

# Capitalism & Measurement

Session 1

PMAP 8141: Microeconomics for Public Policy  
Andrew Young School of Policy Studies

# Plan for today

Technology, growth, and capitalism

Institutions and coordination

Why do we make you take this class?

Class details

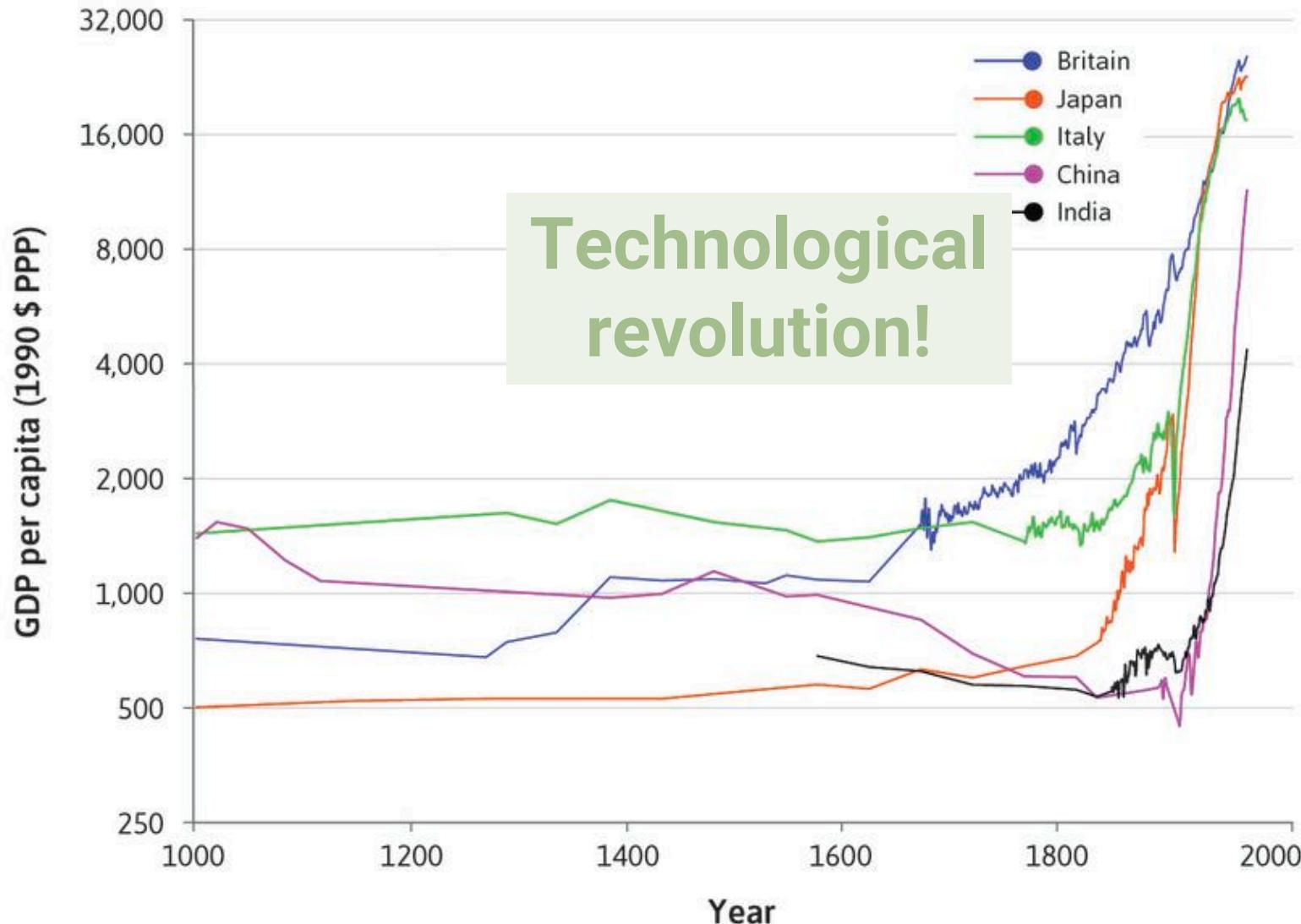
Importance of institutions

Downsides of capitalism

Measuring stuff correctly

Technology, growth,  
and capitalism

# What happened?



# Technological revolution

As the time to produce  
stuff decreases, living  
standards increase

## ASSESSING THE “ENGINES OF LIBERATION”: HOME APPLIANCES AND FEMALE LABOR FORCE PARTICIPATION

Tiago V. de V. Cavalcanti and José Tavares\*

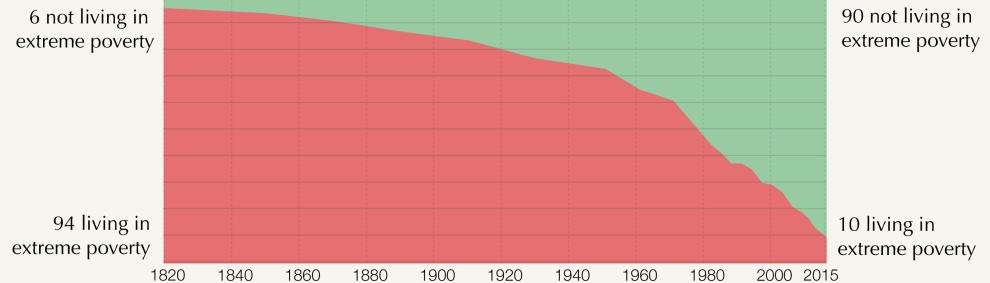
*Abstract*—The secular rise in female labor force participation, highlighted in the recent macroeconomics literature on growth and structural change, has been associated with the declining price and wider availability of home appliances. This paper uses a new and unique country data set on the price of home appliances to test its impact on female labor supply. We assess the role of the price of appliances in raising participation by comparing it to other structural determinants such as average male income. A decrease in the relative price of appliances—the ratio of the price of appliances to the consumer price index—leads to a statistically significant increase in female labor force participation in the United Kingdom, for instance, the decline in the relative

important.<sup>3</sup> The marked decrease in fertility rates, both *cause and result* of the increase in female labor supply, is an important factor.<sup>4</sup> Less obvious candidates have been put forward as well.<sup>5</sup> Economic factors also play a role. The increase in average real wages over time that accompanies economic growth has led to a rise in the opportunity cost of staying at home and encouraged labor force participation as

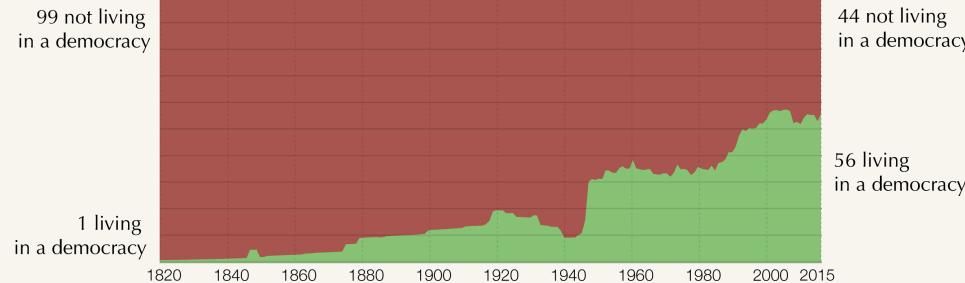
*The Review of Economics and Statistics*, February 2008, 90(1): 81–88

# The World as 100 People over the last two centuries

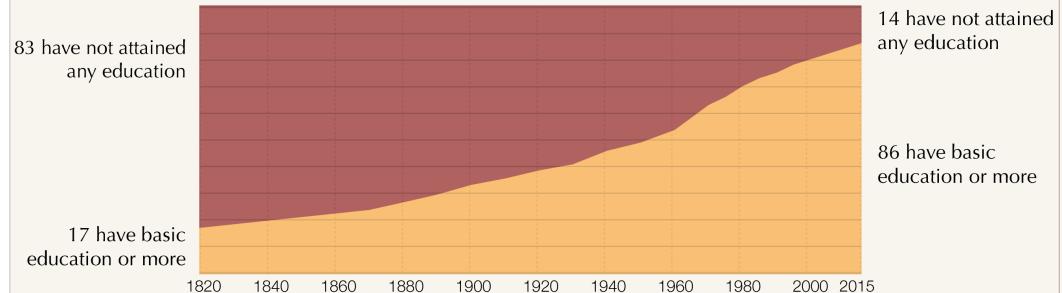
## Extreme Poverty



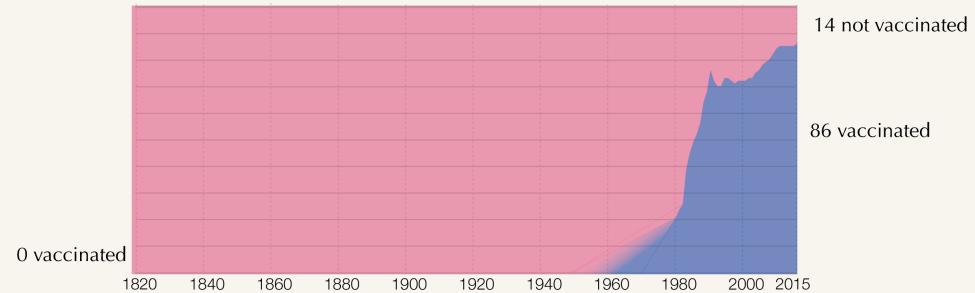
## Democracy



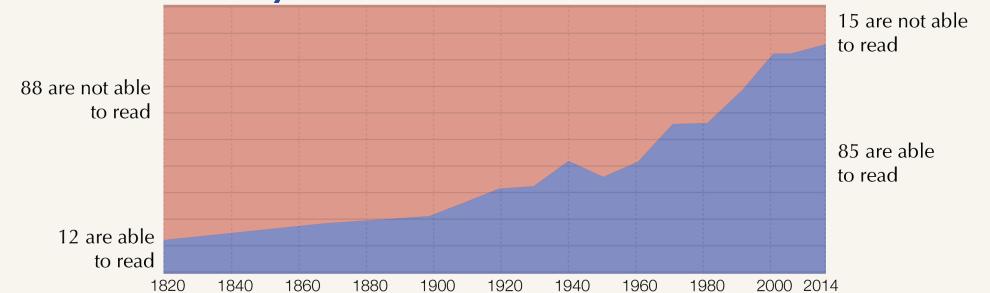
## Basic Education



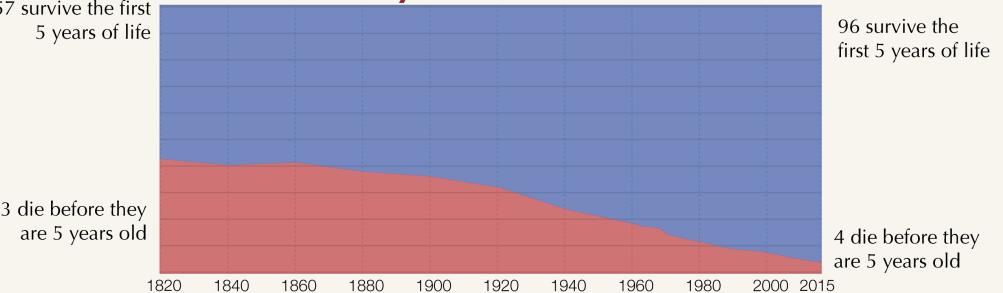
## Vaccination against diphtheria, pertussis (whooping cough), and tetanus



## Literacy



## Child Mortality



### Data sources:

Extreme Poverty: Bourguignon & Morrison (2002) up to 1970 – World Bank 1981 and later (2015 is a projection)

Democracy: Polity IV index (own calculation of global population share)

Vaccination: WHO (Global data are available for 1980 to 2015 – the DPT3 vaccination was licenced in 1949)

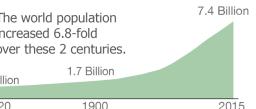
Colonialism: Wimmer and Min (own calculation of global population share)

Education: OECD for the period 1820 to 1960. IIASA for the time thereafter.

Continent: HYDE database

Literacy: OECD for the period 1820 to 1990. UNESCO for 2004 and later.

Child mortality: up to 1960 own calculations based on Gapminder; World Bank thereafter



All these visualizations are from [OurWorldInData.org](http://OurWorldInData.org) an online publication that presents the empirical evidence on how the world is changing.

Licensed under CC-BY-SA by the author Max Roser.

# Systems and institutions

## Economic system

Method for producing and distributing goods and services

## Institutions

Rules for the system

# Capitalist institutions

## Private property

The right and expectation that you can use your stuff how you want

# Capitalist institutions

## Markets

A way of connecting people who may mutually benefit by exchanging goods or services through a process of buying and selling

Specialization

# Capitalist institutions

## Firms

Organizations that use **labor** (people) and **capital** (inputs) to produce goods and services to make a profit

# Capitalist institutions

Private property

Markets

Firms

An economic system with private property

Self sufficient family-based production

and markets

Market economy with family-based production

and firms

Capitalist economic system

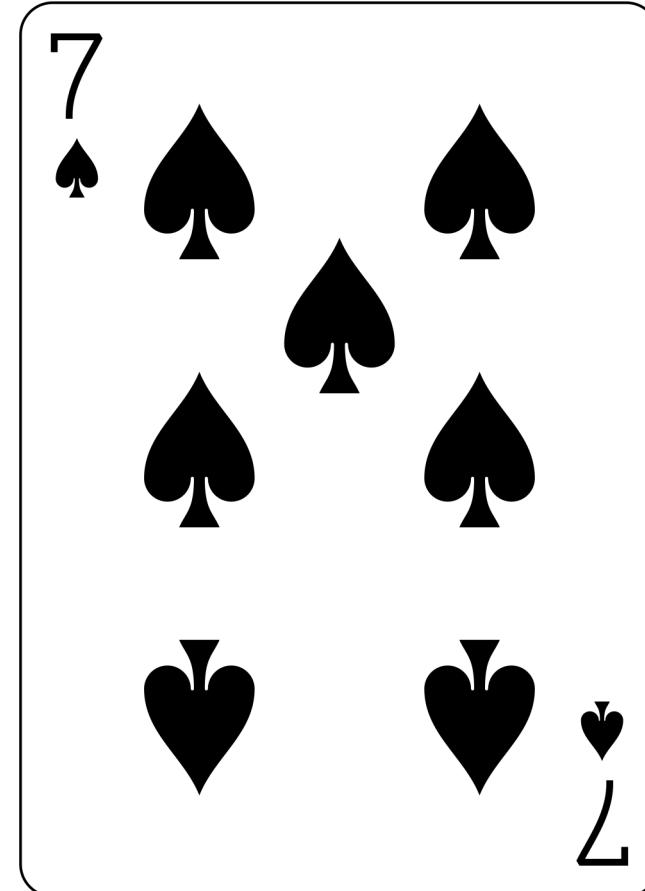
# Institutions and coordination



# Sellers

Sell your paperclip for the highest possible price.

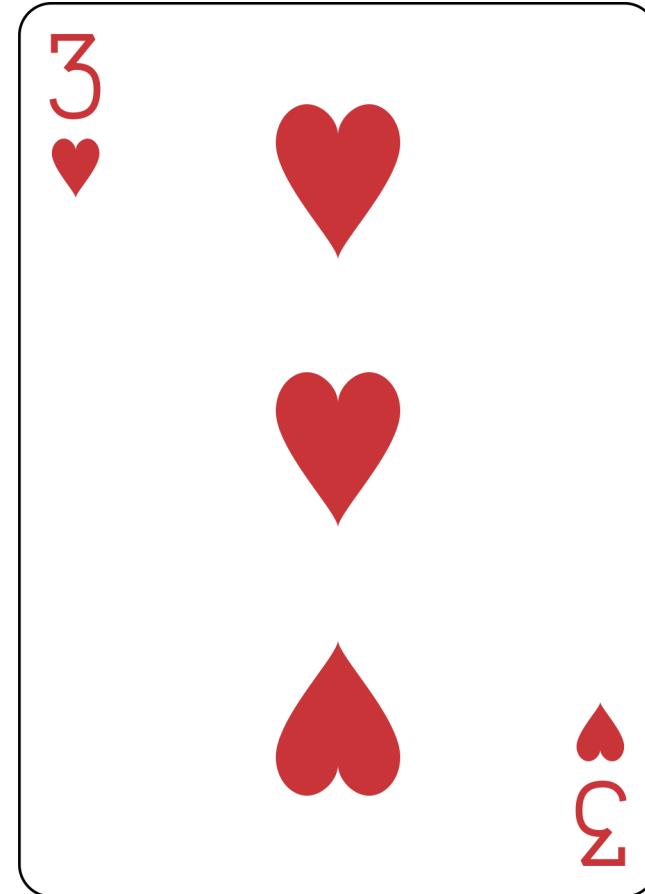
You cannot sell below this number.



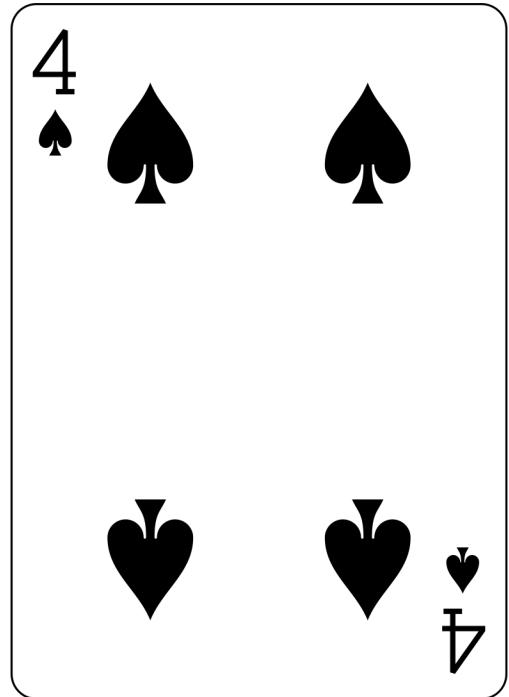
# Buyers

Buy a paperclip for the lowest possible price.

You cannot pay above this number.

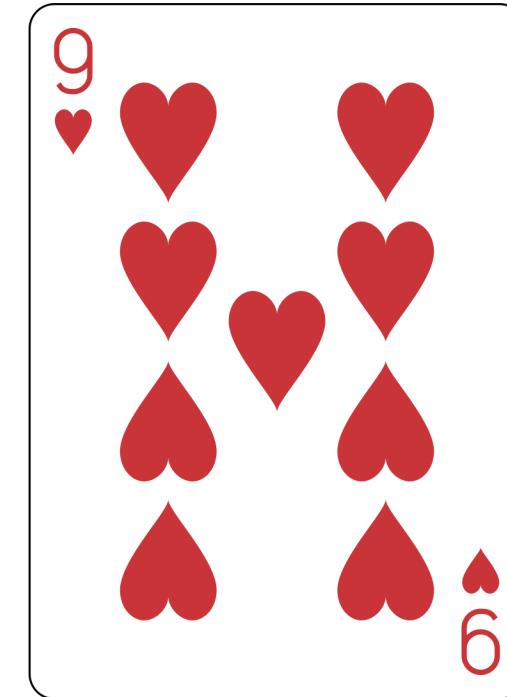


Seller



4 pieces of candy

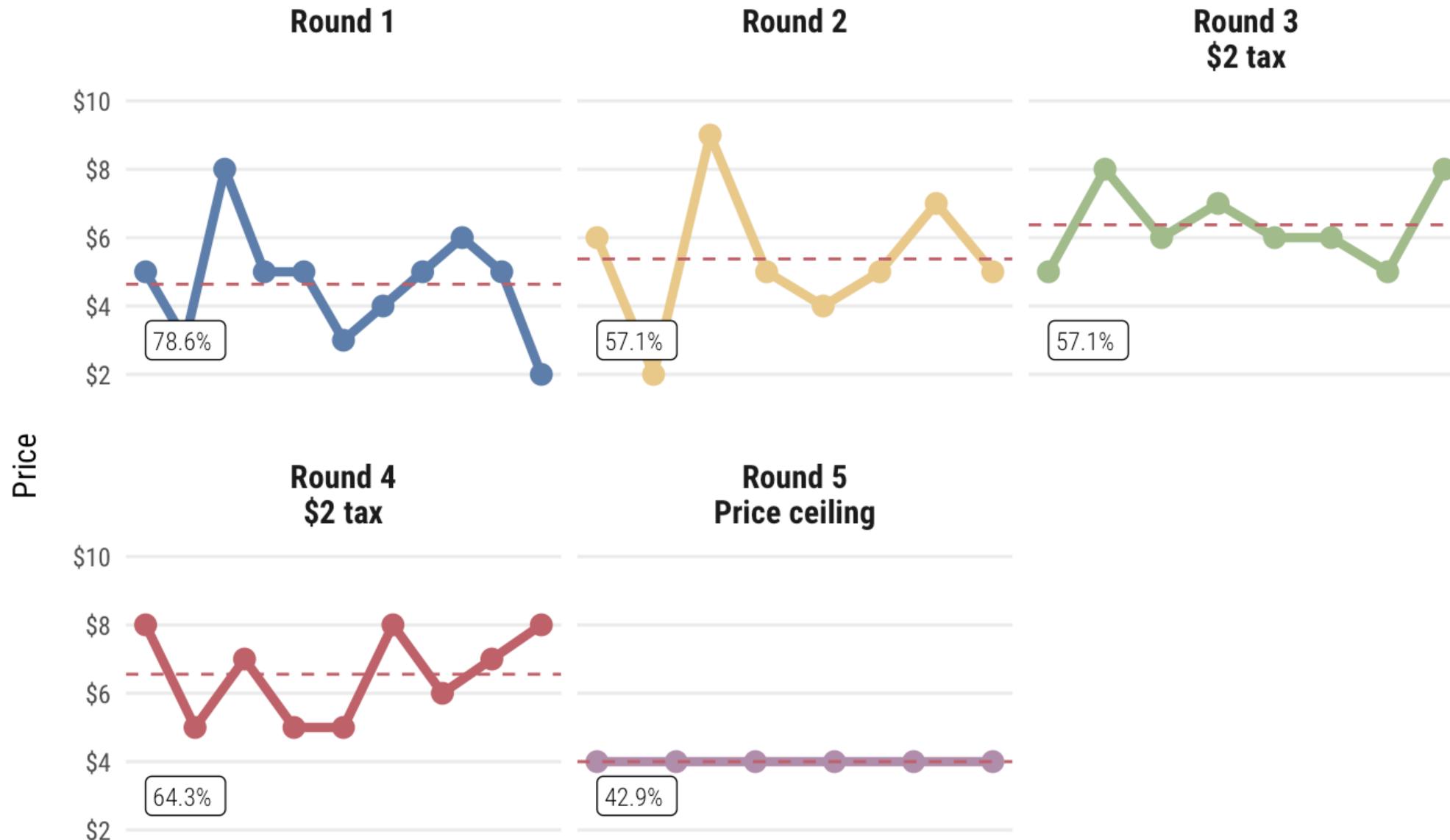
Buyer



1 piece of candy

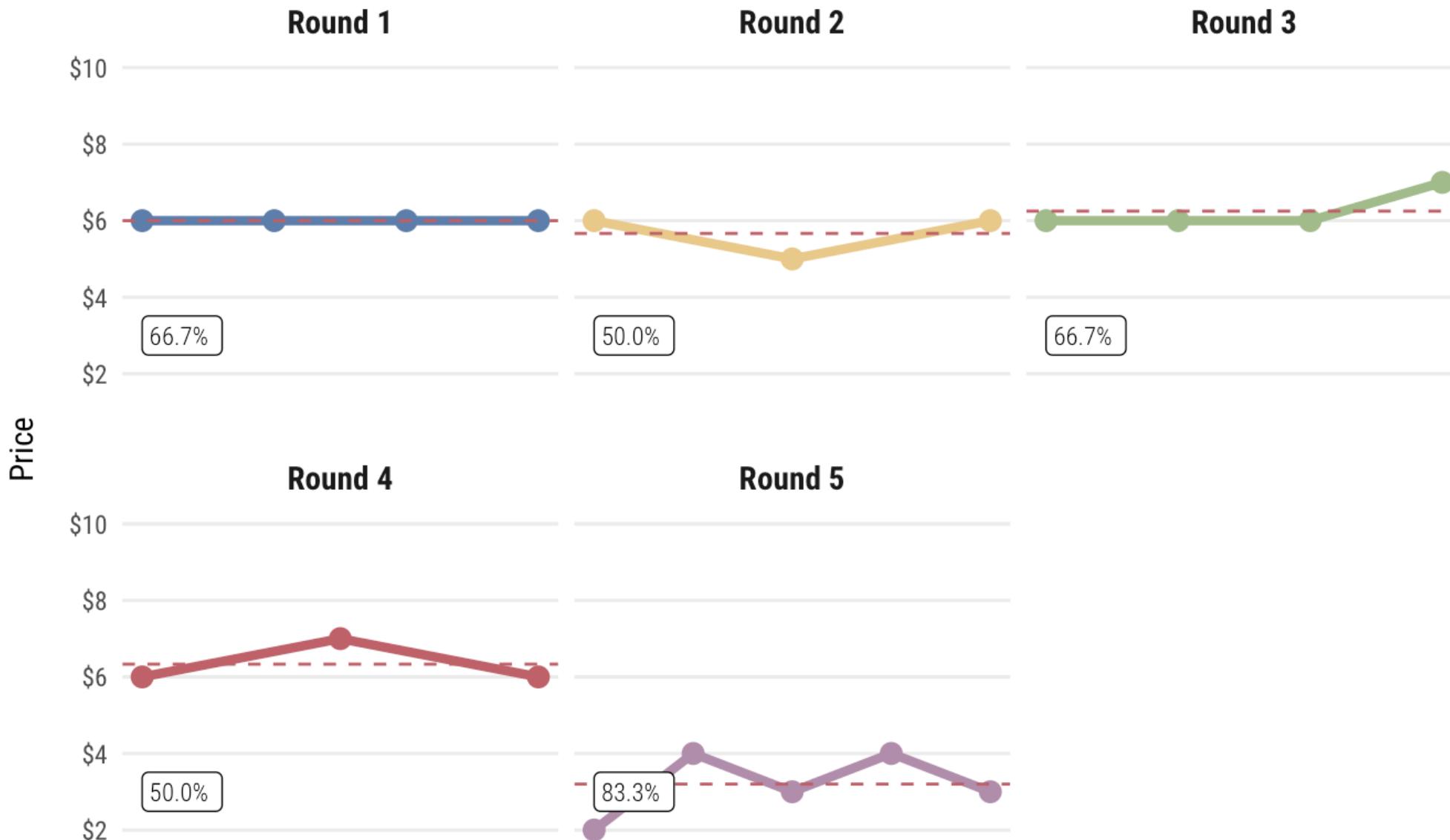
# Results of 5 simulation rounds

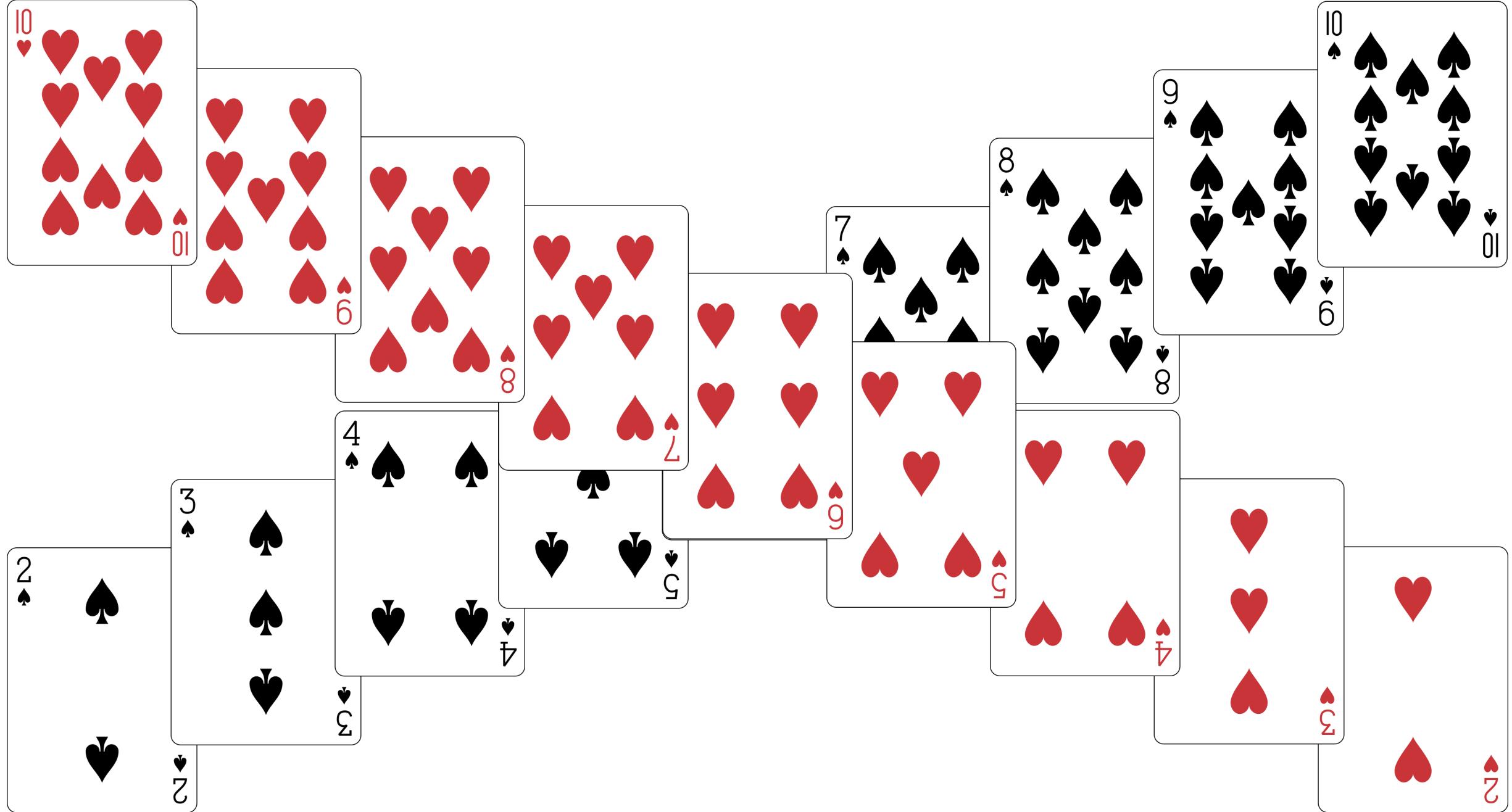
Dashed line shows average price;  
box shows market efficiency, or how many people made a trade



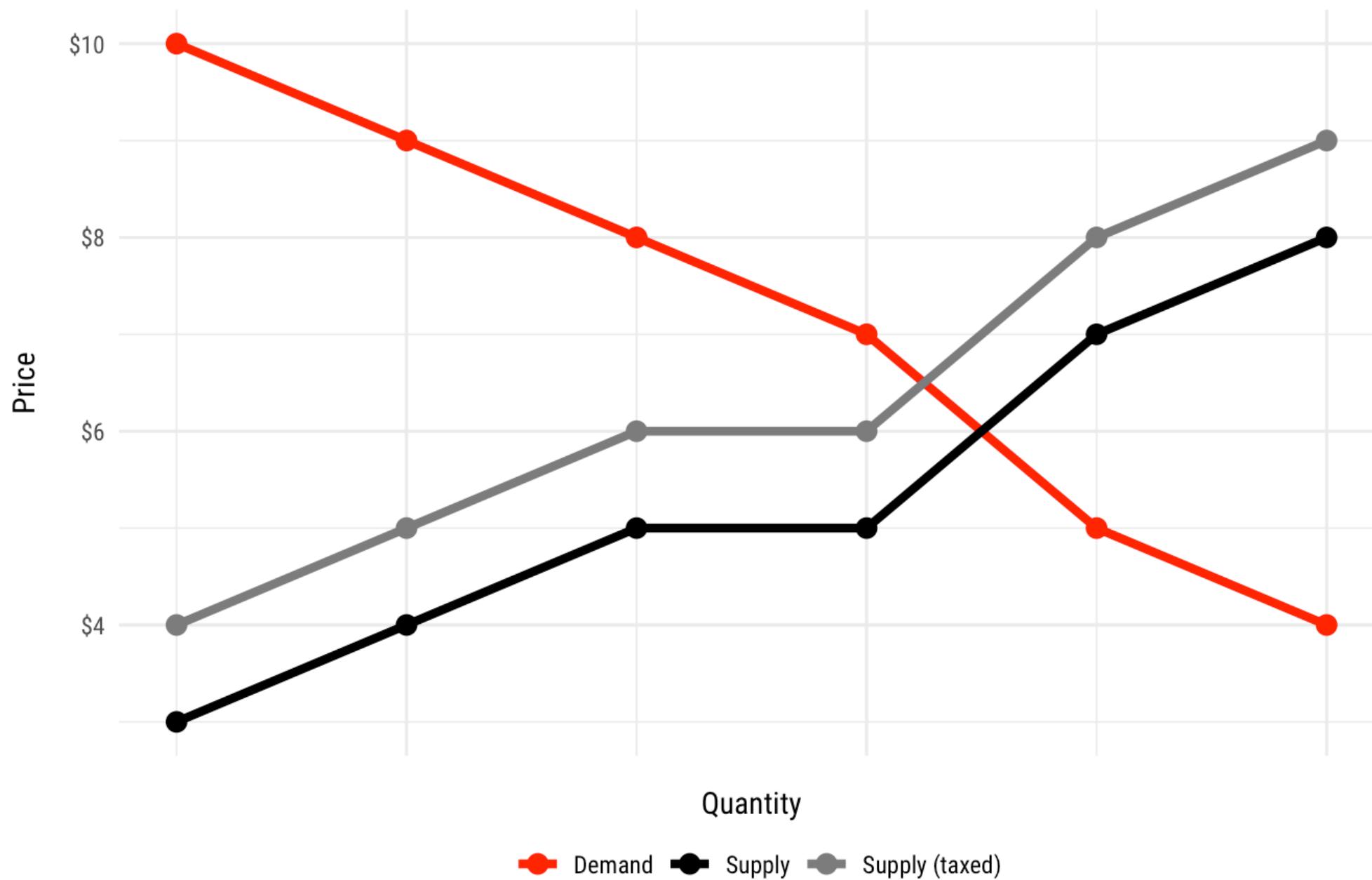
# Results of 4 simulation rounds

Dashed line shows average price;  
box shows market efficiency, or how many people made a trade





# Supply, demand, and price for paper clips



# The invisible hand

**Everyone working in their own  
self interest drives the  
collective market**

“It is not from the benevolence of the butcher,  
brewer, or the baker that we expect our dinner,  
but from regard for their own self interest”

Why do we make you  
take this class?

# What is economics?



The study of how people interact with each other and with their natural surroundings in providing their livelihoods, and how this changes over time.

# Economics ≠ money



**Mike Simpson, M.D.**

@DrMikeSimpson

Follow



The fact that every person with a PhD in economics is NOT a billionaire should tell you all you need to know about the worth of that particular field of study.

2:25 PM - 2 Jun 2018

213 Retweets 1,035 Likes



236

213

1.0K



Tweet your reply

# Economics ≠ money



**Kevin Banda**

@KevinKBanda

Following



The fact that every person with a PhD in geology is NOT a rock should tell you all you need to know about the worth of that particular field of study.

**Mike Simpson, M.D. @DrMikeSimpson**

The fact that every person with a PhD in economics is NOT a billionaire should tell you all you need to know about the worth of that particular field of study.

Show this thread

6:22 AM - 4 Jun 2018

399 Retweets 2,271 Likes



59

399

2.3K



# Why economics if it's not perfect?

*Homo economicus*  
and crystal ball math

vs.

Data + models + analysis =  
decisions

# Why economics in an MPA/MPP program?

**It's the language of policy**

You have to speak that language

**Markets need referees**

You are those current/future referees

# Language of policy



## NIH Public Access Author Manuscript

*N Engl J Med.* Author manuscript; available in PMC 2013 November 02.

Published in final edited form as:  
*N Engl J Med.* 2013 May 2; 368(18): 1713–1722. doi:10.1056/NEJMsa1212321.

### The Oregon Experiment — Effects of Medicaid on Clinical Outcomes

Katherine Baicker, Ph.D., Sarah L. Taubman, Sc.D., Heidi L. Allen, Ph.D., Mira Bernstein, Ph.D., Jonathan H. Gruber, Ph.D., Joseph P. Newhouse, Ph.D., Eric C. Schneider, M.D., Bill J. Wright, Ph.D., Alan M. Zaslavsky, Ph.D., and Amy N. Finkelstein, Ph.D. for the Oregon Health Study Group\*

Department of Health Policy and Management, Harvard School of Public Health (K.B., J.P.N., E.C.S.), the Department of Health Care Policy, Harvard Medical School (J.P.N., E.C.S., A.M.Z.), and RAND Corporation (E.C.S.) — all in Boston; the National Bureau of Economic Research (K.B., S.L.T., M.B., J.H.G., J.P.N., A.N.F.), the Harvard Kennedy School (J.P.N.), and the Department of Economics, Massachusetts Institute of Technology (J.H.G., A.N.F.) — all in Cambridge, MA; Columbia University School of Social Work, New York (H.L.A.); and the Center for Outcomes Research and Education, Providence Portland Medical Center, Portland, OR (B.J.W.)

#### Abstract

**BACKGROUND**—Despite the imminent expansion of Medicaid coverage for low-income adults, the effects of expanding coverage are unclear. The 2008 Medicaid expansion in Oregon based on lottery drawings from a waiting list provided an opportunity to evaluate these effects.

## Preliminary Cost-Benefit Analysis of Ultrasonic and Camera Backup Systems

Table 2  
Net Lifetime Benefits of Various Backup Systems  
On a Per Vehicle Basis (\$2006)

	3% discount rate	50 % Driver Factor	80% Driver Factor
<b>Ultrasonic</b>			
At low speeds, 10 % are backing up crashes		-\$82.73	-\$75.34
At low speeds, 25 % are backing up crashes		-\$64.26	-\$45.78
<b>Camera</b>			
At low speeds, 10 % are backing up crashes		-\$375.21	-\$365.20
At low speeds, 25 % are backing up crashes		-\$350.19	-\$325.16
<b>Both</b>			
At low speeds, 10 % are backing up crashes		-\$468.57	-\$457.54
At low speeds, 25 % are backing up crashes		-\$441.00	-\$413.43

	7% discount rate	50 % Driver Factor	80% Driver Factor
<b>Ultrasonic</b>			
At low speeds, 10 % are backing up crashes		-\$74.23	-\$68.35
At low speeds, 25 % are backing up crashes		-\$59.53	-\$44.83
<b>Camera</b>			
At low speeds, 10 % are backing up crashes		-\$365.11	-\$357.14
At low speeds, 25 % are backing up crashes		-\$345.19	-\$325.28
<b>Both</b>			
At low speeds, 10 % backing up		-\$447.80	-\$439.02
At low speeds, 25 % backing up		-\$425.86	-\$403.92

# What happens if...

Private property is not secure?

Markets are not competitive?

Firms are run by  
entrenched interests?

# Institutions matter

The public sector provides  
the backdrop for capitalist  
institutions

# Class details

# Goals for the class

Talk like an economist

Understand the role of the public  
sector in capitalist markets

Do public economic analysis

## Capitalism, markets, and public policy

Growth      Social dilemmas

Measurement      Fairness      Inequality

## Market failures and institutions

Externalities      Public goods      Rent seeking

Monopolies      Government intervention



## Economic models

Scarcity      Firms and markets

Preferences      Optimization      Information



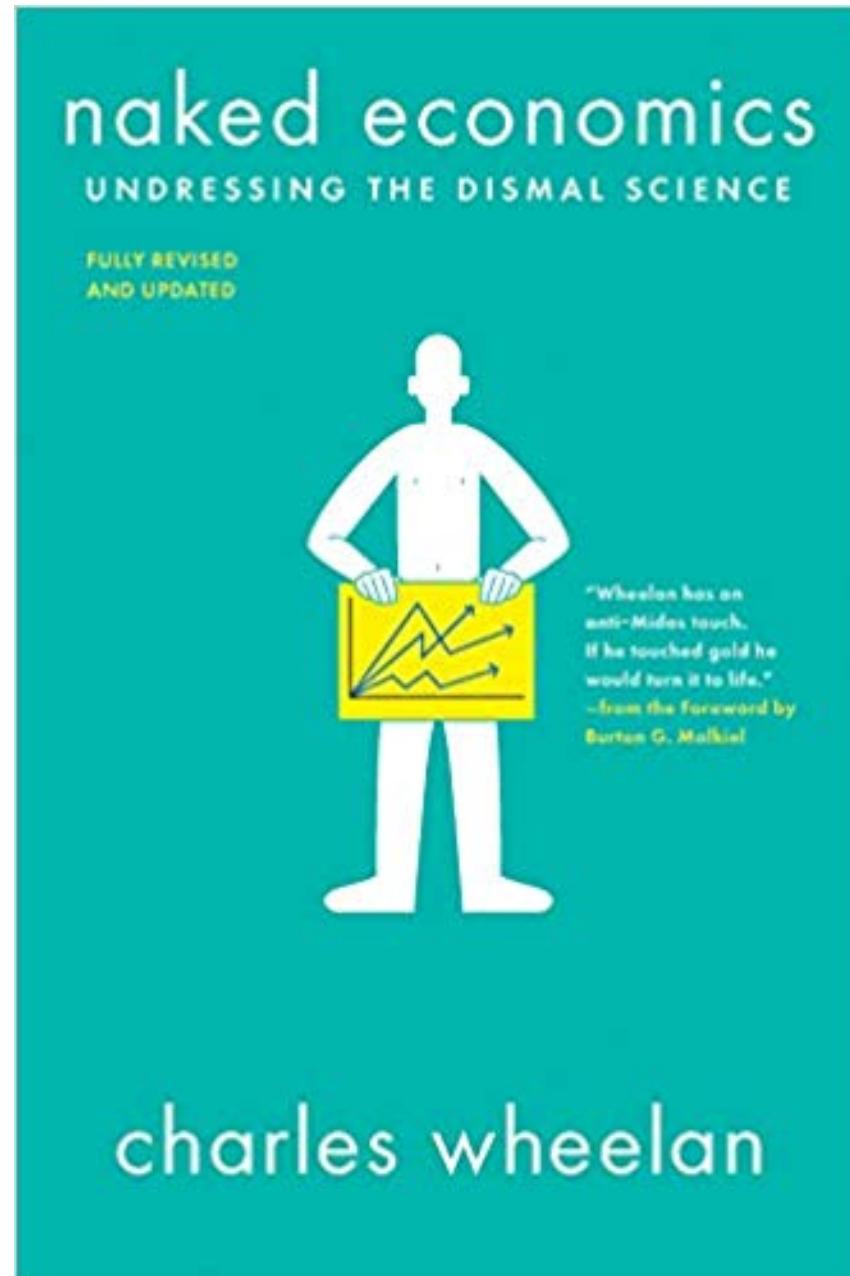
THE CORE ESPP TEAM

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## ECONOMY, SOCIETY, AND PUBLIC POLICY

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coreecon



"Wheelan has an anti-Midas touch.  
If he touched gold he  
would turn it to life."  
—from the Foreword by  
Burton G. Malkiel

charles wheelan

# Skills you'll need



Algebra

Derivatives

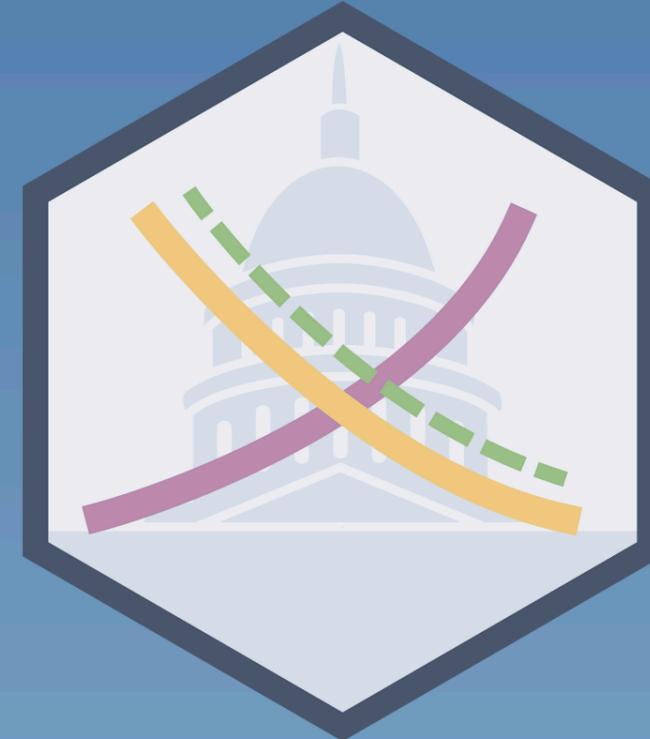
But also don't worry! We will review all this stuff!

# Microeconomics for Public Policy

**Learn how to understand, speak, and do  
economics in the public sector**

PMAP 8141 • Summer 2020

Andrew Young School of Policy Studies  
Georgia State University

**Instructor****Course details****Contacting me**

# Main assignments

Readings

Problem sets

Weekly reports

Exams

# Importance of institutions

# What are institutions?

Rules

Formal

Informal

# Capitalist institutions

Private property

Markets

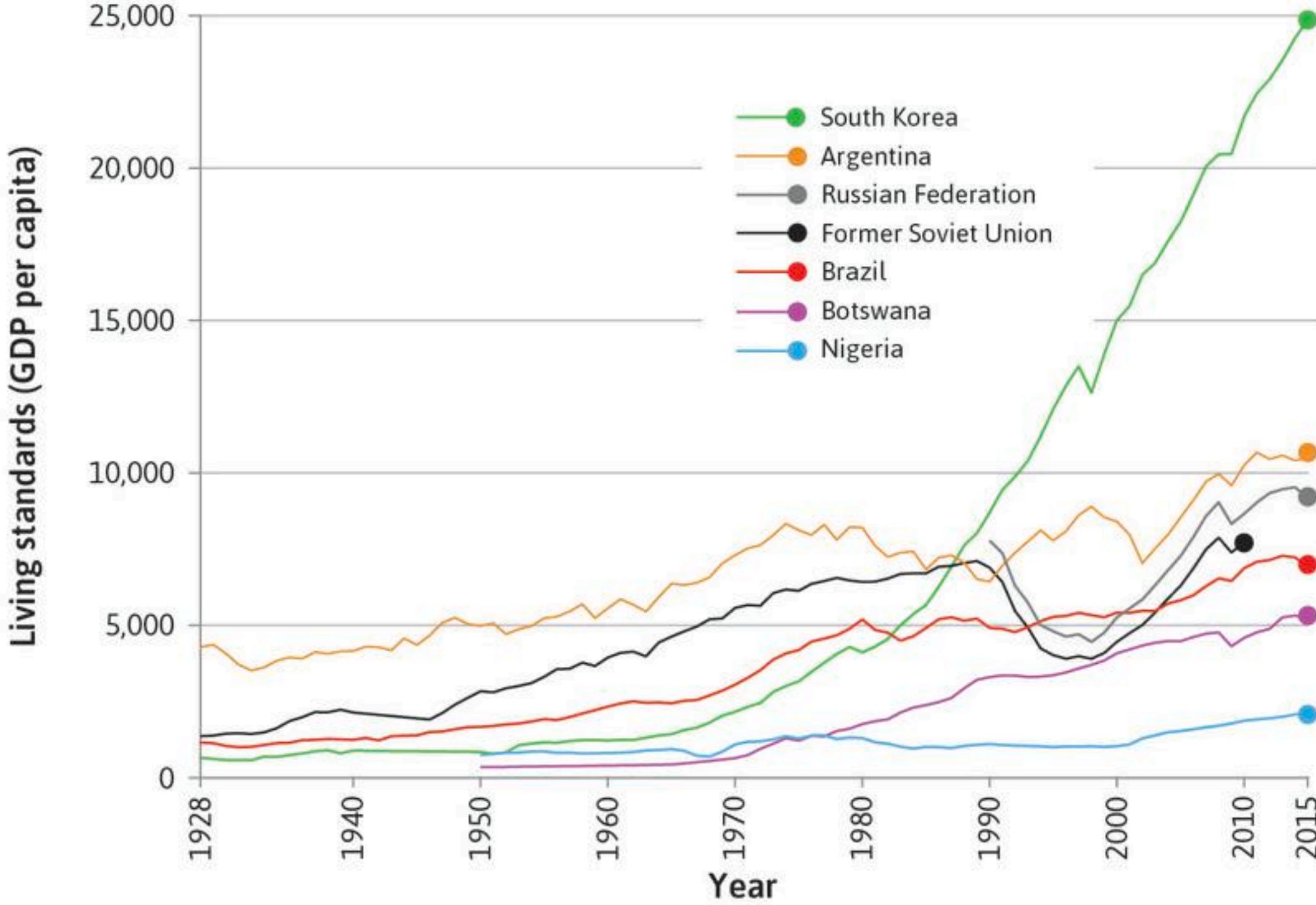
Firms

An economic system with private property

and markets

and firms

**Is democracy  
necessary for  
capitalism?**



# What is the right institutional mix?

## Incentives for innovation

Secure private property +  
competitive markets

## Efficient firms

Competent leadership →  
create goods at low cost

## Public policy

Government policies that  
foster these conditions

## Public good provision

Governments fill in gaps  
missed by private sector

# Downsides of capitalism

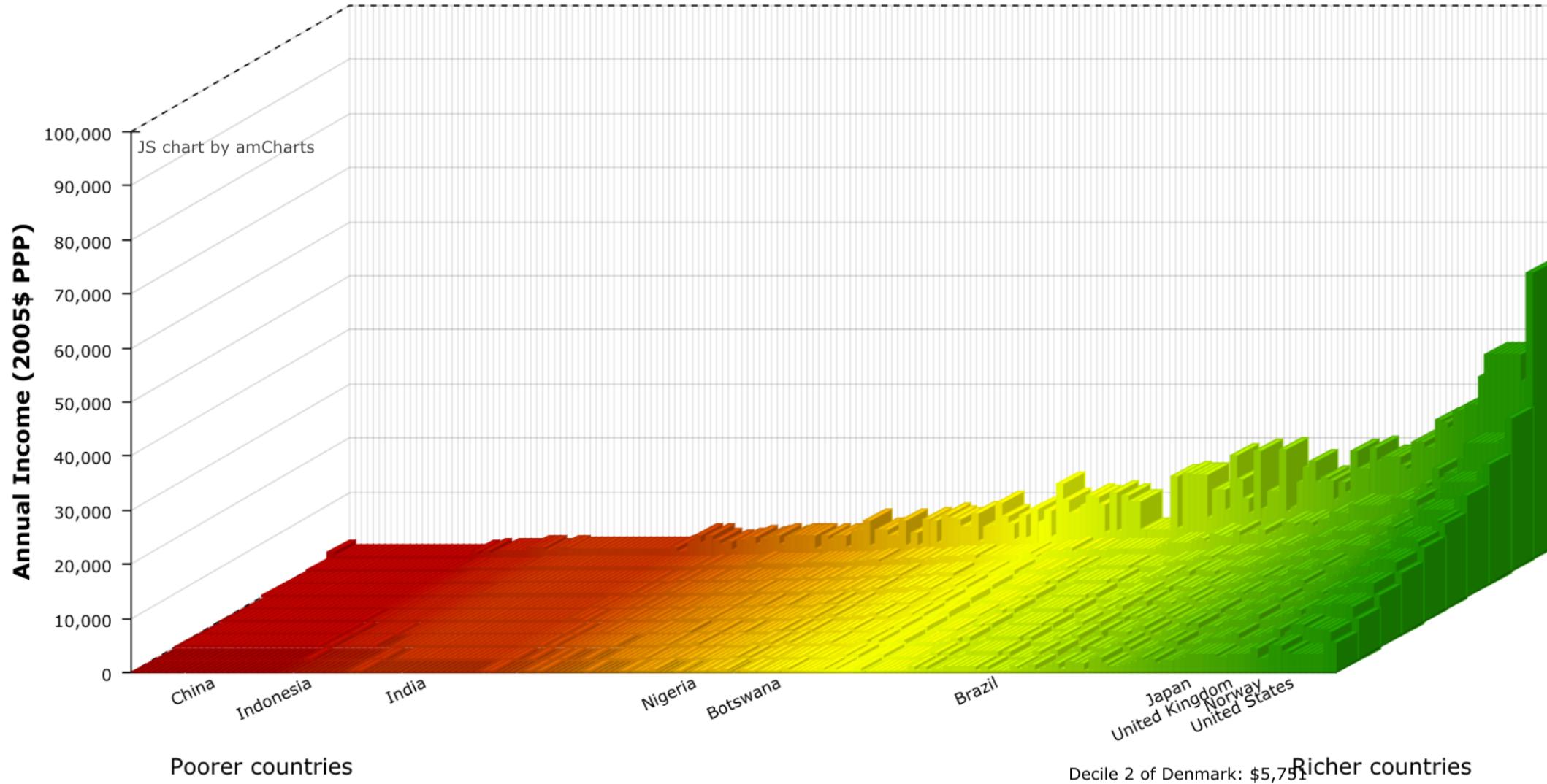


# 1.5 cheers for capitalism

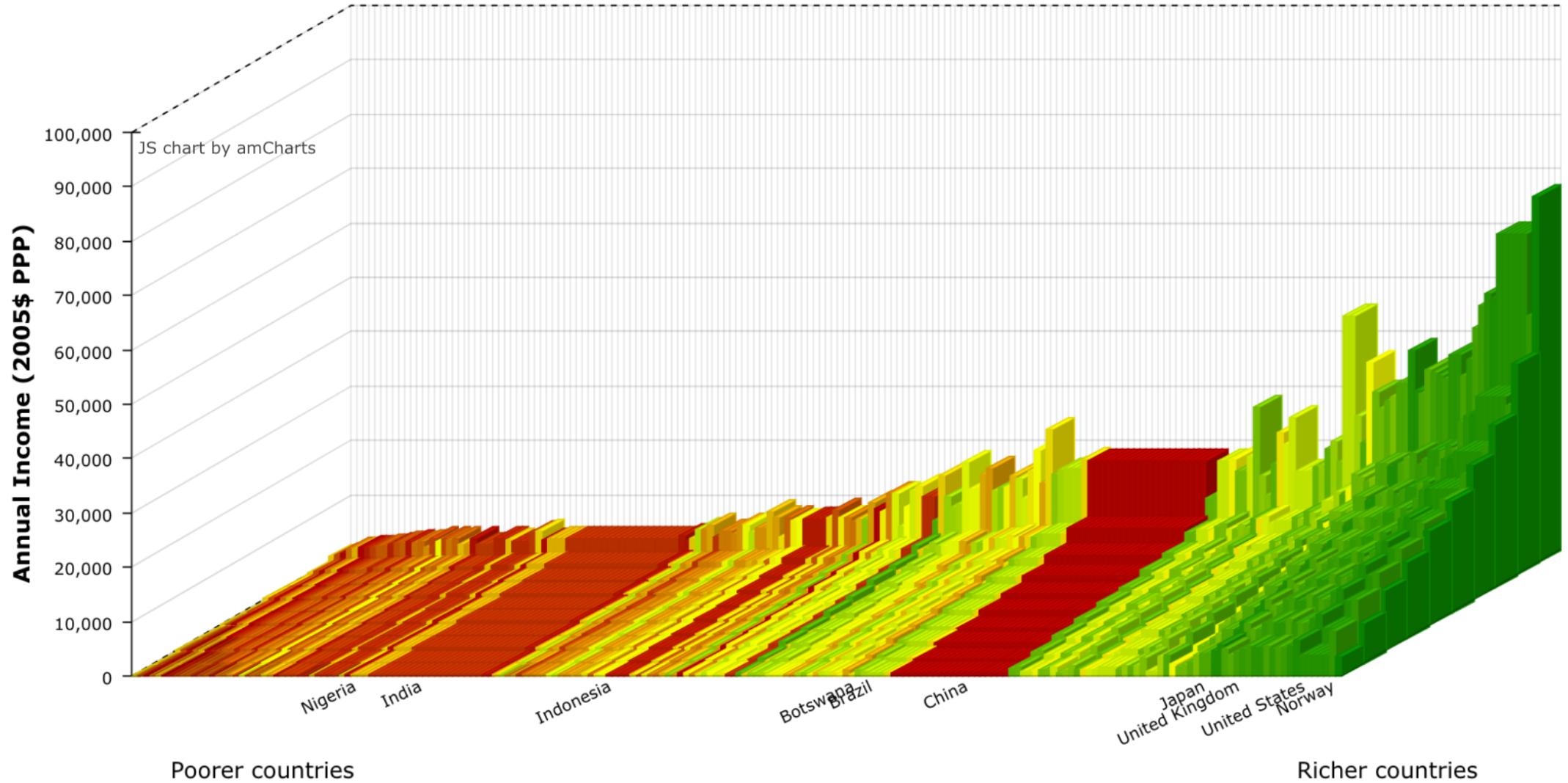
## Inequality

Not all gains are spread equally  
(within and between countries)

# 1980



# 2014



# Race and Economic Opportunity in the United States: An Intergenerational Perspective

Raj Chetty, Nathaniel Hendren, Maggie R. Jones, and Sonya R. Porter

NBER Working Paper No. 24441

March 2018, Revised December 2019

JEL No. H0,J0

## **ABSTRACT**

We study the sources of racial disparities in income using anonymized longitudinal data covering nearly the entire U.S. population from 1989-2015. We document three results. First, black Americans and American Indians have much lower rates of upward mobility and higher rates of downward mobility than whites, leading to persistent disparities across generations. Conditional on parent income, the black-white income gap is driven by differences in wages and employment rates between black and white men; there are no such differences between black and white women. Hispanic Americans have rates of intergenerational mobility more similar to whites than blacks, leading the Hispanic-white income gap to shrink across generations. Second, differences in parental marital status, education, and wealth explain little of the black-white income gap conditional on parent income. Third, the black-white gap persists even among boys who grow up in the same neighborhood. Controlling for parental income, black boys have lower incomes in adulthood than white boys in 99% of Census tracts. The few areas with small black-white gaps tend to be low-poverty neighborhoods with low levels of racial bias among whites and high rates of father presence among blacks. Black males who move to such neighborhoods earlier in childhood have significantly better outcomes. However, fewer than 5% of black children grow up in such areas. Our findings suggest that reducing the black-white income gap will require efforts whose impacts cross neighborhood and class lines and increase upward mobility specifically for black men.

# The plight of essential workers during the COVID-19 pandemic



The COVID-19 pandemic has vividly highlighted how much society depends upon essential workers. Praise for the heroic work being done by health-care workers to save lives worldwide in dangerous, exhausting conditions is everywhere. But those same workers are often left unprotected by governments and systems that have failed to supply them with enough personal protective equipment (PPE), supplies, and resources to do their jobs. In April alone, there were an estimated 27 COVID-19-related health worker deaths in the USA, 106 in the UK, and 180 in Russia, with tens of thousands of infections. The actual numbers are probably much higher.

But essential work extends beyond health care. Although some people have been able to shift their jobs to their homes, millions of workers have jobs that cannot be done at home—not only custodial staff and orderlies in hospitals, but also teachers and child-care workers, grocery clerks and supermarket workers, delivery people, factory and farm workers, and restaurant staff, often without adequate PPE. These people leave their homes to help maintain a semblance of normality for others, at great risk to themselves and their families.

What constitutes an essential worker in the USA varies by state, but black and Latino Americans make up a large part of the essential workforce and have been disproportionately affected by COVID-19. In New York City, over 60% of COVID-19 deaths have been in black and Latino populations. Meat processing plants have become hotspots for transmission, with 700 new cases at a

Transportation Authority (MTA) have died due to COVID-19, and nearly 4000 have tested positive. The MTA changed guidance to advise wearing face masks before the US Centers for Disease Control and Prevention (CDC) and WHO shifted their guidance, but being exposed to the public, even with adequate PPE, presents dangers. At least 28 London bus drivers have died due to COVID-19, and a UK railway worker, Belly Mujinga, died after being spat on by a passenger who claimed to have COVID-19, leaving behind an 11-year-old daughter.

The International Labour Organization has reported that 2.7 billion people—81% of the world's workforce—had been affected by lockdown measures. 61% of workers are from the informal sector, 90% of whom are in low-income and middle-income countries, and social protection measures are often inadequate, with a lack of access to health-care support and economic protections. Informal and migrant workers are likely to fall through the cracks and ensuring their safety must be a priority.

Some US states are considering reopening restaurants, bars, gyms, and swimming pools, without a viable system in place to test, trace, and isolate people, and a CDC draft plan to lift the lockdown has been watered down by the Trump administration. In Germany, infection rates rose as lockdown restrictions began to ease and in the UK Boris Johnson's vague, amorphous plan to end lockdown has caused confusion and angered many. Gifted with a 2-month lockdown and a chance to lay the groundwork for a staged, successful reopening, many western leaders have instead prevaricated, shifted blame, and appear not



Nicolo Giusti/Getty Images

# Capitalism and inequality

Questions we'll explore

Why is capitalism associated  
with growing inequality?

How can democracy ideally  
curtail this capitalist inequality?

# 1.5 cheers for capitalism

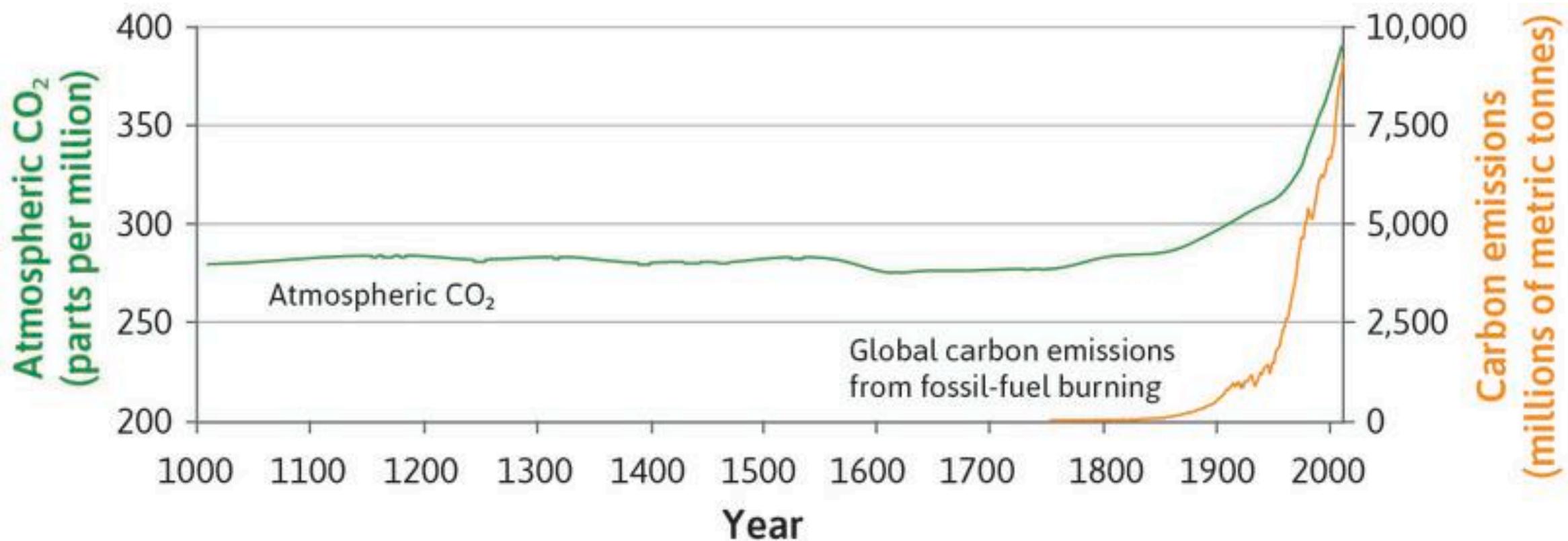
## Inequality

Not all gains are spread equally  
(within and between countries)

## Environmental damage

Gains have side effects

# Capitalism and carbon



# Capitalism and climate

## Questions we'll explore

Why is it so hard for democracies to address climate change?

Can capitalist institutions do anything to address climate change?

# Measuring stuff correctly

What is “the economy”  
and how the heck do  
we measure it?

# Everyone's favorite number

## Gross Domestic Product (GDP)

Private consumption

Investment

Exports

Government expenditures

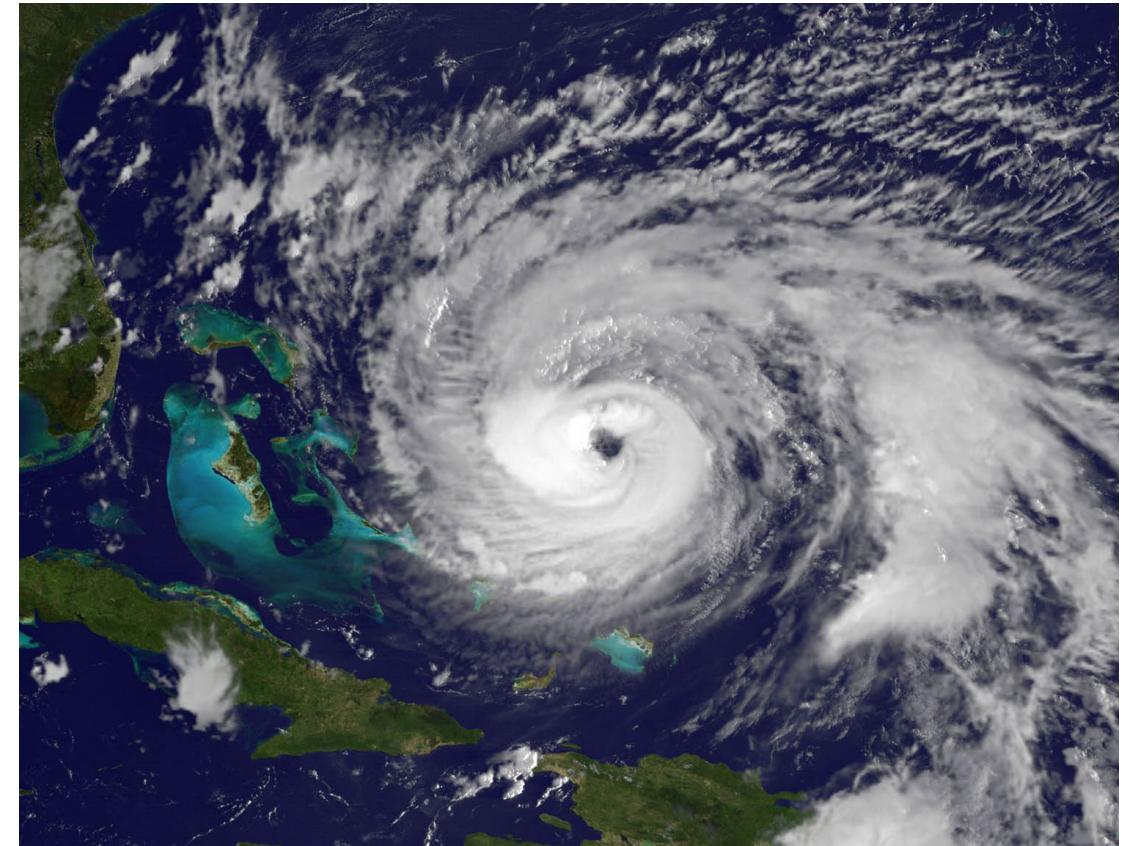
(Subtract imports)

y tho?

Why does everyone  
love this number?

It's easy!

# Problems with GDP



# Dollars across space

## Purchasing power parity (PPP)

Adjust value for how much the same good costs at the same time in different places

## Big Mac Index

🇺🇸 \$5.67

🇨🇳 \$3.12

🇪🇺 \$4.58



# Dollars over time

**Nominal numbers**

What was written down at the time

**Real numbers**

The value in today's dollars (or another year's dollars)

$$\text{Real value} = \frac{\text{Nominal value}}{\text{Price index} / 100}$$

# Price indexes

Compare the price of the same good  
(or basket of goods) over time

Consumer Price Index (CPI) is common

## What goods and services does the CPI cover?

The CPI represents all goods and services purchased for consumption by the reference population (U or W) BLS has classified all expenditure items into more than 200 categories, arranged into eight major groups. Major groups and examples of categories in each are as follows:

- FOOD AND BEVERAGES (breakfast cereal, milk, coffee, chicken, wine, full service meals, snacks)
- HOUSING (rent of primary residence, owners' equivalent rent, fuel oil, bedroom furniture)
- APPAREL (men's shirts and sweaters, women's dresses, jewelry)
- TRANSPORTATION (new vehicles, airline fares, gasoline, motor vehicle insurance)
- MEDICAL CARE (prescription drugs and medical supplies, physicians' services, eyeglasses and eye care, hospital services)
- RECREATION (televisions, toys, pets and pet products, sports equipment, admissions);
- EDUCATION AND COMMUNICATION (college tuition, postage, telephone services, computer software and accessories);
- OTHER GOODS AND SERVICES (tobacco and smoking products, haircuts and other personal services, funeral expenses).



Ernie's B&L mortgage in 1928 = \$5,000

\$72,843

George's salary in 1935 = \$45/week

\$43,365

Potter's offer in 1935 = \$20,000/year

\$370,644

Amount stolen by Potter in 1945 = \$8,000

\$113,275

# Inflation targets

**“Good” inflation = 2–3%**

My dollar today buys more than my dollar tomorrow

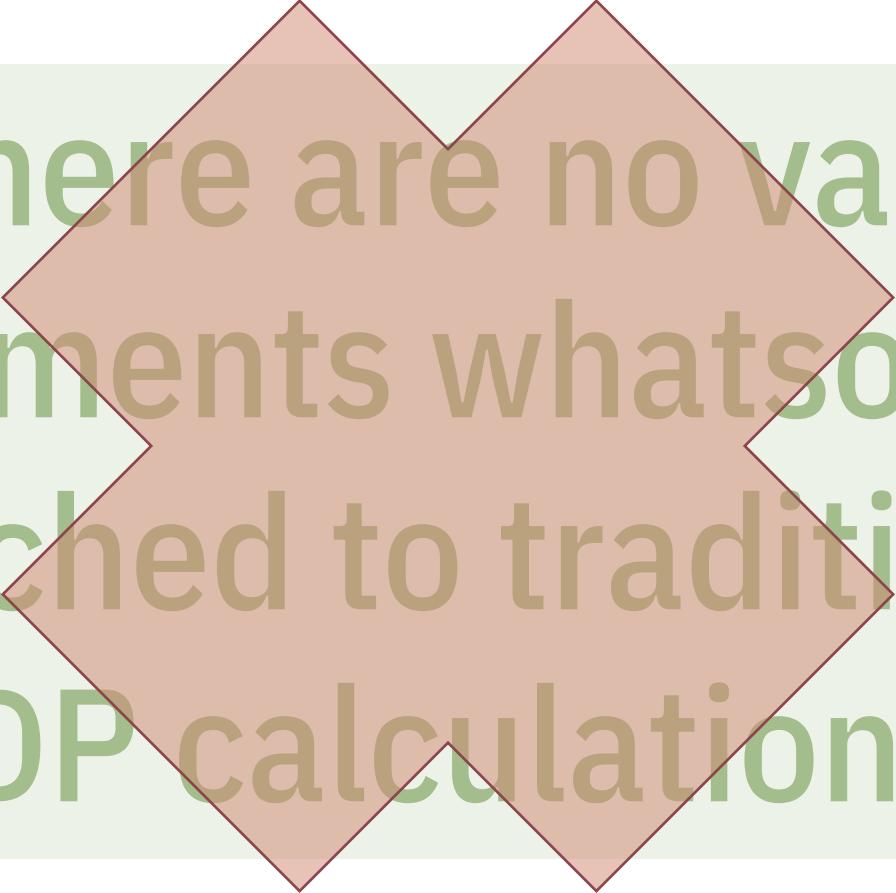
Encourages spending

**Deflation = really bad**

My dollar today buys less than my dollar tomorrow

Encourages saving; discourages spending

Does GDP measure  
human wellbeing?



“There are no value judgments whatsoever attached to traditional GDP calculations”

*Naked Economics*, p. 198

**“Yet the Gross National Product does not allow for the health of our children, the quality of their education or the joy of their play. It does not include the beauty of our poetry, of the strength of our marriages, the intelligence of our public debate or the integrity of our public officials”**

Robert F. Kennedy

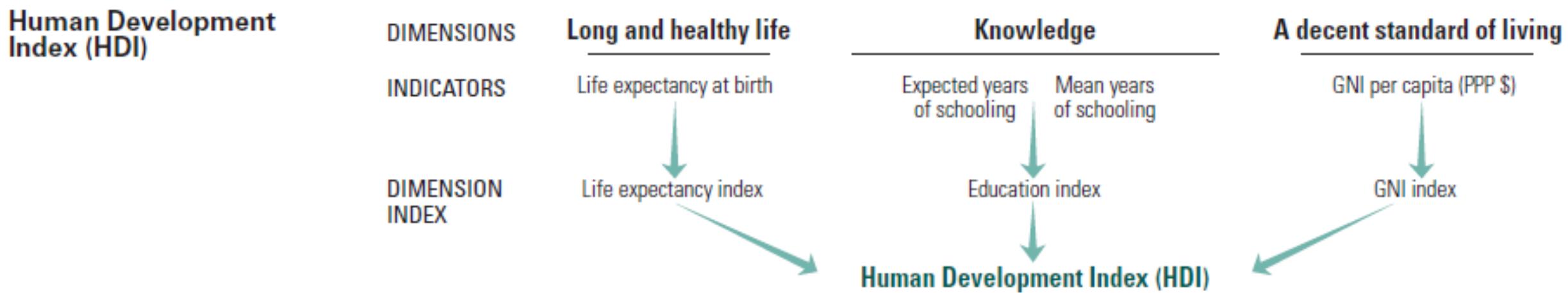
# Other measures

Human Development Index

# Human Development Report 2016



# **Human Development for Everyone**



# Other measures

Human Development Index

Unemployment rate

Poverty

Size of government

Budget surplus/deficit

# Best alternative?

- \ ( ° \_ o ) / -

GDP per capita is standard and  
probably will be for a loooong time