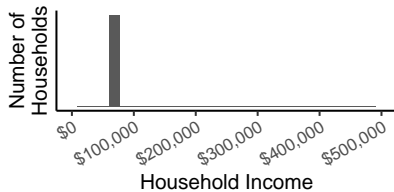
pollev.com/info3370

Distribution A



U.S. 2022 distribution

Distribution B



Everyone gets \$70,181



176

Dy eltsiden zu dir vñ vāz
 mit in all gemāin
 se ozeb hin zu einem nam
 vñ slach mit der vñ dar an
 Das tet der vil wān mān
 vñ al: er an den nam gestug
 Wazers mer dān genug
 vñ ein nach vil graz

In dem heren nam floz
 Das vñch vil lūst w all d' schat
 genug zeterubchen heren gat
 w zogt auf si mit graz er
 vñ amalech dy hāntschalt
 vñ woltē mit in freiten
 Itz dy amalechten
 vegrunde nāhten gem dem mer

The Israelites Collecting Manna from Heaven

Austria

About 1400–1410

Unknown artist

Getty Open Content Program

getty.edu/art/collection/object/105T6R

Manna drops from heaven



176

Dy eltschen zu dir vñ vāz
mit in all gemāin
Se ozeb hin zu einem nam
Dñ klāch mit der vñ dar an
Das tet der vil wān māt
Dñ al: er an den nam gestug
Wazers mer dāñ genug
Dñ ein nach vil graz

In dem heren nam floz
Das vrech vil lūst w all d' schat
Genug zeterubchen heren gat
D w zogt auf si mit groz eht
Dd amalech dy hāntschalt
Dñ woltē mit in freitē
Iz dy amalechten
Wegunde nāhtē gem dem mer

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Manna drops from heaven

First pound is more
helpful than the second



196

Dy etlichen zw dar vñ vñ
mit in all gemain
se ozeb hin zu einern nam
Dñ klach mit der vñ dar an
Das tet der vil wain mait
Dñ al: er an den nam getug
Wazers mer dan genug
Dñ ein nach vil graz

In dem heren nam floz
Das vñch vil luit w all d' schat
Genug zeterubchen heren got. dñ
D w rogt auf si mit groz eß
Dd amalech dy haiden schat
Dñ wolt mit in freiten
Itz dy amalechten
wegirnde naiten gem dem mer

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176

Dy eltsiden zw dir vñ vñ
mit in all gemain
se ozeb hin zu einem nam
vñ slach mit der vñ dar an
Das tet der vil wun mait
vñ al: er an den nam getug
Wazers meo dail genug
vñ ein nach vil graz

In dem heren nam floe
Das vñch vil liue w all d' schat
Genug zeterubchen heren got. dñ
w rogt auf si mit groz epe
Dd amalech dy haiderichalt
vñ woltet mit in freiten
Itz dy amalechten
wegunde naltu gen dem meo

Manna drops from heaven

First pound is more
helpful than the second

How should we distribute
the manna?

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196
Dy etlichen zu dir vñ vñ
mit in all gemain
se ozeb hin zu einem nam
Dü slach mit der vñ dar an
Das tet der vil wun mait
Dü al: er an den nam getug
Wazers me: dail genug
Dü ein nach vil graz

In dem heren nam floz
Das vñch vil liut w all d' schat
Genug zeterubchen heren got. dñ
D w rogt auf si mit groz e:z
D d amalech dy haiden schat
Dü woltet mit in freiten
Itz dy amalechten
Wegunde naiten gem dem me:

–Manna drops from heaven–
People work for manna
First pound is more
helpful than the second
How should we distribute
the manna?

The Israelites
Collecting Manna
from Heaven

Austria

About 1400–1410

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An argument for allowing inequality

1. unequal rewards motivate work and innovation
2. work and innovation make everyone better off

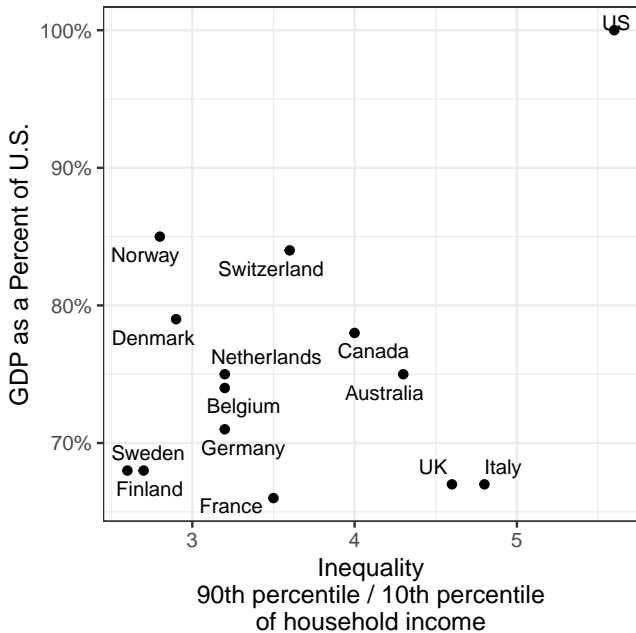
Thus inequality makes us all better off

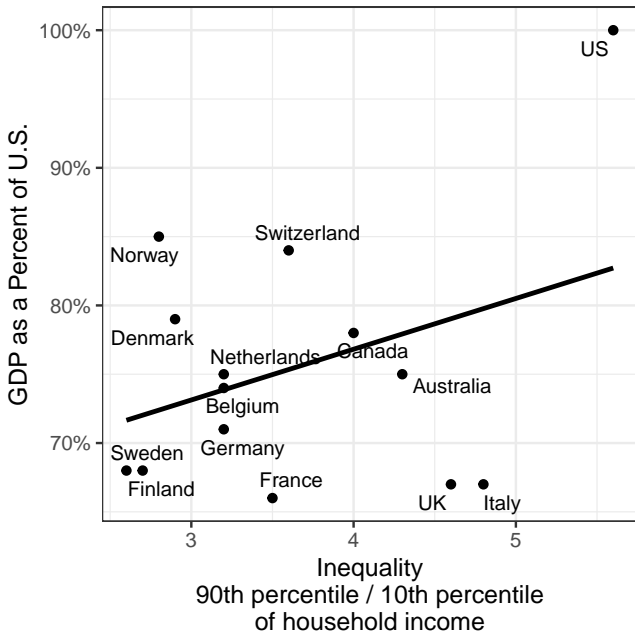
An argument for allowing inequality

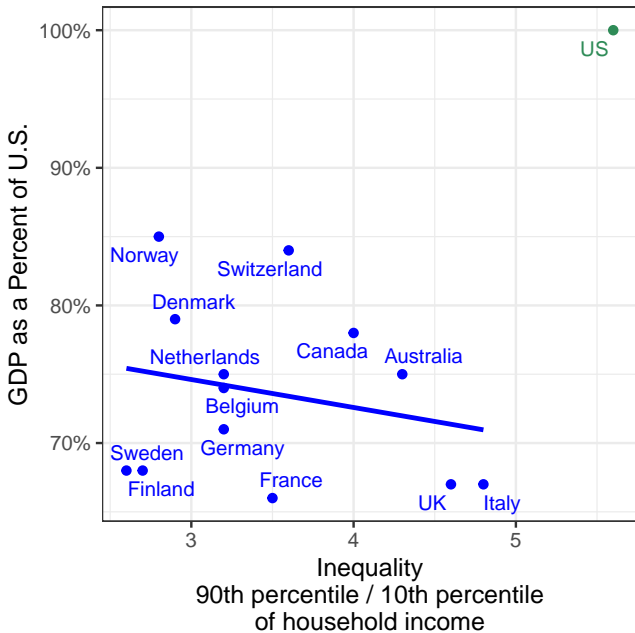
1. unequal rewards motivate work and innovation
2. work and innovation make everyone better off

Thus inequality makes us all better off

Empirical question. Do unequal places have higher well-being?







Goals of the course

- ▶ visualize economic inequality with graphs that summarize survey data
- ▶ connect theories about inequality to quantitative empirical evidence
- ▶ evaluate interventions to reduce inequality
- ▶ conduct data analysis using the R programming language

Plan for the course

info3370.github.io