Political Economy of Redistribution

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Outline

A simple model of preferences for redistribution

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  - Individuals differ along primitive characteristic (productivity) $\rightarrow$ pre-tax income

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  - Key assumptions:
    - pre-tax income exogenous $\rightarrow$ fiscal policy serves only to redistribute
    - no deadweight loss from taxation; no benefits from public spending/public goods

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  - individual's tax bill is linear function of income: τy_i
- Redistribution
  - government redistributes tax revenue equally per capita
  - The tax revenue per person will be equal to $\tau\bar{y}$, that is, the tax rate times the average income

Preferences

- Individuals' utility is given by post-tax-and-transfer income:

$$V(\tau; y_i) = (1 - \tau)y_i + \tau\bar{y}$$

$$= y_i + \tau(\bar{y} - y_i)$$

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- What is individual i's preferred tax and spend policy?
  - tax rate $\tau \in [0, 1]$ that solves

$$\max_{\tau} y_i + \tau(\bar{y} - y_i)$$

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- What tax rate would be preferred by the majority?

Finding the Majority-Winning Tax

- Let's order the N individuals by their pre-tax income:

$$y_1 < y_2 < \cdots < y_{med} < \ldots < y_{N-1} < y_N$$

  - assume N is odd, so there is a single median voter, given by y_{med}, which is $y_{(N+1)/2}$ in the ordering.

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- Consider the individual with the median income in society, y_{med}:
  - Significance: half of society ($\frac{N-1}{2}$) has income below y_{med} , half ($\frac{N-1}{2}$) has income above y_{med} (ignore case of $y_{med} = \bar{y}$.)

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  - If $y_{med} > \bar{y}$ (median income greater than mean income), median voter prefers $\tau^* = 0$ and so do at least half of voters.

Median Voter Theorem

- Theorem: the tax rate preferred by the median voter will also defeat any other tax rate in a pair-wise majority vote.
  - This result generalizes to much more general utility functions
    - All that is required is "single-peaked" preferences, which makes sense for taxes and redistribution

Model Predictions

- If $y_{med} < \bar{y}$, full redistribution
- If $y_{med} > \bar{y}$, no redistribution
- Pressures for redistribution should be proportional to $\bar{y} - y_{med}$

Outline

Meltzer-Richards Model of Taxation

- New assumptions:
  - Government is wasteful, and loses a fraction $\frac{c\tau^2}{2}$ of collected income
  - Each person gets back $T = \frac{(\tau - \frac{c\tau^2}{2})}{N} \sum_{i=1}^{N} y_i$.

Meltzer-Richards Model

- Voter's preferred tax rate solves:

$$\max_{\tau} (1-\tau)y_i + (\tau - \frac{c\tau^2}{2})\overline{y} \tag{1}$$

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    - If above mean, still want $\tau = 0$.
    - People with $y_i \leq (1-c)\bar{y}$ still want full redistribution ($\tau = 1$)

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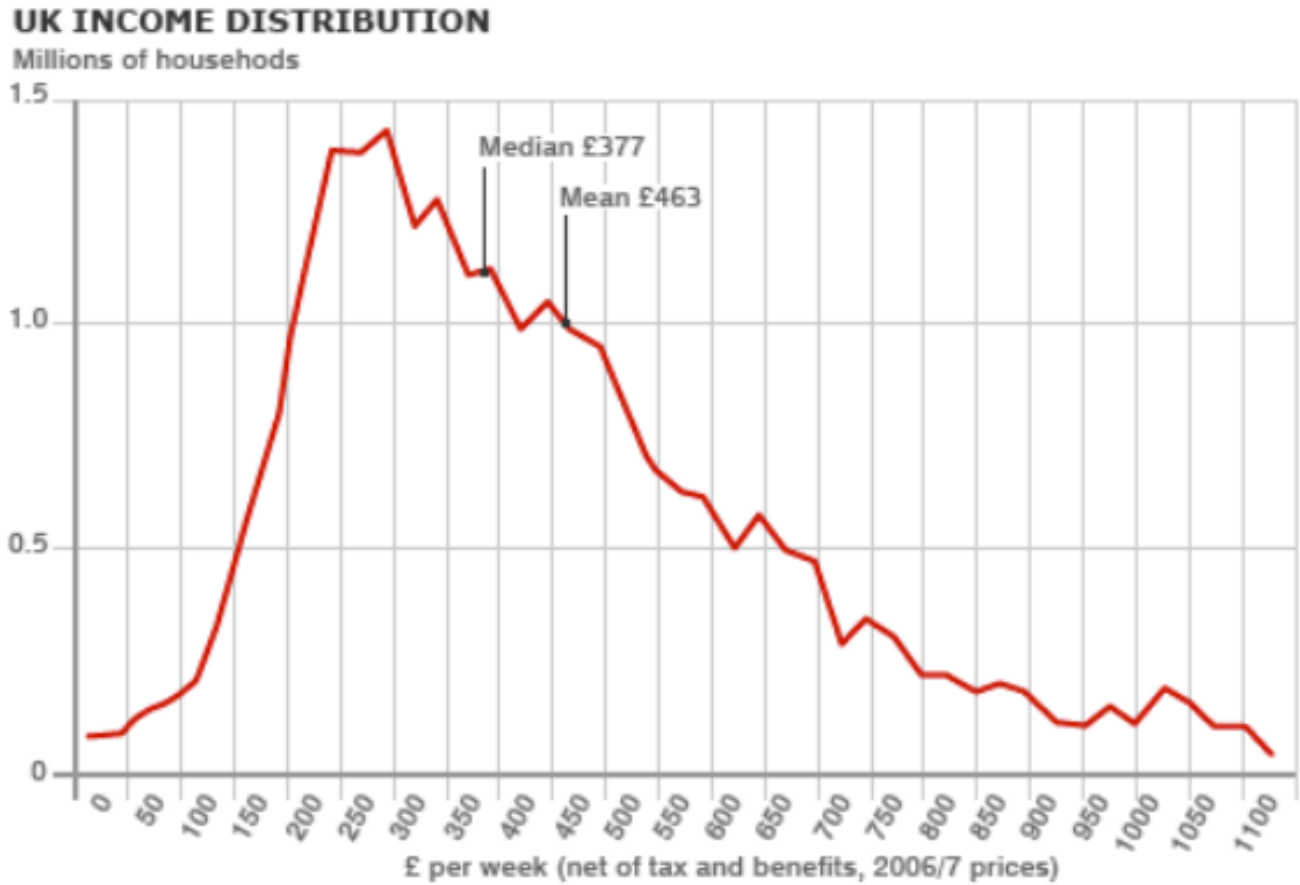
    - If above mean, still want $\tau = 0$.
    - People with $y_i \leq (1-c)\bar{y}$ still want full redistribution ($\tau = 1$)
- Median voter sets policy τ.
  - If median is far below the mean, then taxes will be high.
  - But the tax decreases with government wastefulness ($\frac{d\tau^*(y_i)}{dc} < 0$)

Outline

U.K. Income Distribution



Empirically, income distributions tends to have mean $y >$ median y

Median voter hypothesis (Milanovic 2000)

- Test two hypothesis emerging from our model:
  - When pre-tax income share of below average pre-tax income earners falls, more redistribution
  - Redistribution should reflect preferences of median voter

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- Data from Luxembourg Income Study
  - 24 countries (mostly, uninterrupted democracies)
  - up to 1999
  - anonymous data on demographics, income, expenditure
  - collected in waves: here, 79 country observations

Empirical Strategy

- The idea:
  - (1) Group individuals into pre-tax deciles
  - (2) Look at bottom five deciles' shares of pre-tax income
  - (3) Look at bottom five deciles' shares of post-tax income
  - (4) Calculate the gain for each country observation

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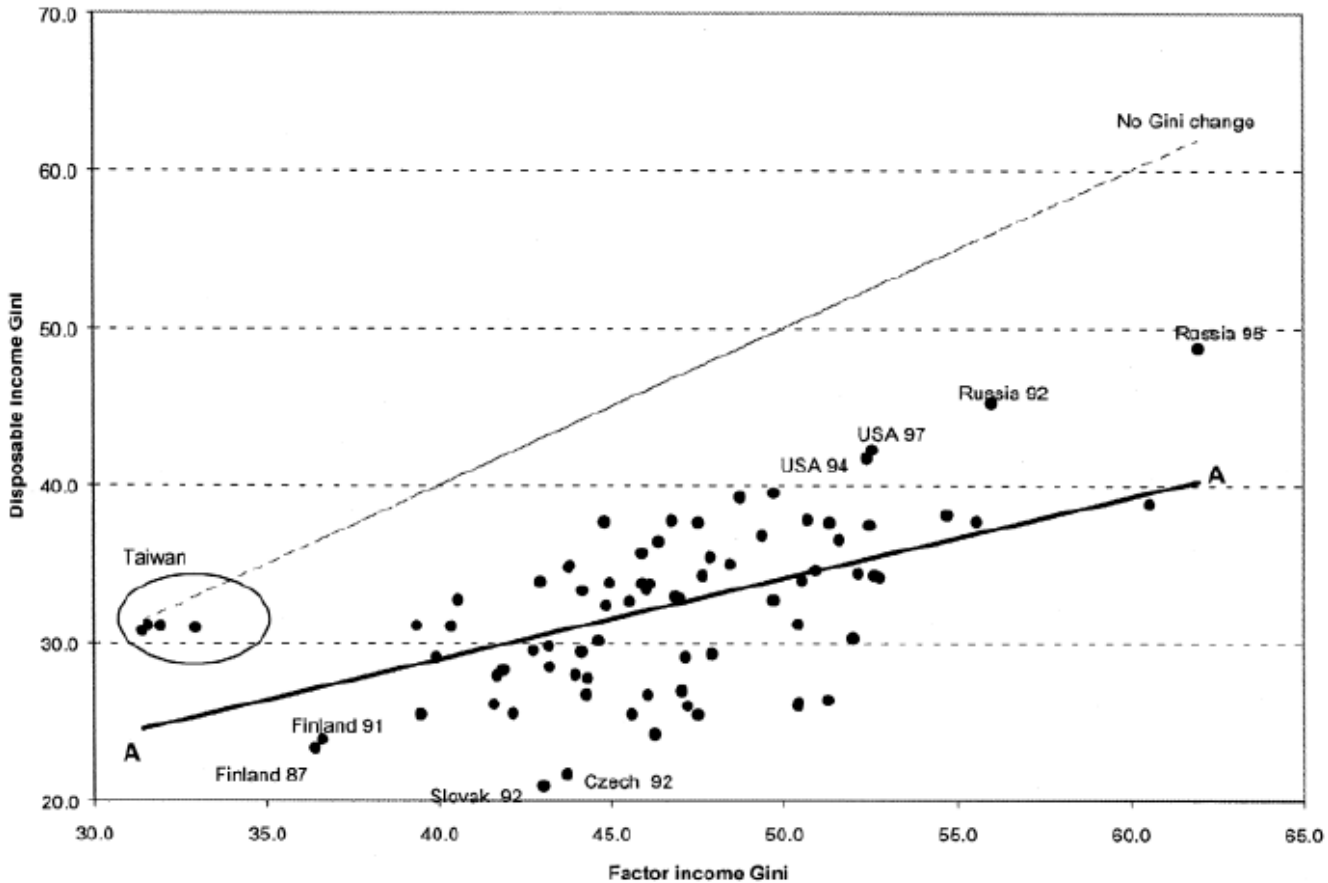
  - (3) Look at bottom five deciles' shares of post-tax income
  - (4) Calculate the gain for each country observation
- The working hypothesis:
  - Higher inequality $\rightarrow$ higher gains from redistribution for five lowest income deciles

Gini, pre and post redistribution



Post-redistribution income is more equal than pre-redistribution income.

Median voter hypothesis

- Next, test the Median Voter Hypothesis
- Look at how much middle class (5th and 6th deciles) gain as function of:
  - Income share of the middle class (median voter): A higher income share should lead to less pressure for redistribution $\rightarrow$ lower gain (negative sign in regression)

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  - Income share of the middle class (median voter): A higher income share should lead to less pressure for redistribution $\rightarrow$ lower gain (negative sign in regression)
  - Ratio of mean income to middle income: A higher ratio should lead to more pressure for redistribution $\rightarrow$ higher gain (positive sign in regression)

Results

Middle class gain as function of initial position of the median voter

Independent variables	Using factor income	
	All sample	Established democracies
	(1)	(2)
	Sharegain5060	*Sharegain5060*
(1) Middle class share (*share5060MM*)	−0.443 (−5.08)	−0.417 (−3.76)
Age over 65 (%)	0.081 (0.59)	0.094 (0.67)
Constant	11.14 (2.51)	9.78 (1.83)
R^2 (F)	0.09 (15.4)	0.13 (8.3)
(2) Mean-to-median ratio	12.94 (4.66)	13.01 (3.59)
Age over 65 (%)	0.093 (0.66)	0.101 (0.7)
Constant	−23.05 (−6.88)	−23.32 (−5.3)
R^2 (F)	0.08 (13.4)	0.13 (7.7)
Number of observations	79	67

- Higher middle-class (median-voter) income share, leads to less redistribution to middle-class.
- Higher mean to median ratio increases redistribution to middle class.

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Other possible determinants of preferences for redistribution

- Preferences may depend not only on current income, but also on (expected) future income (Benabout and Ok 2001).
  - Lower-income individuals may expect that they, or their children, could move up the income distribution in the future, & be hurt by redistributive policies

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- Preferences may depend not only on current income, but also on (expected) future income (Benabout and Ok 2001).
  - Lower-income individuals may expect that they, or their children, could move up the income distribution in the future, & be hurt by redistributive policies
  - So social mobility (or beliefs about it) may affect demand for redistribution

Alesina and La Ferrera (2005)

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  - Does social mobility reduce support for redistribution?
  - Do (un)equal opportunities affect demand for redistribution?

Data: Attitudes Toward Redistribution

- General Social Survey (GSS), 1973-1994
- Dependent variable, agreement with:
  - "Some people think that the government in Washington ought to reduce the income differences between the rich and the poor, perhaps by raising the taxes of wealthy families or by giving income assistance to the poor. Others think that the government should not concern itself with reducing this income difference."
- 7=should, 1=should not

Data: Personal Experience and Attitude about Mobility

- History of personal mobility
  - Whether occupational prestige score is greater than father's
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- History of personal mobility
  - Whether occupational prestige score is greater than father's
  - Years of education minus father's years of education
- Subjective future mobility:
  - "The way things are in America, people like me and my family have a good chance of improving our standard of living - do you agree or disagree?"
    - 1=strongly agree; 5=strongly disagree

Data: Objective Local Measures of Mobility

- Panel Study of Income Dynamics (PSID), 1968-1993
  - By state: annual taxable income for individuals aged 21-59

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  - By state: annual taxable income for individuals aged 21-59
- Measuring "objective" social mobility:
  - conditional probability of moving up in distribution conditional on current quantile.

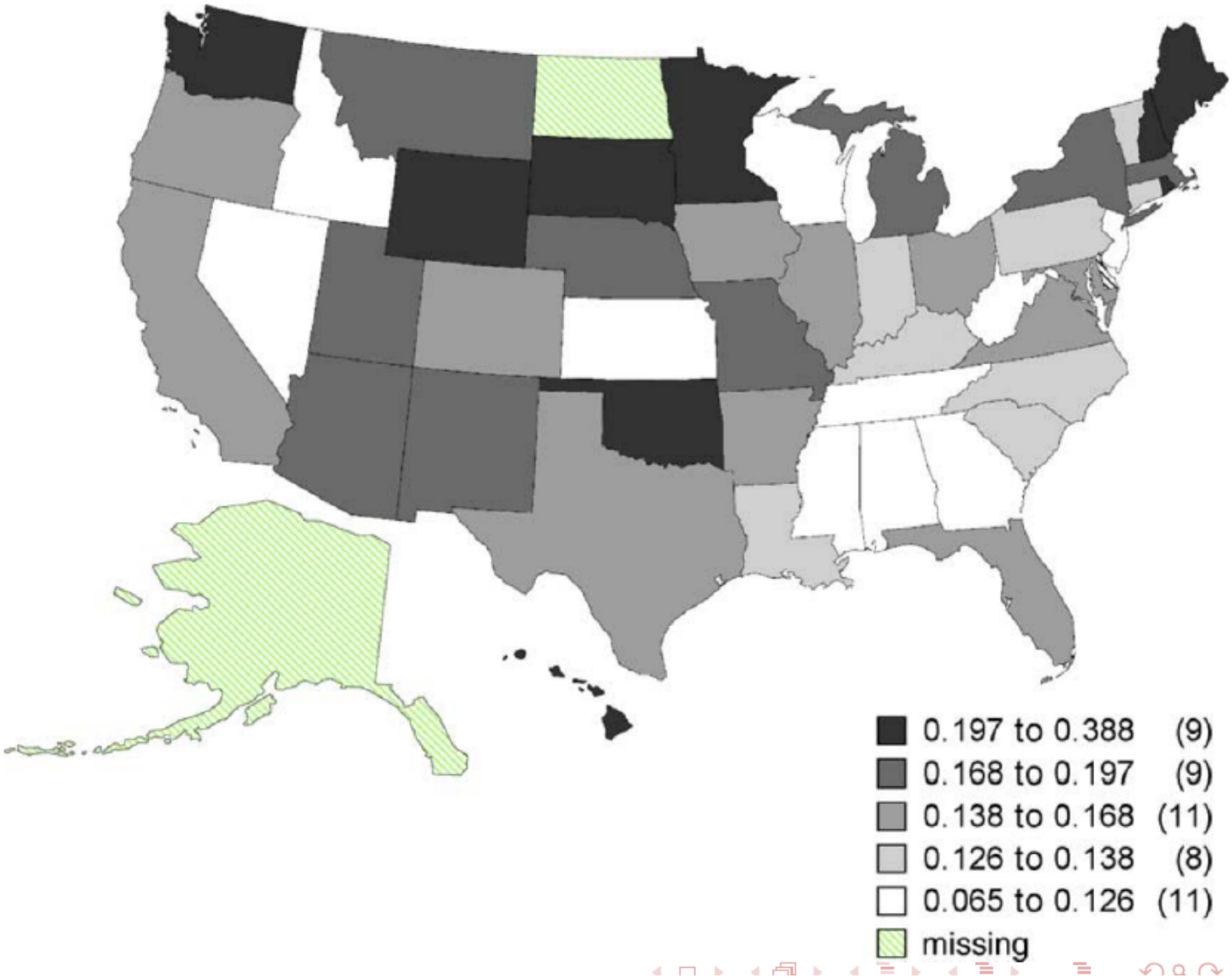
Income Transition Matrix

Transition matrix for US (t, t+5), average 1972–1987

Deciles	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
1st	47.54	23.66	11.67	5.89	3.76	2.71	1.90	1.30	1.03	0.53
2nd	21.58	30.52	20.52	10.24	6.47	4.37	2.53	1.95	1.25	0.57
3rd	10.97	18.55	26.25	17.43	10.60	6.65	4.23	2.67	1.75	0.90
4th	6.39	9.13	17.48	22.55	17.30	11.27	6.94	4.53	2.84	1.57
5th	4.77	6.00	9.25	17.55	22.10	16.77	10.68	6.69	3.91	2.29
6th	3.51	3.80	5.93	9.50	17.14	21.29	17.37	11.49	6.81	3.16
7th	2.92	2.21	4.23	6.77	10.87	17.25	22.13	17.92	10.84	4.86
8th	2.21	1.88	2.61	4.52	5.75	11.06	19.28	24.06	19.38	9.23
9th	1.71	1.36	1.79	2.29	3.71	6.14	10.75	19.72	32.42	20.12
10th	1.17	1.03	1.08	1.52	2.08	2.93	4.69	8.80	19.91	56.79

- Using these probabilities, construct expected income measures for each decile and objectively assess future mobility.
- Combine with survey questions about support for redistribution to test "prospect of upward mobility" effect.

Mobility Varies Across States



Regression: Effects on Preference for redistribution

ln(real income)	−0.089**	−0.050**
	(0.024)	(0.024)
Self-employed	−0.201**	−0.191**
	(0.042)	(0.041)
Unemployed	0.153**	0.154**
last 5 years	(0.026)	(0.027)
Prestige>father's	−0.044*	−0.046**
	(0.023)	(0.023)
Education—	0.018**	0.018**
father's	(0.003)	(0.003)
Prob(7–10	−0.219**	
decile)	(0.023)	
Expected [a]		−0.004**
income		(0.001)
No. obs.	7537	7537
$R^2_{M\&Z}$	0.11	0.11

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Effort vs. Luck – Piketty (1995)

- Another cultural factor is the belief in effort vs luck as determinant of success
  - People get private information about importance of effort from family

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  - People get private information about importance of effort from family
- In the long run, two groups:
  - those who believe in luck and those who believe in effort

Inter-generational mobility and redistributive voting

PERCENTAGE OF VOTES FOR LEFT-WING PARTIES AS A FUNCTION OF INDIVIDUAL MOBILITY EXPERIENCE

		Respondent's income	
		Low income	High income
Parents income	Low income	72%	38%
	High income	49%	24%

EU / US differences - Alesina and Glaeser (2004)

- Main point:
  - Belief that effort determines income $\rightarrow$ low redistribution, low taxes, high effort (e.g., U.S. society)

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  - Belief that effort determines income $\rightarrow$ low redistribution, low taxes, high effort (e.g., U.S. society)
  - Belief that luck determines income $\rightarrow$ high redistribution, high taxes, low effort (e.g., Europe or Latin America)

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- EU vs. US beliefs:
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  - 60% of Europeans believe poor are trapped in poverty
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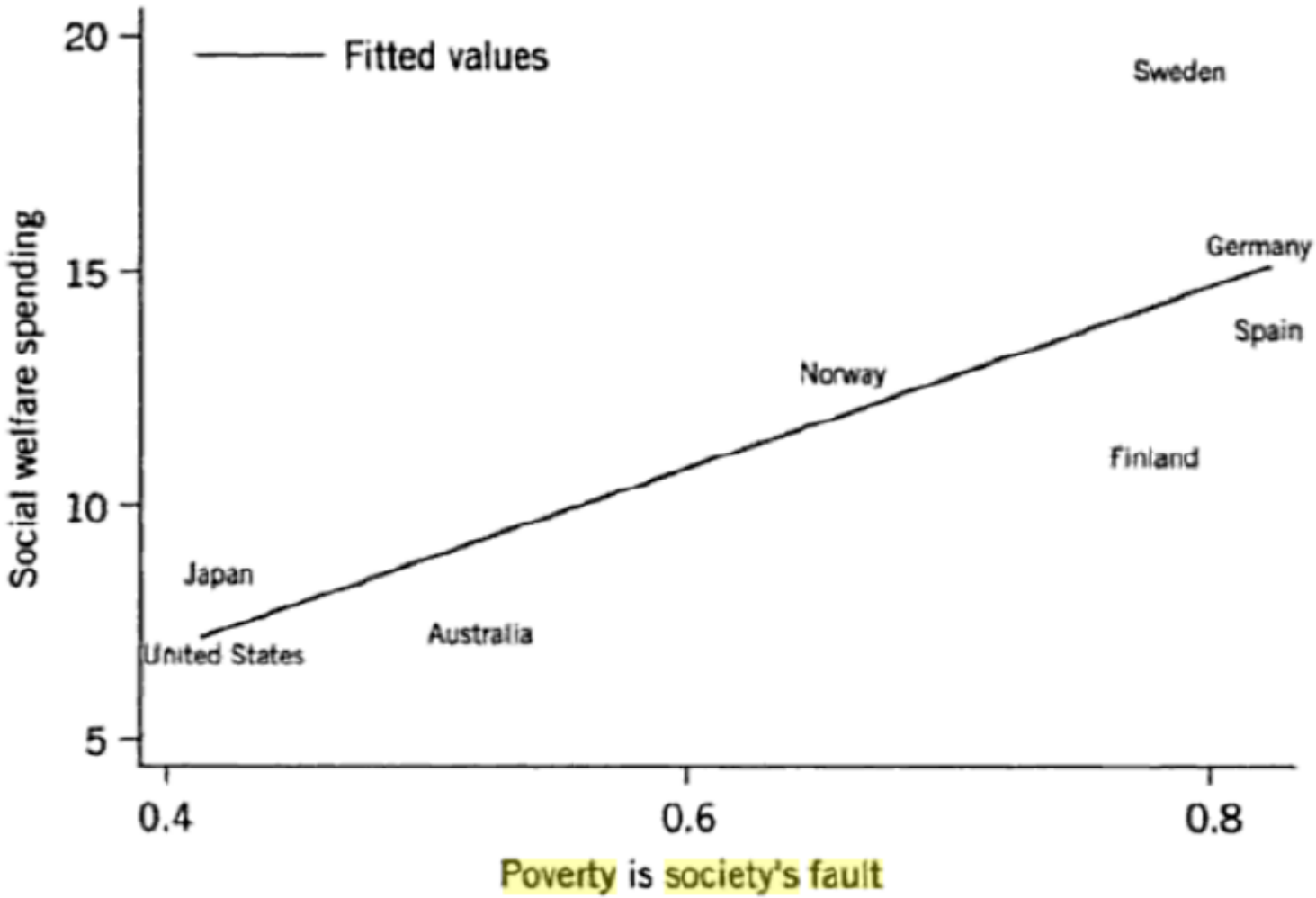
  - 26% of Europeans believe poor are lazy
    - vs 60% of Americans

Attitudes toward poor and redistribution



Source: Alesina and Glaeser (2004)

"Does everyone in the U.S. have the opportunity to succeed, most, or only some?"

	Everyone	*Most*	*Only some*
Total sample	28.8%	47.9%	22.3%
Family income			
Under $50,000	26.4%	44.3%	27.9%
$50,000–$99,999	28.8%	50.5%	20.2%
$100,000 plus	23.1%	58.5%	15.4%
Party identification			
Democrat	17.9%	49.0%	33.2%
Independent	18.3%	56.5%	23.5%
Republican	42.8%	47.3%	8.5%

Source: 2004 Maxwell Poll on Civic Engagement and Inequality.

The Great Gatsby Curve (Corak 2013)