

Social Norms and Inequality



Winter School on Inequality and Social Welfare Theory

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What are social norms?

- There is not an easy answer.
 - Google generates about 5 millions results.
 - Large variation in definitions and use.
 - Usually employed to describe or explain:
- Systematic differences in behavior across social groups that do not have obvious economic explanation.

Why social norms?

- Decisions related to saving, education, childcare, women's work, as well as redistributive policies

exhibit large differences across space and time

- that cannot be explained solely by economic and institutional factors.
- crucial role of social norms for economics.

Social norms and standard economic theory

- Standard economic theory abstracts from social norms.
- Explain variation in economic outcomes with differences in policies, institutions and technologies.
- Preferences and beliefs are homogeneous, exogenous and constant over time.
- *Explaining differences in behaviors as the results of differences in preferences does not help our understanding.*

Including social norms in economic theory

- Inclusion of social norms useful if two conditions are met:
 - ▣ **Empirical relevance:**
evidence that social norms have an effect on economic decisions that goes beyond that of markets and institutions.
 - ▣ **Theory of social norms:**
consistent with empirical evidence: what they are, where they come from and how they evolve.

Without such a theory, their role residual and tautologic.

Roadmap

- Economic decisions for which social norms matters
 - ▣ *Fernandez and Fogli, AEJ (2007), Luttmer and Singhal (2011)*

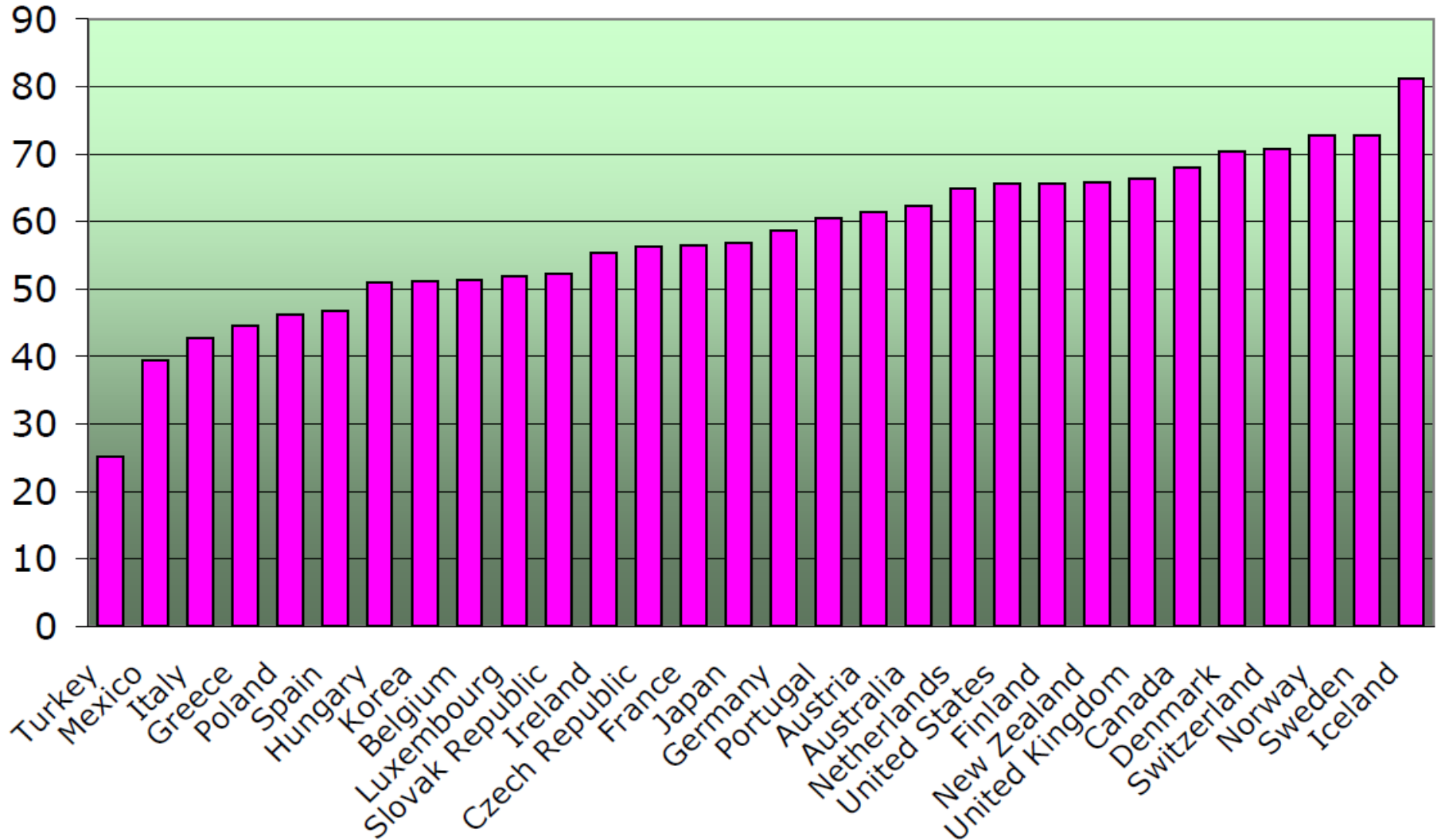
- How to model social norms
 - ▣ Learning: *Fogli and Veldkamp, Econometrica (2011), Picketty, QJE (1995).*
 - ▣ Multiple equilibria: *Alesina and Angeletos, AER (2005), Coles, Mailath and Postlewaite, JPE (1992).*

First question

For which economic decisions do social norms matter?

- Women's decision to work
- Redistributive policies

Female LFP 2003



Large variation across time and space

Existing theories:

- Market prices and technological factors
 - ▣ Wage gap, consumer durables, pill

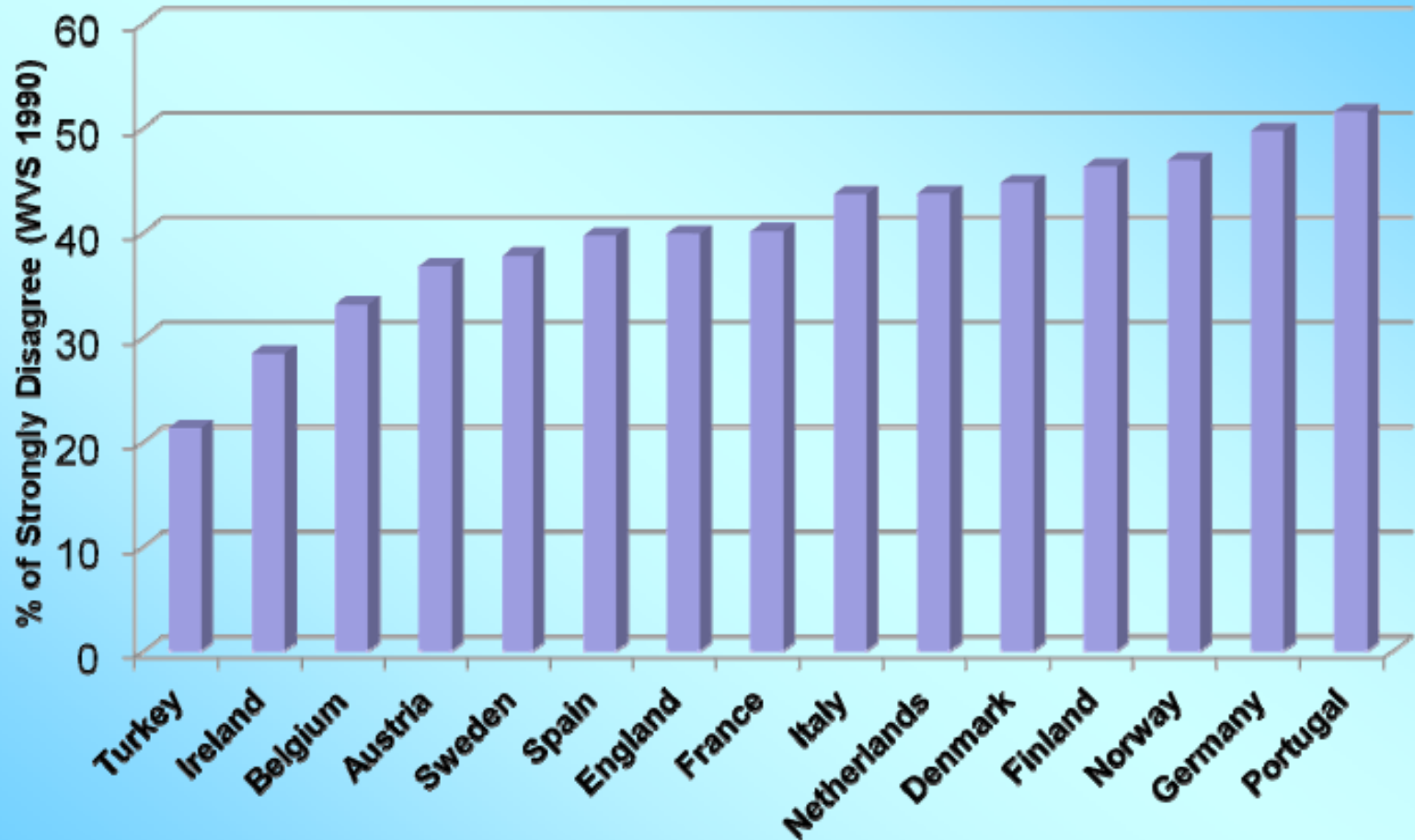
- Policies and institutions.
 - ▣ Labor market policies, childcare

All abstract from culture

- Social norms, i.e. preferences, beliefs and expectations regarding women's role, may be an important factor explaining variation.

Approvazione sociale nel mondo (1990)

Being a Housewife is as Fulfilling as Working for Pay



Fernandez and Fogli (AEJ 2007)

- How to identify the role of social norms in the data
- Epidemiological approach: focus on individuals that share same markets and institutions but differ in their culture:

US born women with foreign born parents

- Key element:
As long as culture is transmitted from parents to children we can isolate the effect of different cultural heritages.

Baseline Analysis

$$x_{isk} = \beta_0 + \beta_1' Z_i + \beta_2 X_{kt-1} + f_s + \varepsilon_{isk}$$

x_{isk} = Number of weeks worked in previous year by:
individual i , from cultural heritage k , residing in area SMA

X_{kt-1} = Cultural proxy variable: LFP in country j at $t-20$

Dataset and Sample Selection

Main data sets: US Census 1970 and ILO 1950

- ❑ We use father's birthplace as ancestry.
- ❑ Married women 30-40, born in US: 87,305.
- ❑ Subtract those with US-born father (~ 89%)
- ❑ Exclude USSR and 10 European countries who became centrally-planned around WWII.

Final sample: 6774 women and 25 countries

Culture and Work

Female	0.066**	0.049*	0.093**
LFP 1950	(0.024)	(0.024)	(0.028)
High School		1.598*	3.783**
		(0.676)	(0.677)
Some College		-0.171	4.189**
		(1.183)	(1.172)
College +		2.132**	8.909**
		(0.824)	(0.881)
Husband			-2.530**
High School			(0.901)
Husband			-1.647+
Some College			(0.894)
Husband			-6.281**
College +			(0.750)
Husband			-4.067**
Total Income			(0.368)
Obs.	6774	6774	6774
Adj. R-sq	0.013	0.020	0.052

Large effect on work and fertility

- Increase in LFP 1950 by 1 std dev. associated with 7.5% increase in weekly hours
- Increase in TFR 1950 by 1 std dev. associated with an increase of 0.40 children.

Potential Problems

- Are we truly picking up differences in attitudes or is there some other variable which is correlated with LFP in 1950 and is driving the results?

Two main sources of concern:

- Unobserved human capital
- Networks

Robustness

- ❑ Parental education
- ❑ Ethnic human capital: 1940 and 1970 avg. educ. of immigrant group (Census)
- ❑ Quality of education (Hanushek and Kimko, 2000)
- ❑ Mincer wage regressions

Other results

- Expanded sample to men, using criteria as for women
 - ▣ Culture not significant for men's work behavior
 - ▣ Culture significant in explaining family size

- His culture or hers?
 - ▣ When culture is different, men's more important for work, both for fertility

- Networks
 - ▣ When living in ethnically dense neighborhood, larger effect of culture

Social norms and redistribution

- Why less redistribution of income from rich to poor in US than in Europe? (Alesina 2001, Alesina and Glaser 2004).
- Size and composition of government spending
- Taxation
- Labor market regulation

Government spending

Table 1. Composition of General Government Expenditure, 1999^a
Percent of GDP

<i>Country</i>	<i>Total</i>	<i>Consumption</i>		<i>Subsidies</i>	<i>Transfers and other social benefits^b</i>	<i>Gross investment</i>
		<i>Goods and services</i>	<i>Wages and salaries</i>			
United States ^c	35.5	5.2	9.2	0.2	11.0	3.1
European Union ^d	47.9	8.4	12.0	1.5	18.1	2.8
France	51.0	10.0	13.7	1.3	20.1	3.0
Germany	47.4	10.7	8.3	1.7	20.5	1.8
Sweden	60.2	10.3	16.7	2.0	21.1	2.5
United Kingdom	38.3	11.0	7.4	0.6	15.7	1.0

Source: *OECD Economic Outlook*, no. 68, 2000 (see appendix B for details).

a. Details may not sum to totals because of excluded categories.

b. Includes social security.

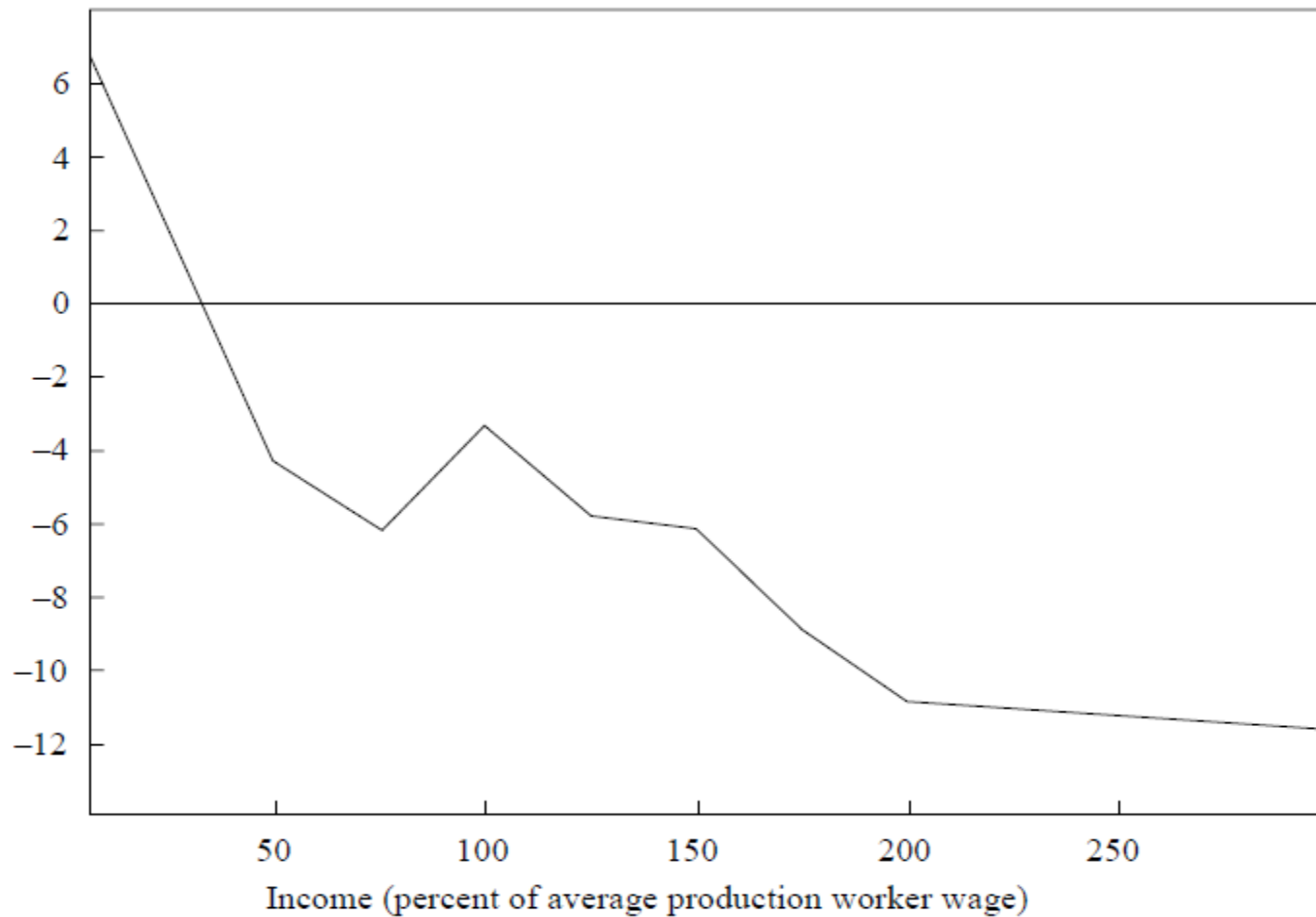
c. Data are for 1998.

d. Simple average for fourteen EU countries (excludes Luxembourg).

Taxation

Figure 1. Difference between U.S. and EU Marginal Income Tax Rates, 1999–2000^a

Percentage points



Labor market regulation

Table 3

Labor markets in the US and in Europe

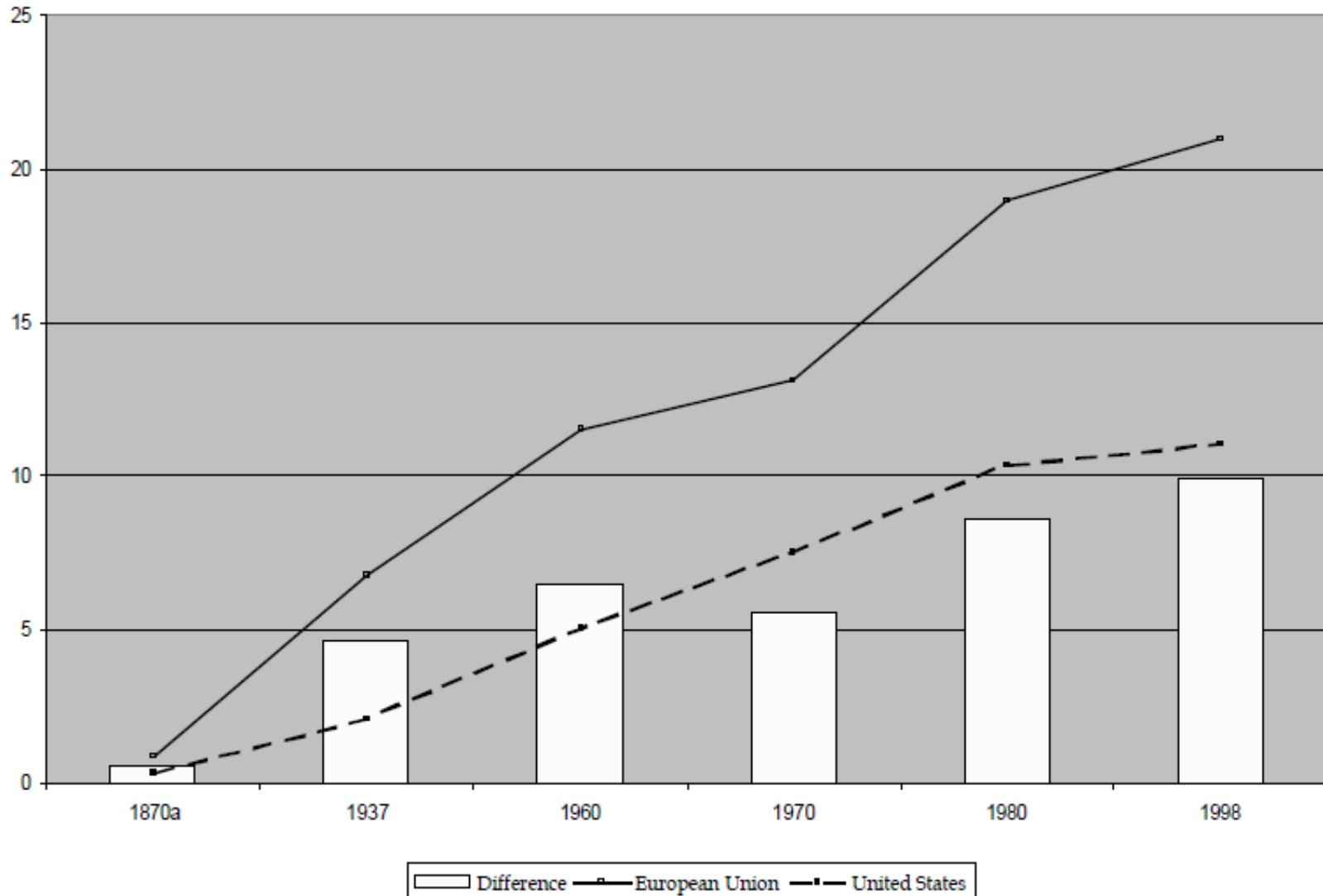
	Labor standards 1985-93	Employment Protection 1990	Minimum annual leave (weeks) 1992	Benefit replacement ratio (%) 1989-94	Benefit duration (years) 1989-94
France	6	14	5	57	3
Germany	6	15	3	63	4
Sweden	7	13	5	80	1.2
UK	0	7	0	38	4
European Union (1)	4.8	13.5	3.8	58.7	2.6
US	0	1	0	50	0.5

Source: Nickell and Layard (1999) and Nickell (1997)

1. Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Portugal, Spain, Sweden and UK.

Differences grow over time

(expenditures on transfers and subsidies %)



Why Europe redistribute more?

- Economic explanations:
 - ▣ More pre-tax inequality
 - ▣ More variability of income due to openness
 - ▣ Tax system is more efficient

all go in the wrong direction

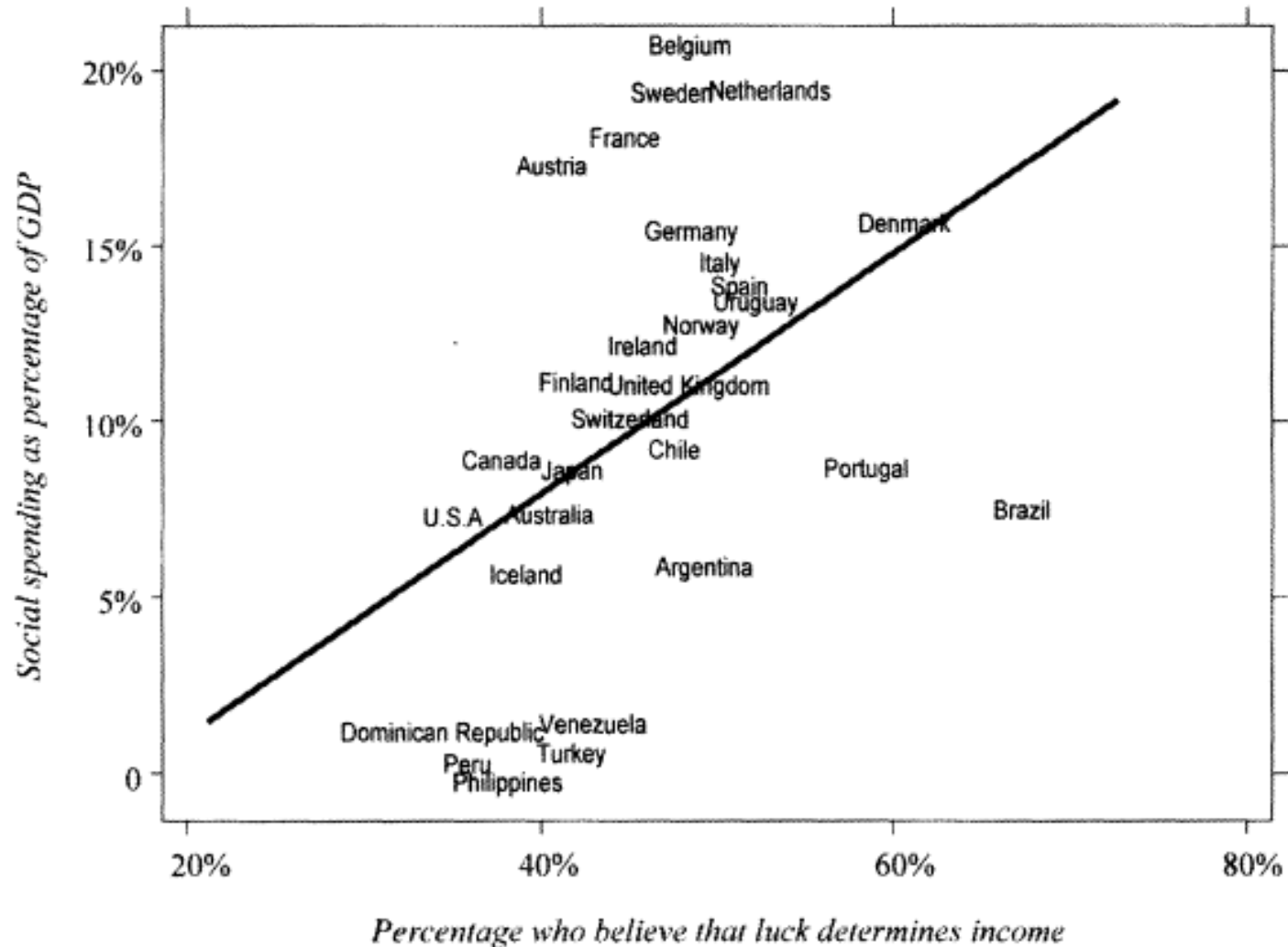
Redistribution and social norms

- Beliefs about the nature of poverty and income mobility are extremely different in US and in Europe.
- They do correlate, and possibly cause, low levels of redistribution in US.

Beliefs from World Value Survey

Belief	United States	Europe
Are the poor trapped in poverty?	29 %	60%
Does luck determine income?	30%	54%
Are the poor lazy?	60%	26%

Beliefs and redistribution

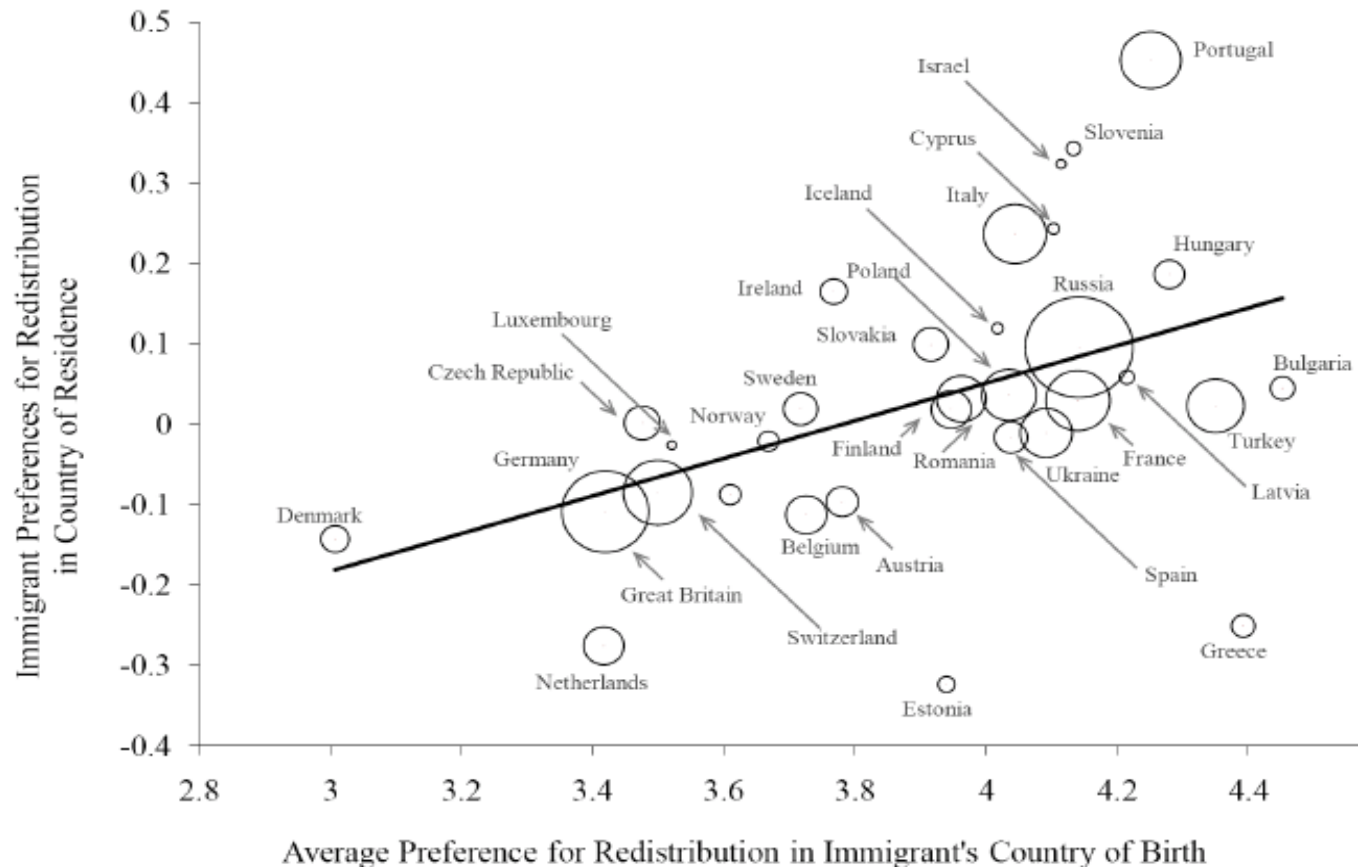


Can we establish causation?

- Luttmer and Singhal (2011) examine the determinants of preferences for redistribution among immigrants across 32 countries.
- Immigrants born in a country with a high preference for redistribution tend to have higher preferences for redistribution than the natives of the countries in which they reside.
- This relationship is verified in the regression analyses, where they include country of residence dummies and rich controls for economic and demographic characteristics

Preferences for redistribution

Figure 1: Immigrant Preferences for Redistribution by Preferences in Country of Birth



Note: Immigrant preference for redistribution in country of residence is measured in deviation from the mean preference of natives in the country of residence. It is then averaged over all countries in which immigrants from a given birth country currently reside. Thus, the country labels indicate countries of birth. The size of each circle is proportional to the number of immigrants from the indicated country in the ESS dataset. The regression line has a slope of 0.30 with a standard error of 0.08. The adjusted R^2 equals 0.38.

Second question

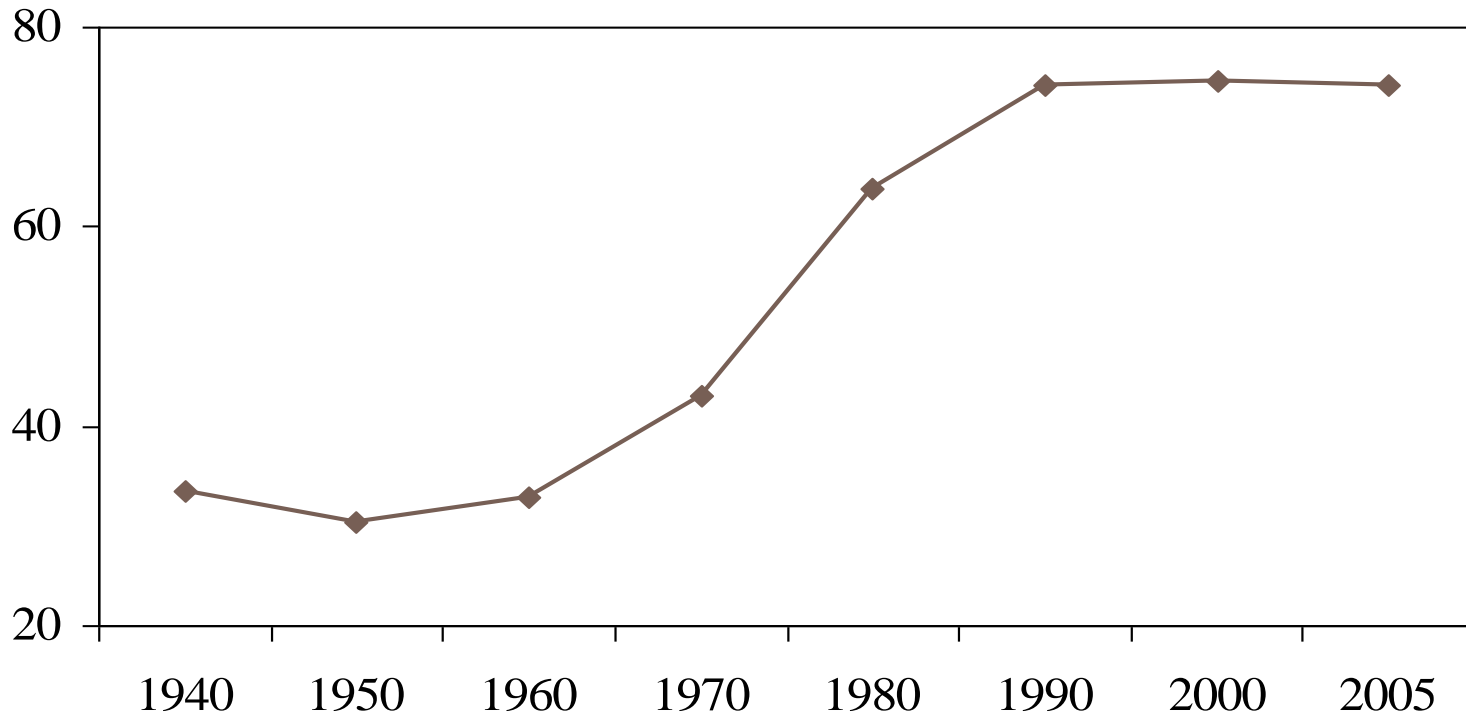
How to model social norms?

Three approaches

1. Differences in individual “deep preferences” (Alesina and Fuchs 2007 and Giuliano and Spilimbergo 2009).
2. Differences in beliefs about the consequence of actions undertaken under uncertainty.(Fogli e Veldkamp 2011 and Picketty 1995).
3. Coordination mechanisms in economies with multiple equilibria (Cole et al. 1992 and Alesina and Angeletos 2005).

Imply different dynamics of economic variables.

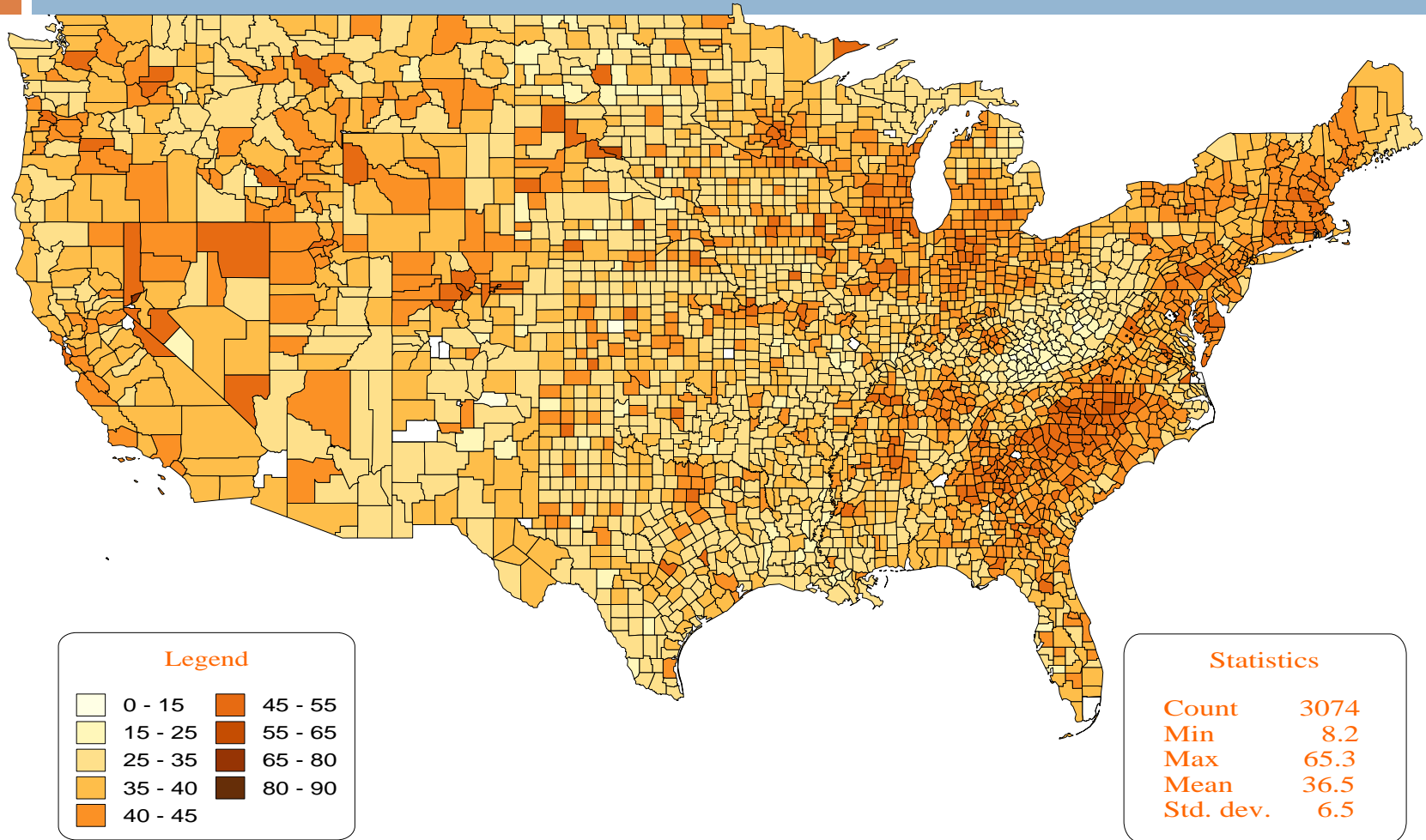
Learning and FLFP: Fogli Veldkamp 2011



Source: Census, 1% sample. White, 25-35, non-farm

S-shaped dynamics over time

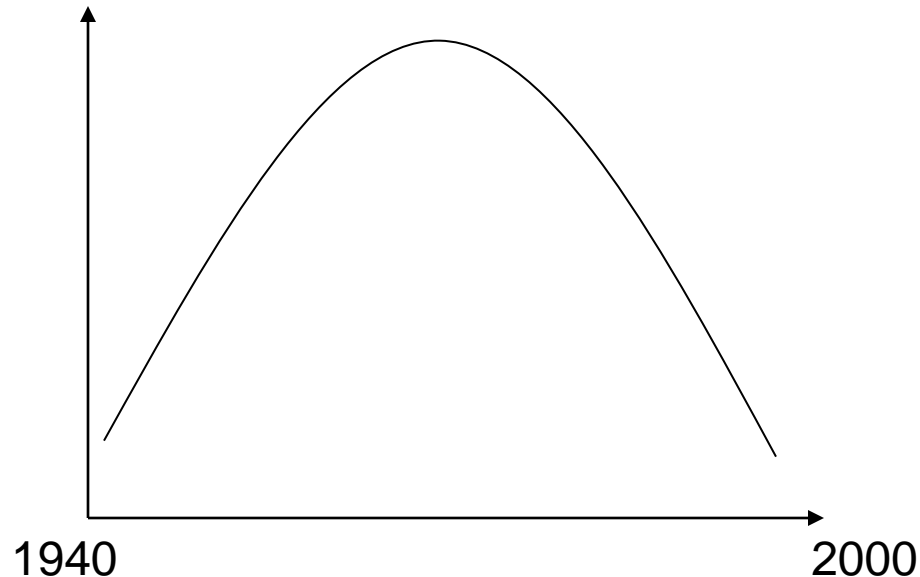
The Geography of Female LFP



- ▣ Participation rates across US counties in 1970
- ▣ Heterogeneity and spatial clustering

The Dynamics of Geography

- After controlling for local economic and demographic conditions, inverse U pattern over time for:
 - Standard deviation across locations
 - “Spatial Correlation”



A Geography Theory

- Theory in which local conditions matter for women decisions
 - can account for evolution of LFP both across time AND space
 - provides a more general framework to analyze the impact of large aggregate changes
- Why do local conditions matter?
 - Learning crucial element with a local dimension: women face uncertainty and learn from neighbors

Learning reduces uncertainty and increase LFP

A Geography Theory

- ▣ OLG economy. Preferences:

$$U = \frac{c_{it}^{1-\gamma}}{1-\gamma} + \beta \frac{w_{i,t+1}^{1-\gamma}}{1-\gamma}$$

- ▣ Budget constraint:

$$c_{it} = n_{it} w_{it} + \omega_{it} \quad n_{it} \in \{0, 1\}$$

- ▣ Nature or nurture trade-off: working has an unknown effect θ on child's outcome.

$$w_{i,t+1} = \exp(a_{i,t} - n_{i,t} \theta) \quad a_{i,t} \sim N(\mu_a, \sigma_a^2)$$

Learning about nurture (θ)

- Generation 0 has common, unbiased, priors with high uncertainty:

$$\theta_{i,0} \sim N(\mu_0, \sigma_0^2)$$

- Subsequent generations inherit priors from parents and update with J signals, using Bayes' law:

$$(w_{i,t}, n_{i,t-1}) \text{ and } (w_{j,t}, n_{j,t-1}) \text{ for } j \in J_i$$

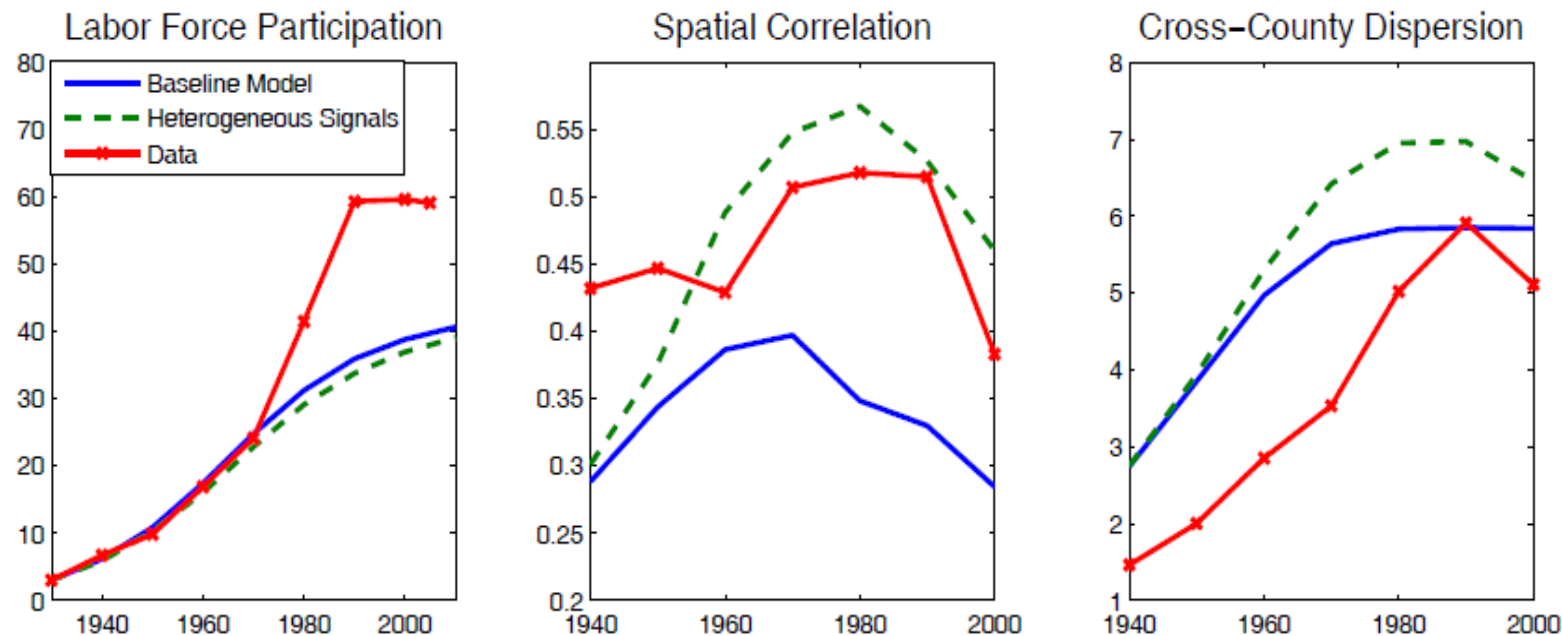
- Each woman has a location. Signals come from others within distance d .

$$w_{i,t+1} = \exp(a_{i,t} - n_{i,t}\theta)$$

How to Measure Information Flows?

- Initial w and ω distributions: from Census 1940
- Initial beliefs: $\mu_\theta = \theta$ (from micro studies, small cost)
 σ_θ to match aggregate LFP 1940
- No. of signals J : to match growth of aggregate LFP 1940
- Geography: initial LFP distribution from county data

Results: Model and Data



- ❑ Learning explains 2/3rds of the increase.
- ❑ Increasing dispersion and correlation from externality
- ❑ Decreasing because beliefs converge to the truth.

Conclusions

- Local learning can explain the geographic transition of female LFP in US.
- It complements existing theories by shaping the effects of aggregate shocks on LFP: responses are gradual and localized.
- Broader message: understand the diffusion of new behaviors with uncertain consequences among different social groups.

Learning and redistribution (Piketty, 1995)

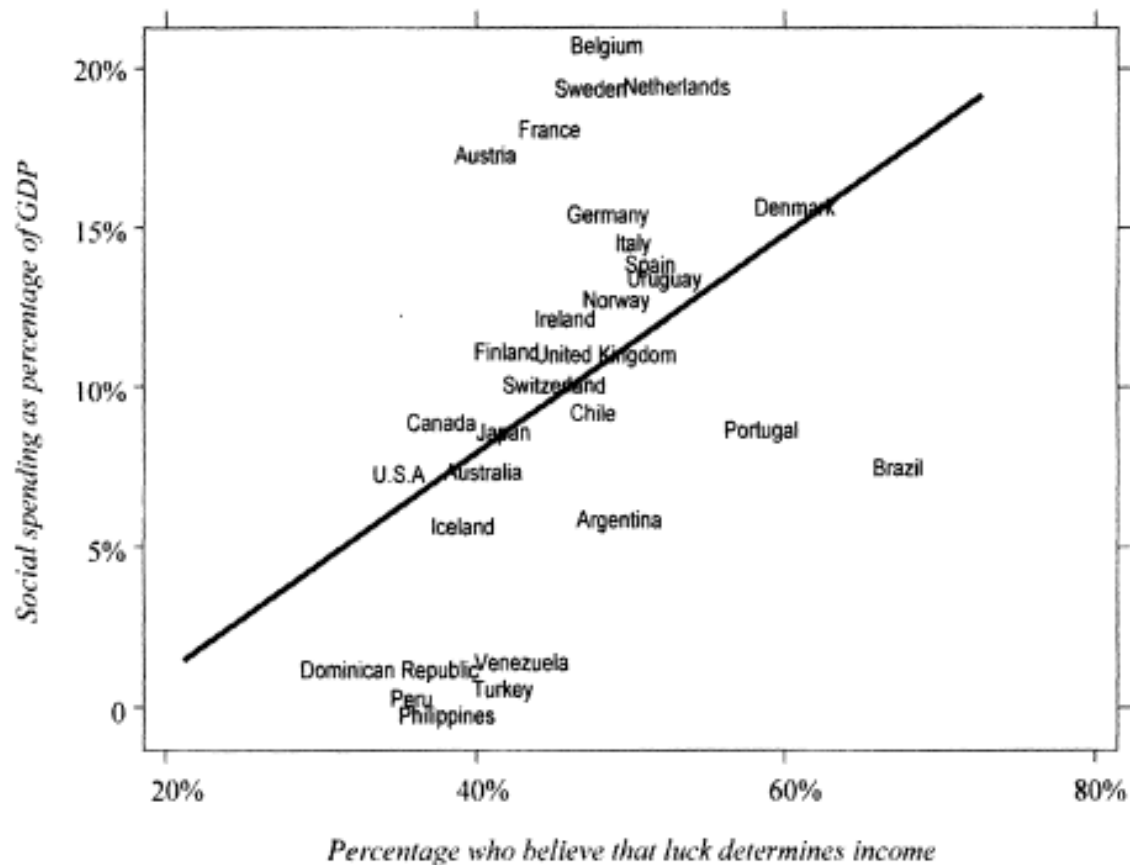
- Social norm is the distribution of beliefs about determinants of social mobility.
- Income depends on effort, on initial social conditions and luck but agents do not know the relative importance of these factors.
- Agents inherit priors from their parents and learn from personal experience, but experimentation is costly, hence learning can be very slow.
- Agents vote on redistributive policies using a common welfare function.

Main results from Piketty (1995)

- In the long run societies with identical “true” mobility structure can converge to equilibria with different social beliefs distributions (social norms) and different redistributive policies.
- Social norms are persistent and unrelated to fundamentals

Multiple equilibria: Alesina and Angeletos

- Us and Europe have different perceptions and outcomes on the desirability of redistribution despite similar fundamentals

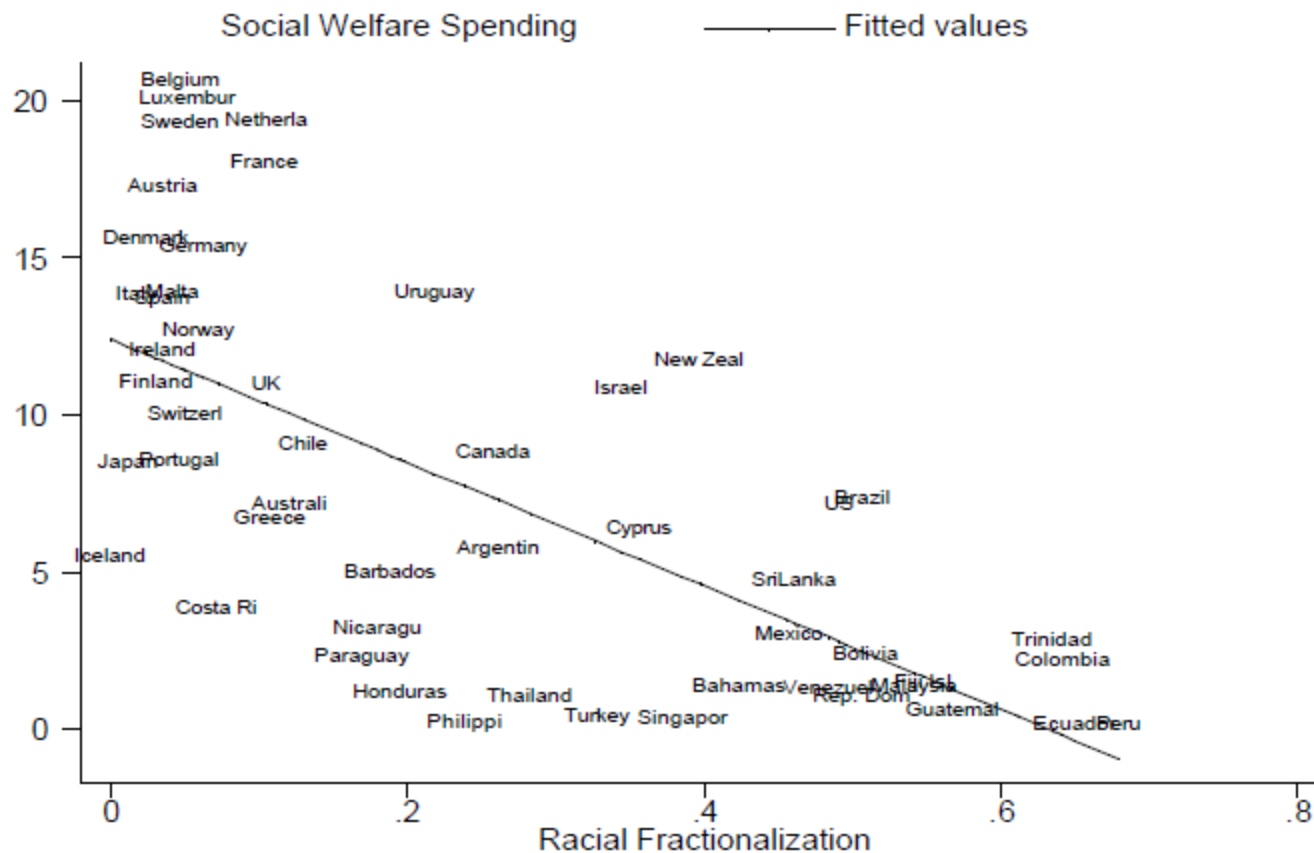


Main results: Alesina and Angeletos

- In EU, anticipation of high taxes induces agents to exert little effort. This, in turn, implies most heterogeneity in success due to luck, making ex post desirable for EU to under-take redistributive programs.
- In US anticipation of low taxes induces agents to work hard, and implying income heterogeneity in success is due to effort, making it socially fair for US to have little redistribution.
- Key ingredient: fairness is a public good

Why less redistribution in US?

Social Spending/GDP vs. Race Fractionalization



2. Multiple equilibria: Coles and al.

In the absence of a market, different social norms can emerge as alternative allocation mechanism.

- Cole et al. (1992): the absence of a marriage market makes it possible the emergence of multiple equilibria: one in which ranking is based on wealth and one in which it is based on birth..
- Reduced form preferences are different in the two economies even if economic and institutional factors and “deep preferences” are the same.
- Individuals living in identical economies make different saving choices because of the different social value of wealth in the two economies.