

# Income Inequality in Europe and America: Reassessment and Policy Implications

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## Motivation

- A common idea: European countries have less income inequality than the U.S.
- However, comparison of countries overlooks heterogeneity within an economic area.
- Yet, heterogeneity is key for policy:
  - The economics and politics of it.
- Policy needs to consider both.

- First time direct micro data evidence.
  - 1994 to 2012
  
- Comparing monetary unions: E.U. vs U.S.
  - Stages: Integration and euro
  - Challenges: Crisis and Eastern European countries accession
  - Redistribution: Market income vs Disposable income

# Outline

- 1 Data
- 2 Heterogeneously unequal
- 3 Redistribution?
- 4 Implications for policy making

# 1 Data

## **Europe**

European Union Household Panel (1994/2001) &  
Survey of Income and Living Conditions (2004/2012)

## **United States**

Panel of Study of Income Dynamics (1994/2011)

## **Household-level measures**

*Gross Income*: labor, capital, property, self-employed, and pensions.

*Disposable Income*: Gross income plus transfers minus taxes.

All measured in real terms, in euros or in dollars.

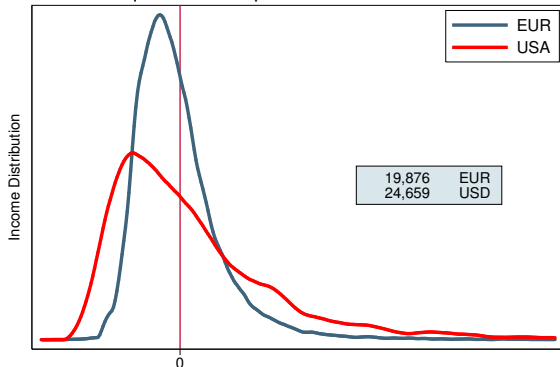
## Gini coefficient

- A measure of inequality
  - **0**: perfect equality
  - **1**: perfect inequality (one person has all the income)
- Possible interpretation:

Expected gains (*moving up in the income distribution*) expressed as a proportion of average income.

## E.U. vs U.S.

Equivalent Disposable Income, 2009



U.S. more unequal:

### Gini:

E.U. 0.32

U.S. 0.43

### Fatter tails:

90th/50th percentiles:

E.U. 2.17

U.S. 3.22

50th/10th percentiles:

E.U. 1.93

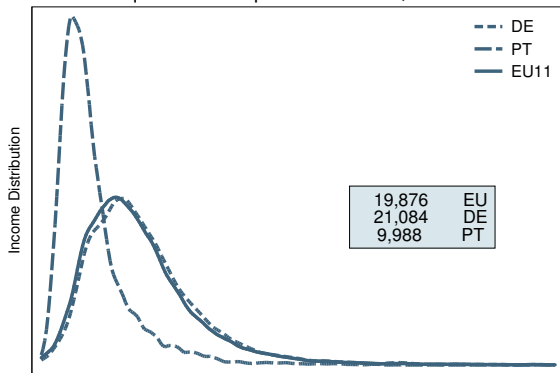
U.S. 2.52



## 2 Heterogeneously unequal

## Portugal, Germany and E.U.

Equivalized Disposable Income, 2009

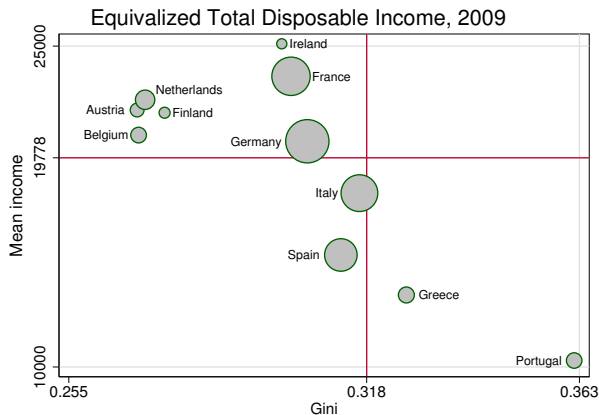


Income distribution in poor countries differs a lot from overall distribution

Correlations above 0.45 between the rank of the E.U. distribution and the distribution rank of richer countries

Small correlation ( $< 0.10$ ) for periphery countries

## Gini and average income

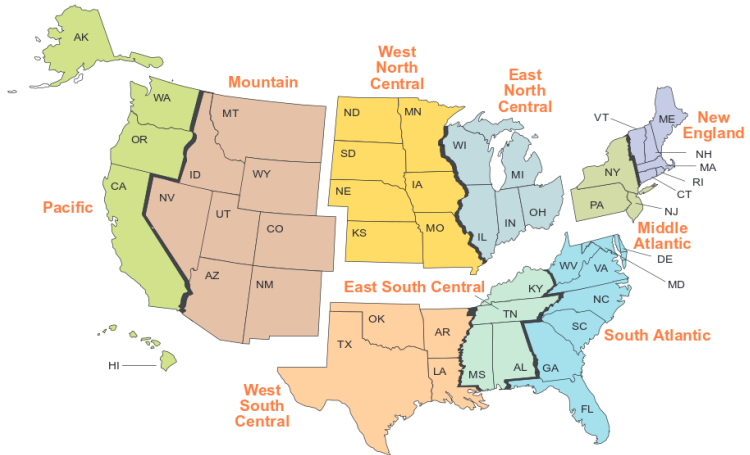


Richer countries are more egalitarian

Gini of an economic area is **not** the weighted average of members' Gini;

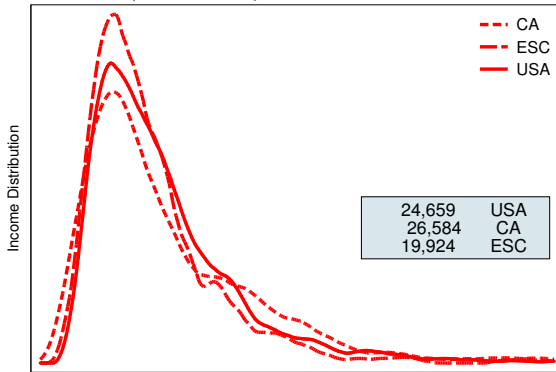
E.U. Gini at **0.318** is larger than in most countries.

## U.S. Geography: Divisions



## California, East South Central, U.S.

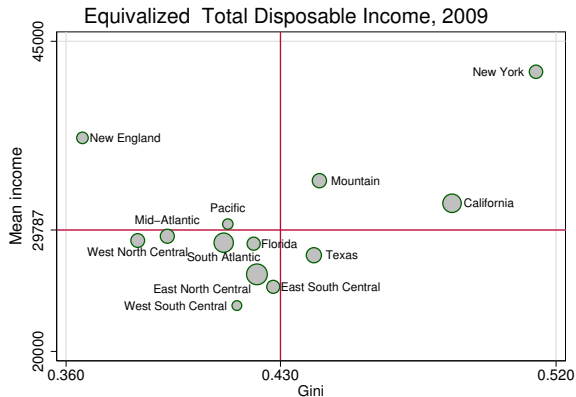
Equivalized Disposable Income, 2009



In America, states and divisions are **more similar** to the overall distribution.

Correlations above 0.60 between the rank of the U.S. distribution and the states/divisions ranks.

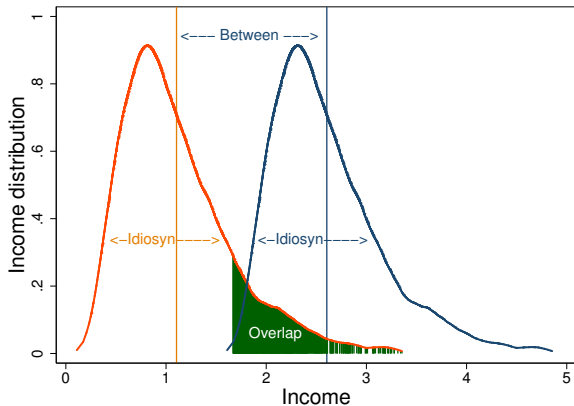
## Gini and average income



Richer states more unequal: if there is a right kind of inequality, this might be the one

*Exception:* New England (similar to an European nation)

## Gini Decomposition: Between; Idiosyncratic; Overlap



**Between:** Average income mobility attained by moving across distributions (countries)

**Idiosyncratic:** Countries inequality contribution to economic area inequality

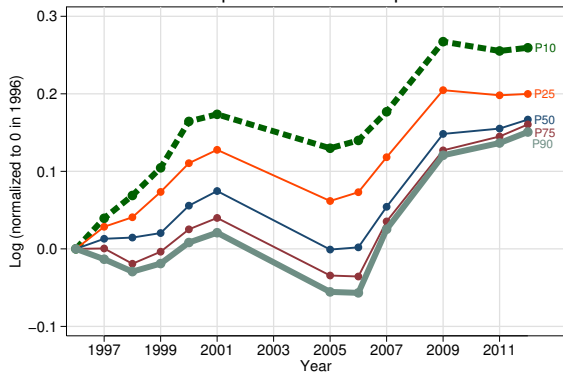
**Overlap:** A common core of income that a common policy can address; Interpreted as a measure of “**common economic citizenship**”

Year	Decomposition	Eurozone 11		United States	
		Gini	Share	Gini	Share
1996	Gini	0.33		0.42	
	Between	0.13	38%	0.09	21%
	Idiosyncratic	0.06	18%	0.04	9%
	Overlap	0.15	<b>44%</b>	0.29	<b>70%</b>
2009	Gini	0.32		0.43	
	Between	0.09	28%	0.07	16%
	Idiosyncratic	0.06	18%	0.04	9%
	Overlap	0.17	<b>54%</b>	0.33	<b>75%</b>



## Inequality over time: E.U.

Euroarea – Equivalent Total Disposable Income



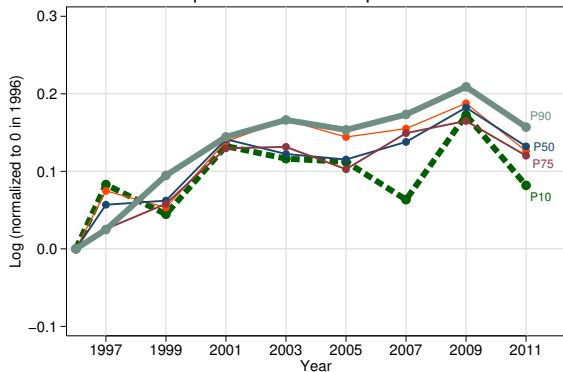
Up to 2001:  
Inequality reduction

2001 to 2007:  
Stable

2007 to 2009:  
Slight increase

## Inequality over time: U.S.

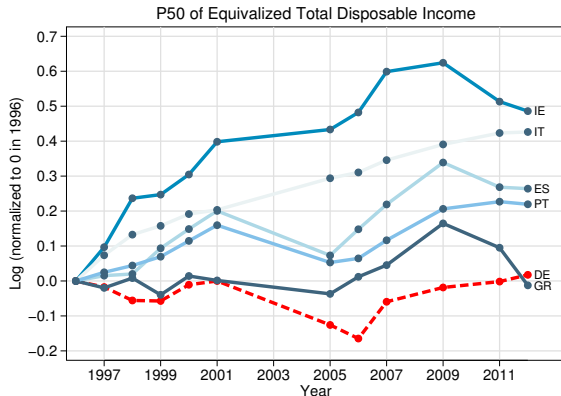
US – Equivalized Total Disposable Income



Relatively stable until the 2007 crisis;

Then, it increased in lower tail inequality.

## Median Income over time: E.U.



Periphery converging.

Germany and Greece unexpectedly similar.

### 3 Redistribution?

## Income sources:

### Marginal impact on inequality (Gini)

Source	Correlation	Gini of Source	Impact
Germany: Gini 0.31			
<b>Salaried Employment</b>	0.68	<b>0.35</b>	0.21
Self-employment	0.71	0.66	0.10
<b>Pensions</b>	0.08	0.28	<b>-0.19</b>
Property & Capital	0.37	0.75	0.00
<b>Transfers</b>	-0.25	0.49	<b>-0.16</b>
Portugal: Gini 0.36			
<b>Salaried Employment</b>	0.69	<b>0.38</b>	0.09
Self-employment	0.57	0.58	0.05
<b>Pensions</b>	0.29	0.41	<b>-0.09</b>
Property & Capital	0.50	0.69	0.01
<b>Transfers</b>	-0.02	0.57	<b>-0.09</b>

### Salaried income:

Germany and Portugal have similar inequality.

**Pensions and transfers** are more redistributive in Germany.

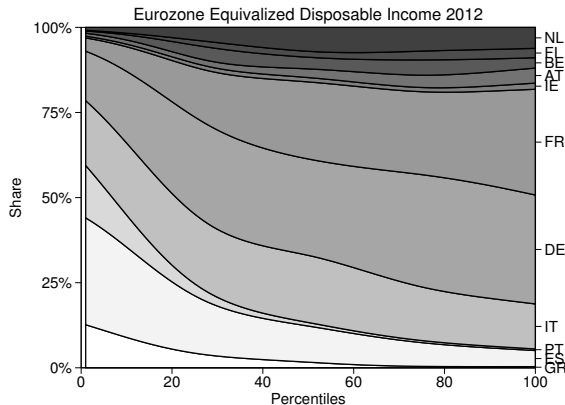




## **4 Implications for policy making**



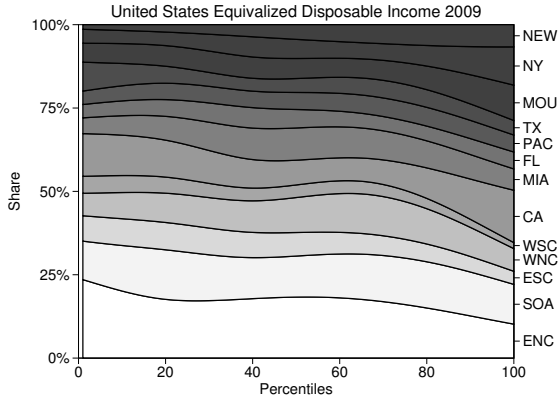
## Share of income percentiles per country



Half of EU11's poorest households are concentrated in PT, GR, and ES.

However, the share of population of these 3 countries is 21%.

## Share of income percentiles per state/division

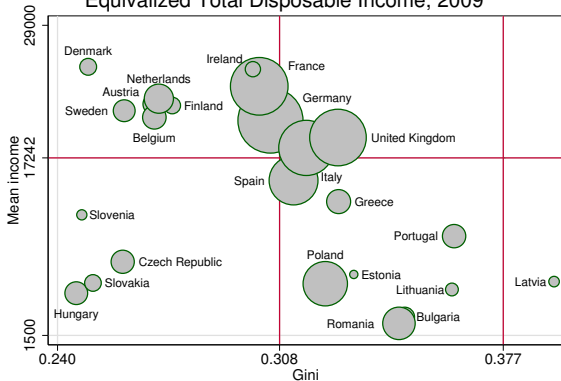


Stripes (and stars?)



## EU28: Gini and average income

Equivalized Total Disposable Income, 2009



Eurostat computes inequality in EU28 as the weighted average of countries' Gini, 0.308.

Computed for E.U. as a single economic area, 0.377.

## Crisis

- **Europe:** Common economic citizenship decreased and differences between countries increased from 2005 to 2001.
  - Gini overlap: -6 p.p.
  - Gini between: +6 p.p.
- **U.S.:** Common economic citizenship stable and no changes in between states differences from 2005 to 2009.
  - Gini overlap: -1 p.p.;
  - Gini between: 0 p.p.,

# Conclusion

Income inequality in Europe reassessed

1. Larger than previously considered
2. Countries in E.U. more heterogeneous than American states
3. Redistributive systems differ widely in the E.U.

Does the absence of an European common policy cause the smaller common economic citizenship?

The lack of an European common economic citizenship certainly makes it harder to have a common policy

1. Common economic citizenship needs to be enhanced
2. Convergence
3. Migration
4. Better policies, common or other

Thank you. Hvala. Děkuji. Tak. Dankjewel.  
Aitäh. Kiitos. Danke. Obrigado. Gracias. Grazie.  
Merci. *ευχαριστω*. Köszönöm. Go raibh maith  
agat. Blagodarya. Paldies. Ačiū. Nirringrazzjak.  
Dziękuję. Multumesc. D'akujem. Tack.

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