

PUBLIC POLICY FOR FAIRNESS & EFFICIENCY

MPA 612: Economy, Society, and Public Policy

January 23, 2019

**Fill out your reading report
on Learning Suite**

PLAN FOR TODAY

Stags, hares, and prisoners

Fixing collective action problems

Power and efficiency

Creating economic policy

Fairness

STAGS, HARES, AND PRISONERS

PRISONER'S DILEMMA

		Bala	
		Magic bugs	Poison
Anil	Magic bugs	3, 3	1, 4
	Poison	4, 1	2, 2

COOPERATION IN PD LAND

Repetition + iteration

One-shot vs. repeated

Infinitization

Defect at $t - 1$

**PD games underpredict
voluntary cooperation**

People cooperate even though the dominant strategy is always defect



STAG HUNT

		Bala	
		Hunt stag	Hunt hare
Anil	Hunt stag	10, 10	0, 2
	Hunt hare	2, 0	2, 2

Non-zero-sum

Two pure equilibria

Mixed strategy

Not socially optimal!

COOPERATION IN STAG HUNT LAND

**The payoffs for cooperation
are greater than the payoffs
for defection**

**There's still an
incentive to defect**

BETTER MODEL OF SOCIAL DILEMMAS

Climate change

Arriving on time

Real estate agents

Points in soccer tournaments

Negative political campaigns

FIXING COLLECTIVE ACTION PROBLEMS

**Perfectly rational
individual behavior can
create irrational and
inferior social outcomes**

WHAT STOPS US FROM COOPERATING?

Uneven payoffs

Lack of assurance

Dishonesty

Selfishness

These are all rational things that
utility-maximizing people do!

HOW DO WE FIX THIS?

Altruism

Repetition and iteration

Infinetization

Punishment

Norms

Institutions

Public policy



TRAGEDY OF THE COMMONS

		Farmer 2	
		Use water normally	Double water use
Farmer 1	Use water normally	6, 6	2, 8
	Double water use	8, 2	3, 3

INSTITUTIONAL FIXES

Change payoffs so that normal water use is more valuable

Make water common property

Privatize the water and let one person control it

POWER & EFFICIENCY

POWER

**The ability to do what we want in
opposition to the intentions of others**

WHO SHOULD DECIDE?

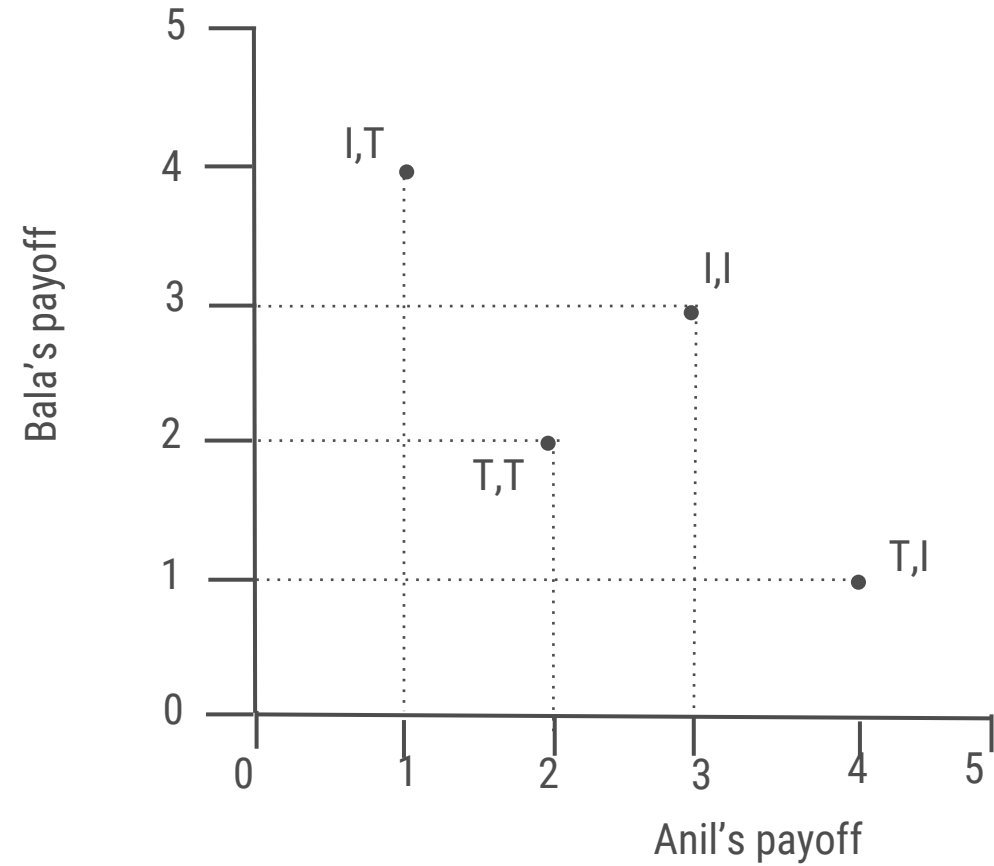
		Bala	
		Left	Right
Anil	Left	Live, Live	Die, Die
	Right	Die, Die	Live, Live

PARETO EFFICIENCY

No alternative allocation where one person would be better off and nobody would be worse off

The most economic pie is consumed without taking pieces away from others

		Bala	
		Magic bugs (I)	Poison (T)
Anil	Magic bugs (I)	3, 3	1, 4
	Poison (T)	4, 1	2, 2



I,I = Both use Integrated Pest Control (IPC)

I,T = Anil uses IPC, Bala uses Terminator

T,I = Anil uses Terminator, Bala uses IPC

T,T = Both use Terminator

TRAGEDY OF THE COMMONS

		Farmer 2	
		Use water normally	Double water use
Farmer 1	Use water normally	6, 6 ★	2, 8 ★
	Double water use	8, 2 ★	3, 3

IS PARETO THE BEST STANDARD?

**There can be more than one
Pareto-efficient allocation (or none!)**

There are no rankings

No consideration of power

CREATING ECONOMIC POLICY

Annual income

\$0–\$10,000

\$10,001–\$50,000

\$50,001–\$100,000

\$100,001–\$300,000

\$300,000–\$∞

Tax rate

0%

10%

20%

30%

50%

1: Progressive tax rate

Increasing marginal rates

2: Flat tax

15% regardless of income

$\$80,000 \times 15\% = \mathbf{\$12,000}$

Jody earns \$80,000 a year.

She pays 0% on first \$10,000

She pays 10% on the next \$40,000

She pays 20% on the last \$30,000

Total tax:

$\$10,000 \times 0\% = \0

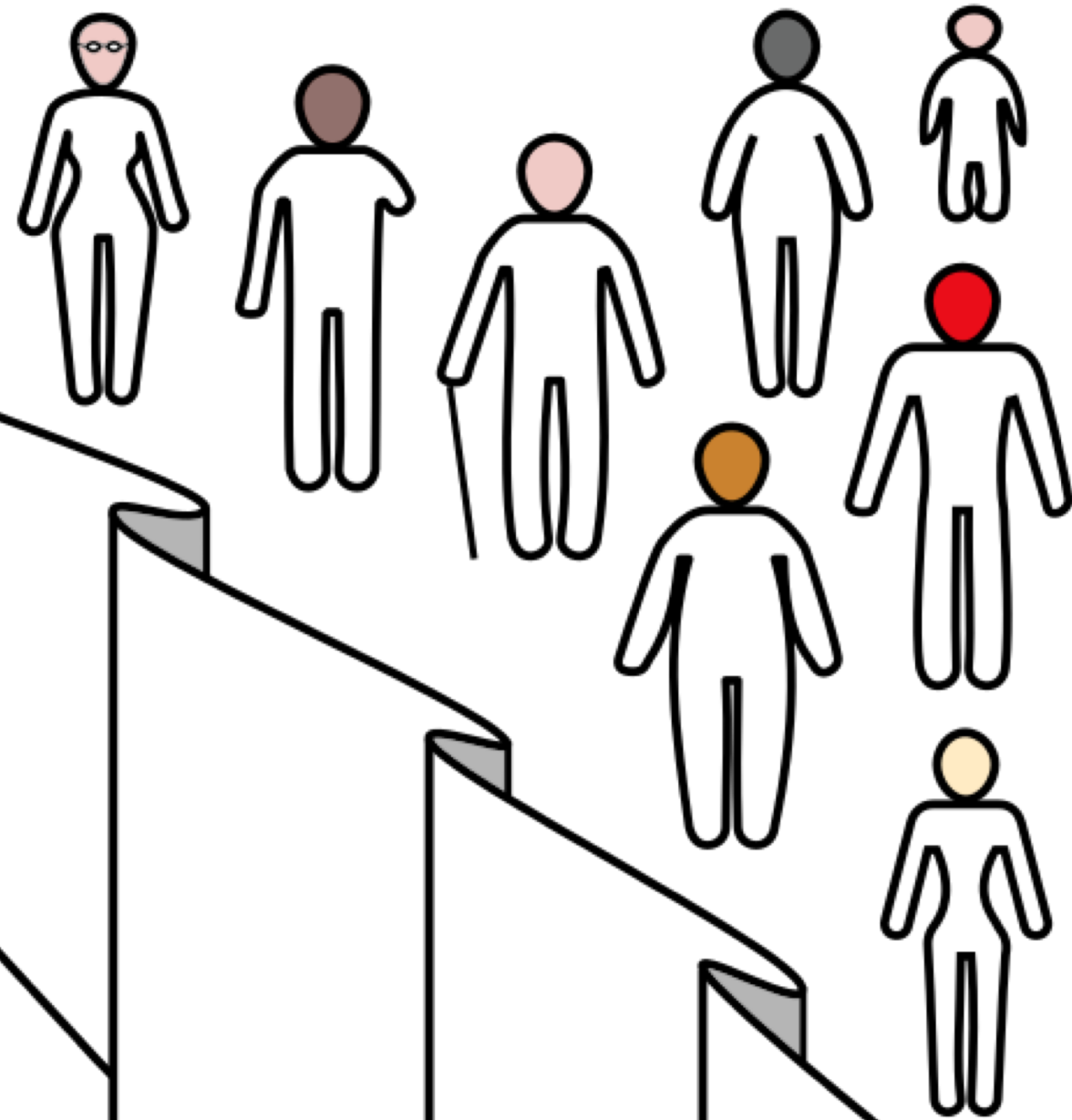
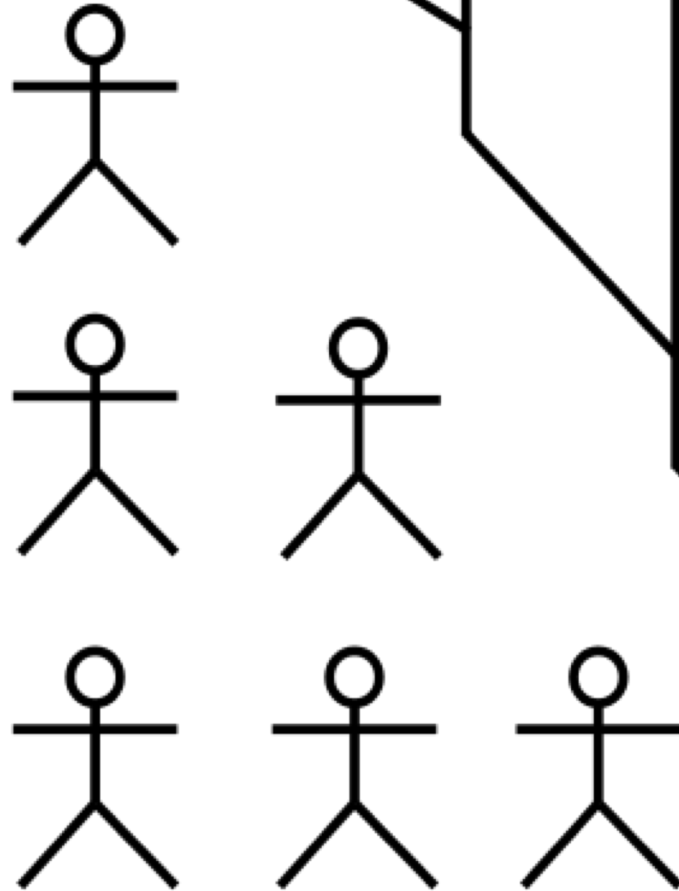
$\$40,000 \times 10\% = \$4,000$

$\$30,000 \times 20\% = \$6,000$

$\$0 + \$4,000 + \$6,000 = \mathbf{\$10,000}$

Veil of ignorance

Original position



FAIRNESS

IS PARETO THE BEST STANDARD?

**There can be more than one
Pareto-efficient allocation (or none!)**

There are no rankings

No consideration of power

No consideration of fairness

EFFICIENCY VS. EQUITY

Efficiency

The most economic
pie is consumed

Equity / Fairness / Justice

It matters who consumes
how much of the pie

“But let judgment run down as waters, and righteousness as a mighty stream.” (Amos 5:24, KJV)

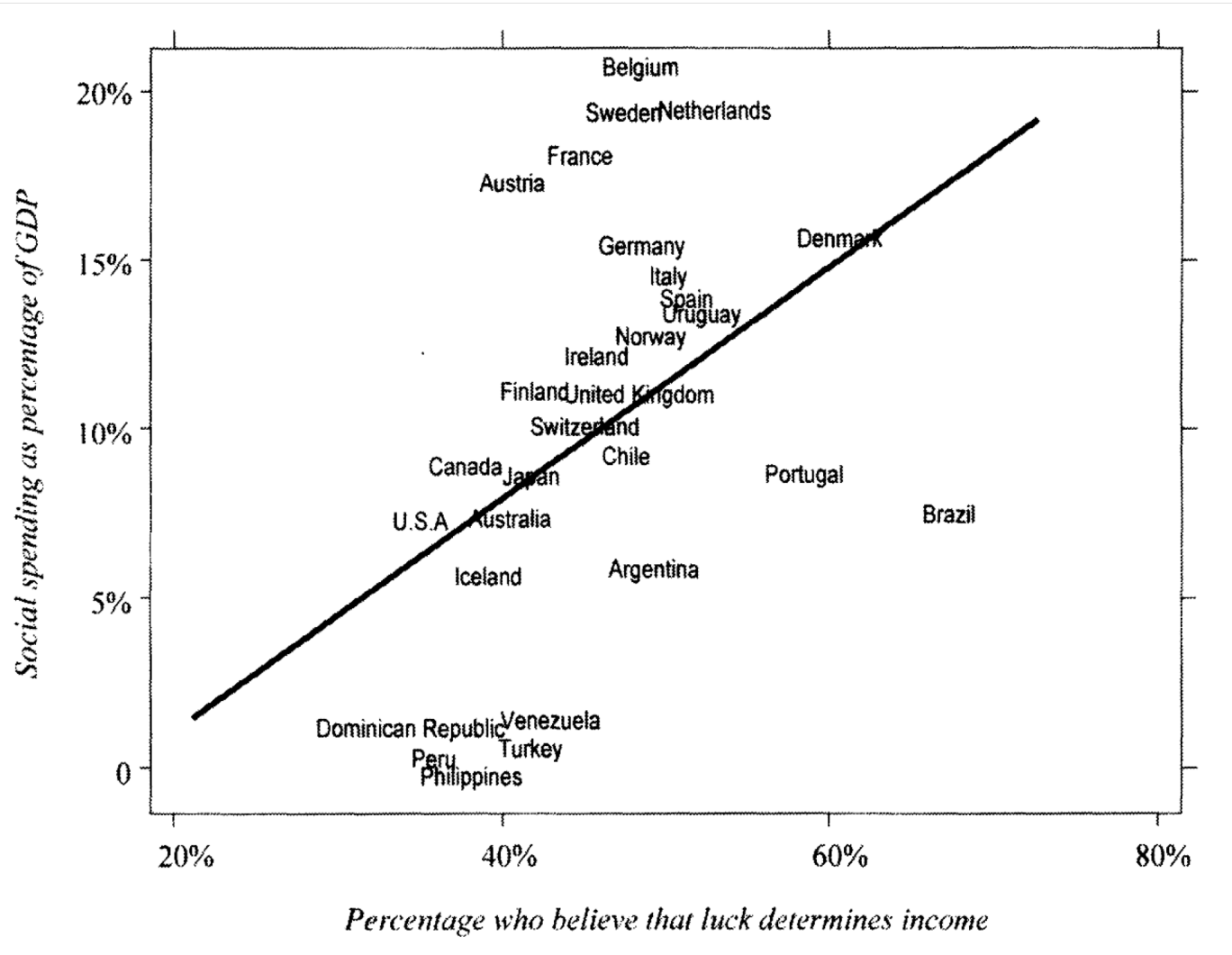
“Learn to do good; seek justice, rescue the oppressed, defend the orphan, plead for the widow.” (Isaiah 1:17, NRSV)

“This was the guilt of your sister Sodom: she and her daughters had pride, excess of food, and prosperous ease, but did not aid the poor and needy.” (Ezekiel 16:49, NRSV)

HOW DO WE DECIDE WHAT'S FAIR?

Social norms

LUCK, NORMS, AND TAXES



Our analysis thus sheds some light on why differences in attitudes toward the market mechanism are so rooted in American and European cultures. In Europe, opportunities for wealth and success have been severely restrained by class differences at least since medieval times.²⁷ At the time of the extension of the franchise, the distribution of income was perceived as unfair because it was generated more by birth and nobility than by ability and effort. The “invisible hand” has frequently favored the lucky and privileged rather than the talented and hard-working. Europeans have thus favored aggressive redistributive policies and other forms of government intervention. In the “land of opportunity,” on the other hand, the perception was that those who were wealthy and successful had “made it” on their own. Americans have thus chosen strong property protection, limited regulation, and low redistribution, which in turn have resulted in fewer distortions, more efficient market outcomes, and a smaller effect of “luck.” Today, the “self-made man” remains very much an American “icon”; and Americans remain more averse to government intervention than Europeans.

LUCK, NORMS, AND TAXES

Strong Reciprocity and the Welfare State

Christina M. Fong, Samuel Bowles and Herbert Gintis*

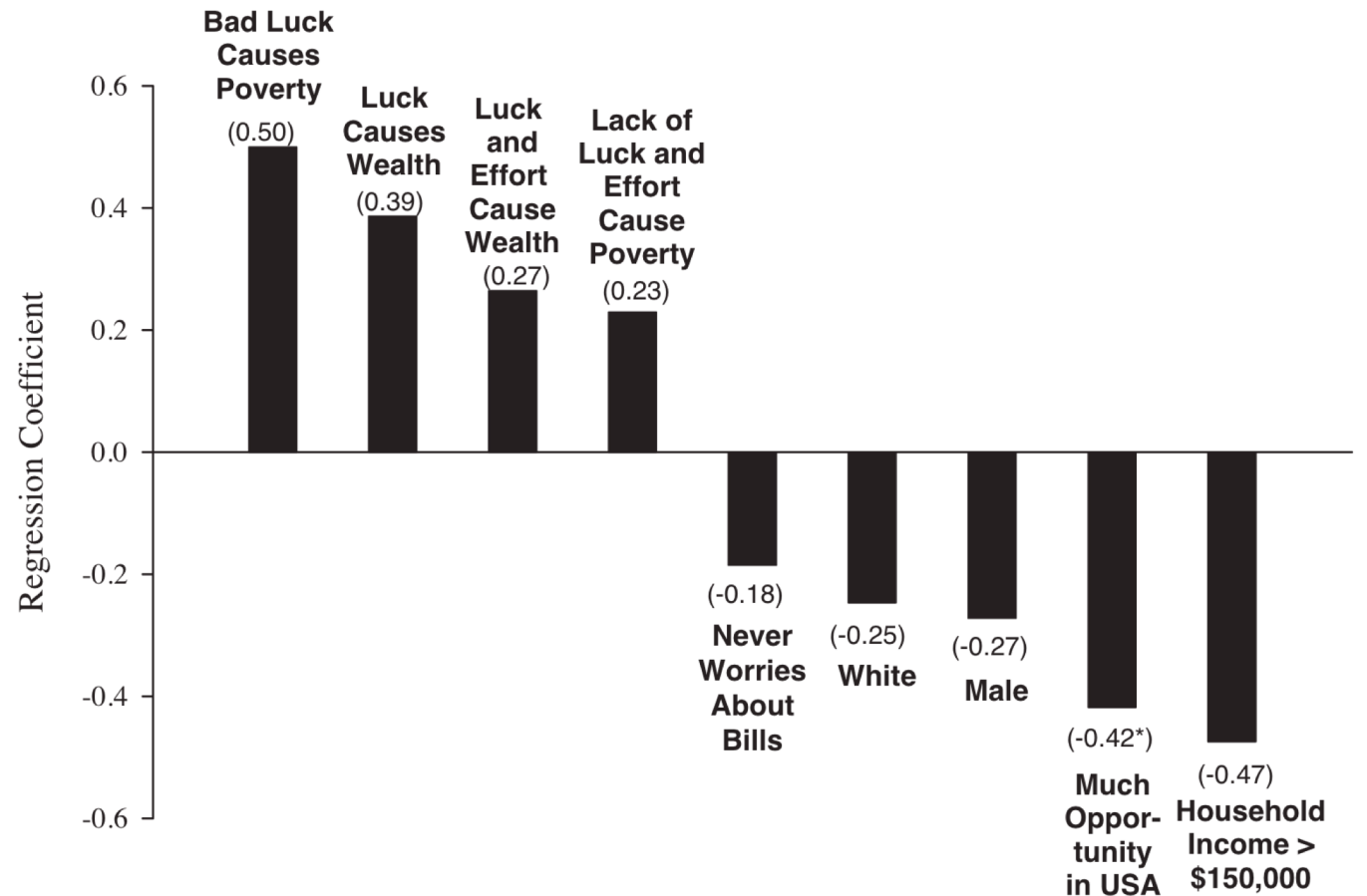
July 3, 2004

A man ought to be a friend to his friend and repay gift with gift.
People should meet smiles with smiles and lies with treachery.

The Edda, a 13th century collection of Norse epic verse.

1 Introduction

The modern welfare state is a remarkable human achievement. In the advanced economies, a substantial fraction of total income is regularly transferred from the better off to the less well off, and the governments that preside over these transfers are regularly endorsed by publics (Atkinson 1999). The modern welfare state is thus the most significant case in human history of a voluntary egalitarian redistribution of income among total strangers. What accounts for its popular support?



WHAT COUNTS AS FAIR?

Substantive fairness

What the allocation looks like

Procedural fairness

How the allocation got there

Veil of ignorance fairness



**Is international
trade efficient?**



**Is international
trade just/fair?**