Economic inequality

ECONOMICS

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Lecture 19

Context

Previously studied models of *asymmetric economic interactions*

e.g. bargaining, labour markets, credit markets. (Units 5-9)

Asymmetry between parties involved in a transaction can result in unequal outcomes.

- Why do these asymmetries (inequalities) occur in the first place?
- How can we reduce inequality?
- How much equality should a society have?

In this lecture we look at

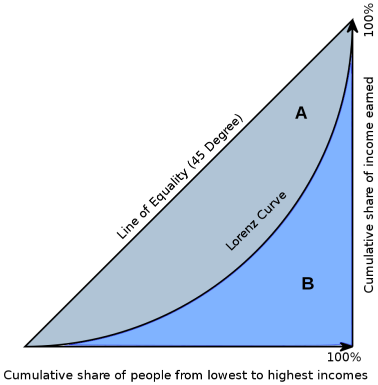
- Trends in economic inequality within and between countries
- Types and sources of inequality
- When and how inequality should be addressed

Gini coefficient

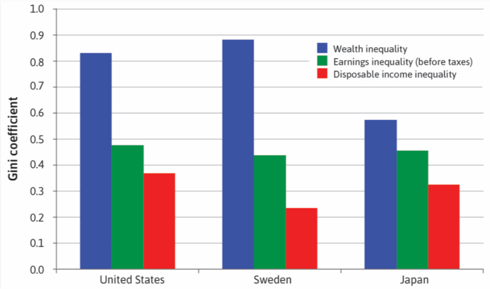
Lorenz curve: shows the extent of inequality and allows comparison of distributions.

Gini coefficient: a measure of inequality.

$$g = \frac{A}{A+B}$$



Income inequality within countries



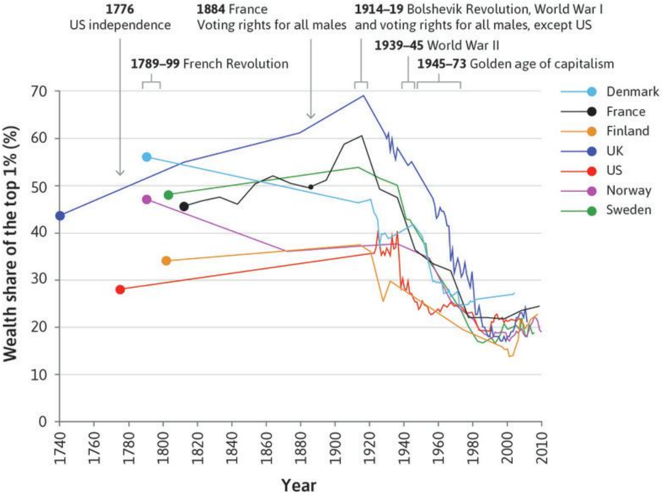
Market income: Income from wage, business and investments

Disposable income: Market income minus taxes and transfers

- *Wealth* is much more unequally distributed than market income, which is more unequally distributed than disposable income.
- Inequality in *disposable income* due to tax and transfers.

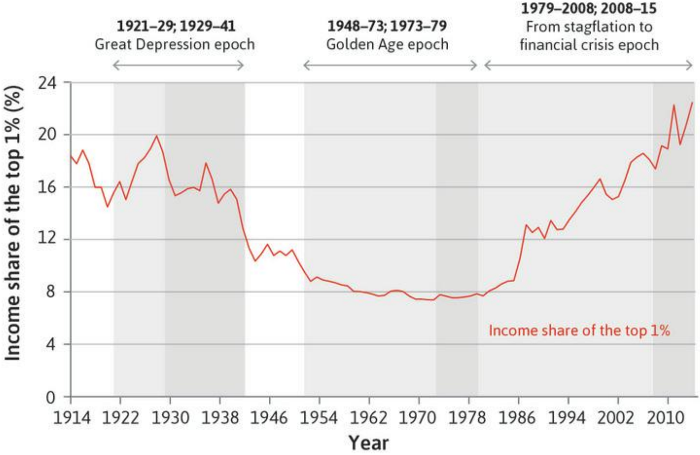
Inequality trends: Wealth

Share of total wealth held by the richest 1% (1740–2011)



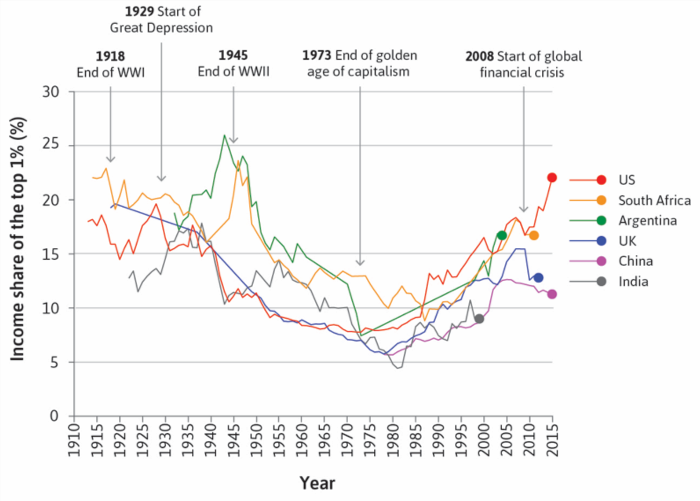
INEQUALITY TRENDS: INCOME

Share of total income received by the top 1% in the US (1913–2015)



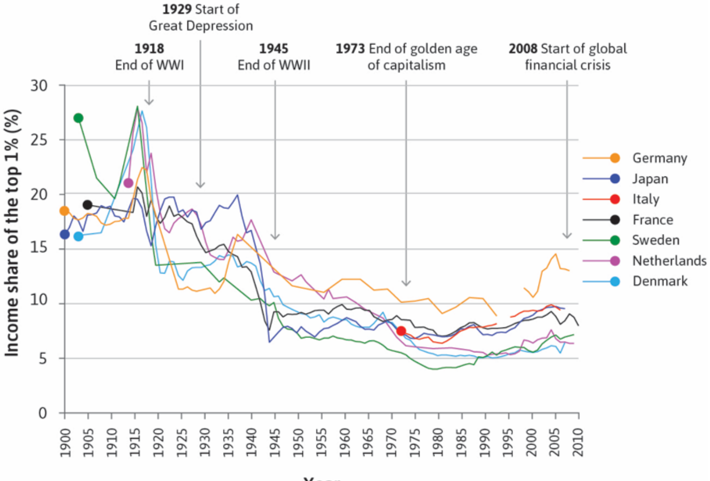
Inequality trends: Income

Share of total income received by the top 1% across the world (1913–2015)



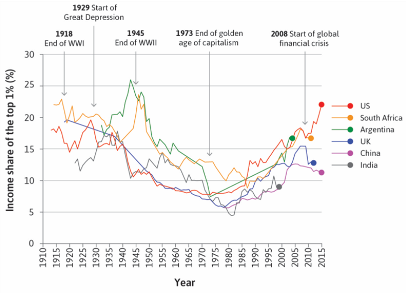
Inequality trends

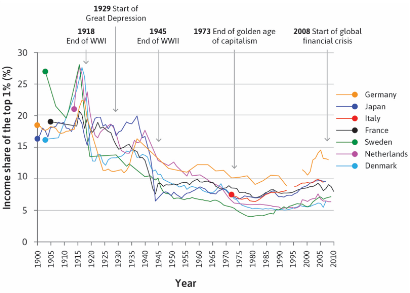
Share of total income received by the top 1% in some European economies and Japan (1900–2013)



Trends in inequality across countries

- There are cross-country differences in the level of inequality
- Common trend over 1920-1980 period, i.e., a fall in inequality
- No common trend after 1980





Global inequality

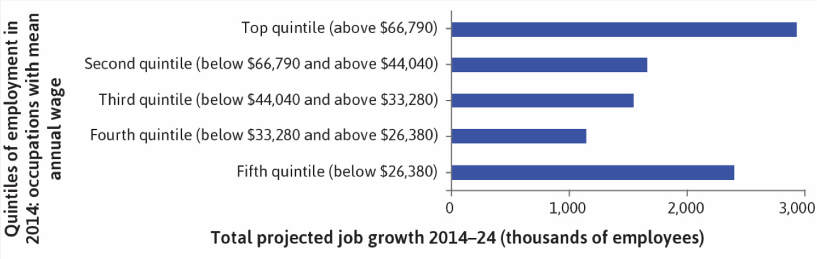
Blue line Gini coefficient for the entire world.

Red line Gini coefficient for the entire world if everyone in the country earns the average income.

Since 1980, between-country inequality fell rapidly *(blue line)*, but within-country inequality increased *(red line)*.

The net result is that global inequality has started to decline.

Within-country inequality



Inequality within: *Increasing inequality* within most countries is associated with the *changing distribution of jobs*

Missing middle: Low-paying and high-paying jobs are increasing in number while *middle-income jobs are becoming scarcer*

Categorical inequality

Understanding the nature of inequality within

Categorical inequality inequality between groups

Economic differences among people who are treated as different categories.

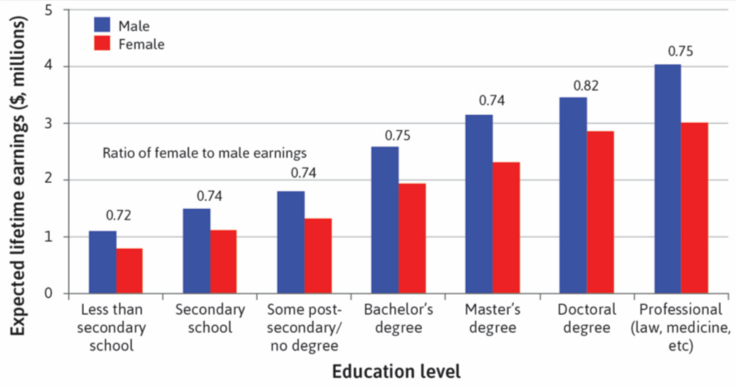
Usually based on *accidents of birth*:

Country of citizenship passports and borders limit access to certain economic opportunities

Gender or ethnic group inherent characteristics

Categorical inequality

Example Income disparities between men and women with the same level of education.



Inherited inequality

Intergenerational inequality extent to which differences in parental generations passed on to next generation

Intergenerational elasticity % difference in second generation's status associated with 1% difference in previous generation's status.

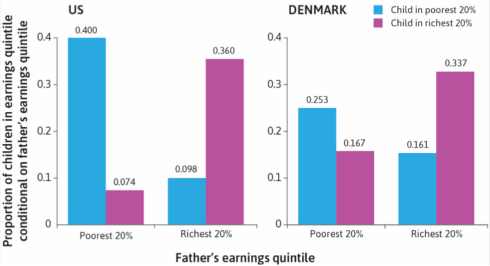
high elasticity *implies* low intergenerational mobility

Inherited inequality

Intergenerational transmission can be by *inheriting:*

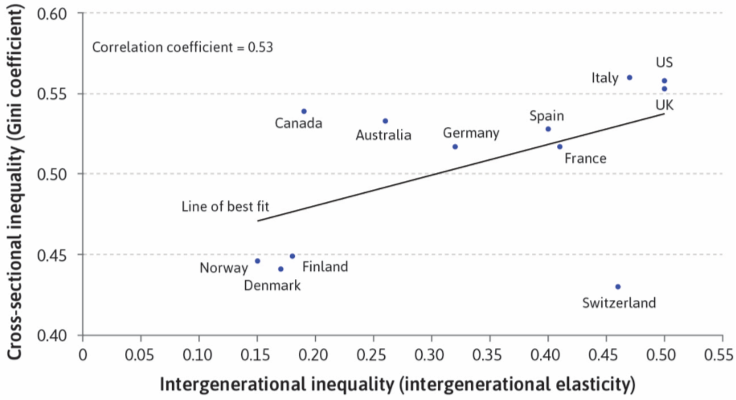
- wealth
- genetic makeup
- skills & social networks

Jumping quintiles across generation: based on men's labour income

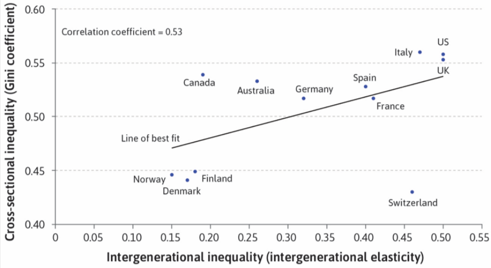


Relation to cross-sectional inequality

Inequality measured by *income gini-coefficient* increasing with *intergenerational mobility* measured by *intergenerational inequality elasticity* across countries



Relation to cross-sectional inequality

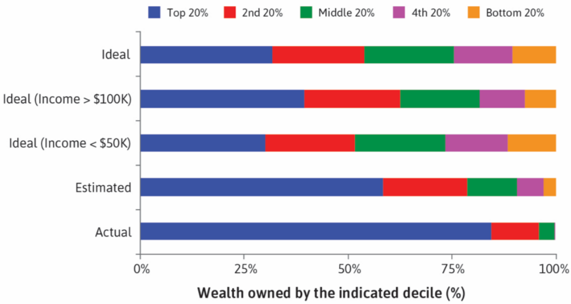


Possible reasons

- societies with strong *culture of fairness* have policies that reduce cross-sectional inequality and promote intergenerational mobility
- Effects of good and bad *income shocks passed on to next generation*, contributing to cross-sectional inequality

How much inequality is 'too much'?

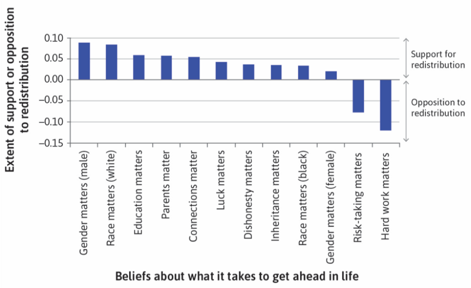
Ideal, estimated and actual distribution of wealth in the US



US *actual wealth inequality* is much higher than people's *estimate* of wealth inequality, which is higher than their *ideal* wealth inequality

When is inequality unfair?

Does beliefs about what it takes to get ahead predict people's support or opposition to government redistributive programmes for the poor in the US



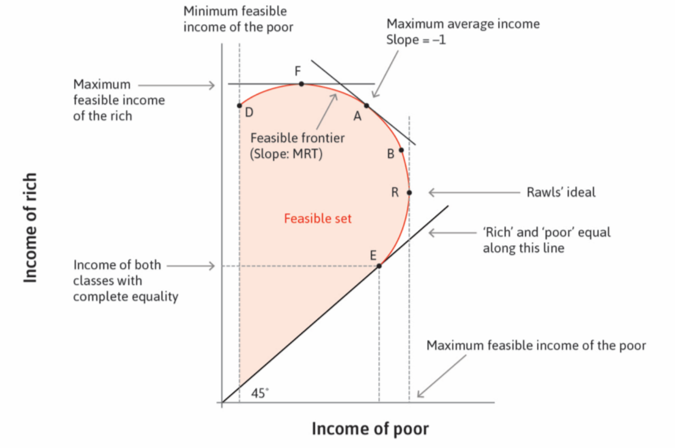
"fair" inequality based on *hard work* or taking risks is *fair*

"unfair" people think *categorical inequality* is *unfair* and should be addressed

Modelling preferences over inequality

Feasible frontier tradeoff between income for rich and poor

Rawls *"Veil of ignorance"*



Preferences over inequality

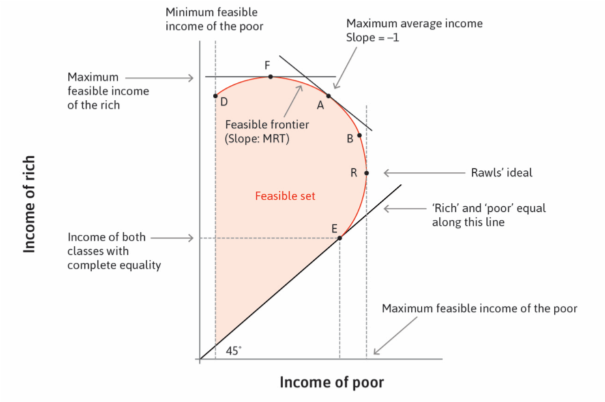
E: complete equality

F: maximum income of the rich

A: maximum average income

D: minimum income of the poor

R: Rawls' *"Veil of Ignorance"* – highest income for the poor

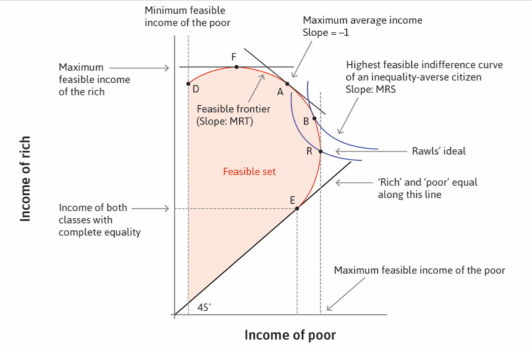


Choosing allocations

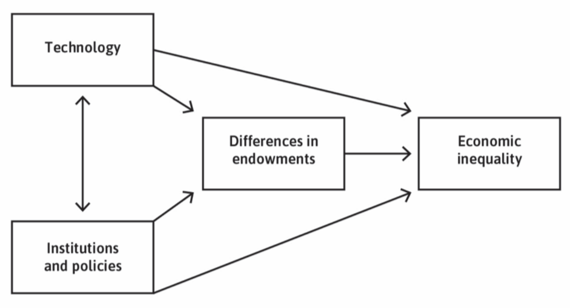
Inequality aversion care about own payoffs but dislike inequality between groups

Pareto inefficient DF and ER

Optimal point B



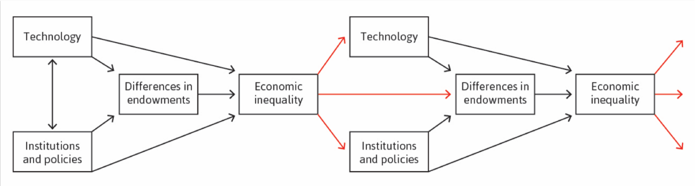
Economic inequality: Sources



An individual's income depends on:

- *Endowments:* financial wealth, physical assets, human capital, citizenship, race, gender, age, etc.
- *Technology* and *institutions* affect the *value* of a particular set of endowments

Economic inequality over time



Current *economic inequality* impacts future economic inequality

directly through *endowments* future generations inherit and

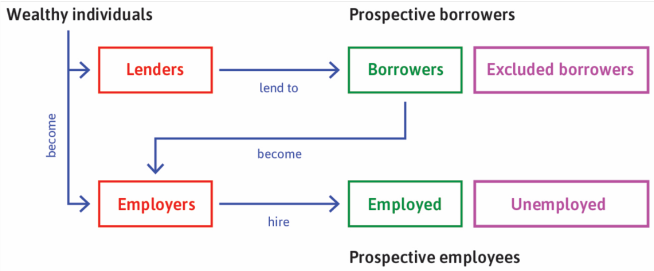
indirectly through their value, which is determined by *technology* and *institutions*

- e.g., Automation, minimum wage, free education, climate change

Economic inequality: Sources

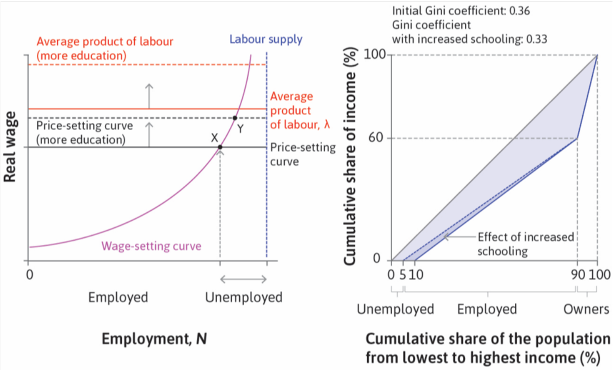
Differences in endowments affect

- the *balance of power* In Principal-agent relationships: principal can exercise power over agents, but not vice versa
- ability to become the principal or agent i.e., borrower or lender



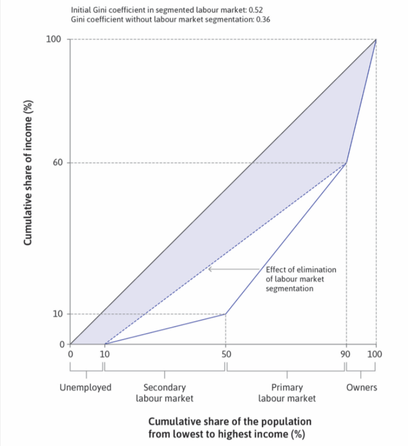
Example 1: Worker productivity increase

- Output per workers increases due to better schooling
- Wages increase as price setting curve shifts
- Lorenzo curve shifts down due lower unemployment



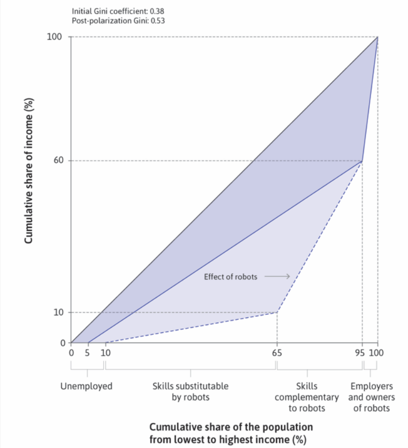
Example 2: Labour market segmentation

- *Good jobs* with high wages, job security, and trade unions
- *Bad jobs* with short-term contracts, limited wages and job security
- Reducing labour market segmentation by *reducing the bad jobs* raises average wages, moves down the Lorenzo curve and *reduces inequality*



Example 3: Automation

- *Machines replace routine labour tasks*, increasing unemployment
- Workers with *skills that complement machines* earn higher wages, increasing inequality
- *Higher profits* may lead to *greater investment* and higher wages and employment in some sectors in the the future
- Other sectors may entirely disappear



Addressing unfair inequality

Government policies can influence economic inequality by:

Redistribution	Taxes and transfers to reduce differences in disposable income, and expenditure on public services *in-kind transfers or subsidised services, social insurance targeted at specific groups*
Pre-distribution	Greater equality of endowments *property redistribution or raising the value of endowments of the poor via legislation* *statutory minimum wage for specific types of workers*

Pre-distribution policies: Labour

Direct effect	Indirect effect
Free high-quality primary education for all children	
Increases opportunities for poorer children to attain high quality schooling, which increases the market value of their endowment of labour	Raises average productivity of labour, shifting up price-setting curve, which increases wages and employment
Eliminate ethnic, racial, or gender discrimination	
Increases the value of the labour endowment of those targeted by discrimination	Raises incomes of targeted groups
Minimum wage	
Increases value of labour endowments among those who were previously unable to work for more than the minimum wage	Raises incomes of the poor and reduces incomes of employers (unless employment effects dominate)
Laws and policies to increase workers' bargaining power (trade unions)	
Increases value of labour endowments of trade union members and improves working conditions	Raises incomes of trade union members (unless negative employment or productivity effects dominate) and reduces incomes of employers

Pre-distribution policies: Others

Direct effect	Indirect effect
Policies to ensure competition	
Reduces price markup	Raises real wages, reduces profits
Restrict IPRs (for example shorter patents or copyrights)	
Reduces value of endowment of intellectual property among IPR holders	May discourage innovation but enables quicker diffusion of innovations
Allow easier access to licenses (for example for taxis)	
Increases supply and reduces incomes of license holders	Greater equality (if license holders are richer than average)

Explaining trends in income inequality

Declining within-country inequality (1920–1980)

- Increasing *education* and *productivity* reduced unemployment
- Reduced *labour market segmentation* and other sources of inequality among workers
- Technological improvements that were *complementary* to low and middle-skill workers

Stable or decreasing between-country inequality (1995–2017)

- Reduced global labour market segmentation due to rapid growth of labour productivity and demand in China and other poorer countries.

Explaining trends in income inequality

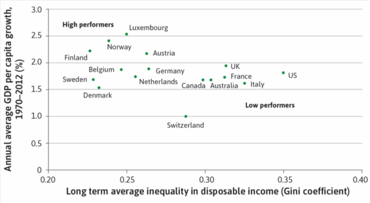
Stable or rising within-country inequality (1980–2017)

- Increased inequality among workers due to *new technologies* that were *complementary to the skills of higher paid workers*, and *substitutes for workers doing routine tasks*
- Weaker trade unions and conservative political parties in power saw *bargaining power shift in favour of employers*, whilst the resulting higher profits after taxes were not translated into expanding employment (in some countries).

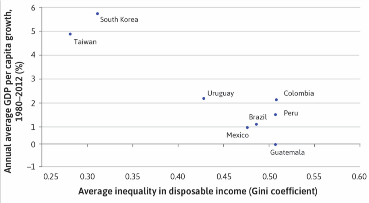
Inequality and Economic Growth

Inequality and growth in living standards

Rich countries



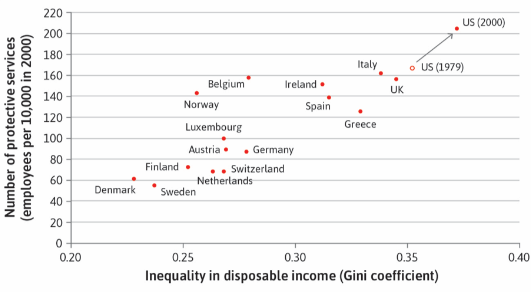
Catch-up countries



- Most countries grow at similar rates and there is *no correlation* with the level of inequality
- High taxes and transfers do not necessarily reduce *incentives* to work hard or innovate

Inequality and Economic Growth

- *Cooperation* and trust necessary for production of knowledge and caring services is *harder to sustain with high inequality*
- Policies that *enhance endowments* of the poor *improve productivity*
- *Less guard labour needed*, which diverts resources from production



Summary

- Technology and institutions influence inequality directly and indirectly (via differences in endowments).
- Various types of inequality: between countries, group inequality, inherited inequality.
- Policy can reduce inequalities by affecting technology, institutions and the distribution of endowments.
- How equal should society be? Depends on beliefs about inequality and preferences for fairness.