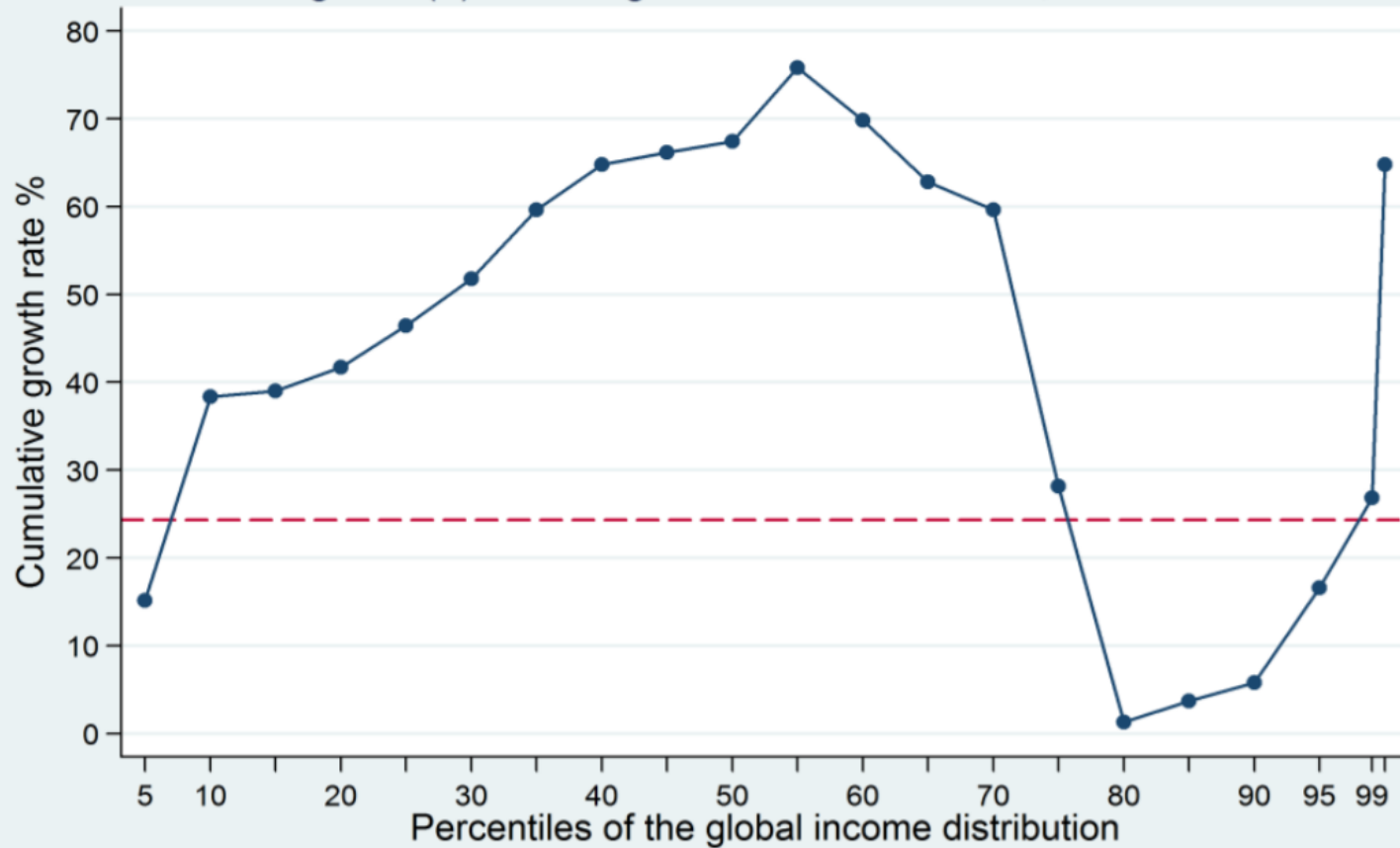


- From globalization to inequality
- From inequality to populism
- From inequality to redistribution
- How do we do this without affecting competitiveness?



Figure 1(a): Global growth incidence curve, 1988-2008

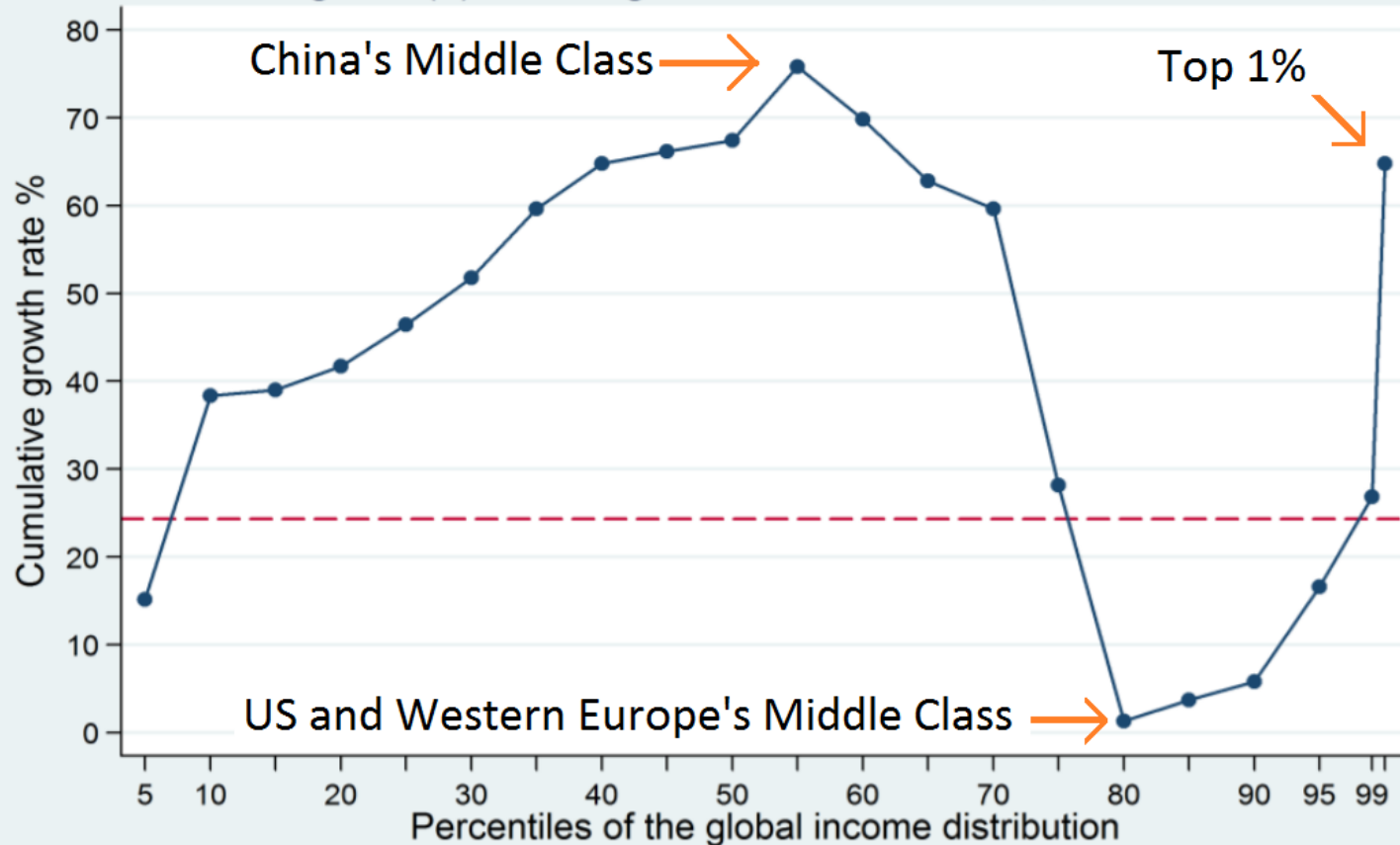


Y-axis displays the growth rate of the fractile average income (in 2005 PPP USD). Weighted by population.  
Growth incidence evaluated at ventile groups (e.g. bottom 5%); top ventile is split into top 1% and 4% between P95 and P99.  
The horizontal line shows the growth rate in the mean of 24.34% (1.1% p.a.).

Source: Lakner and Milanovic (WB ER 2016)



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Robert Hanson

## Six big economic ideas

### Breakthroughs and brickbats

#### In this series:

1. Akerlof's market for lemons
2. Minsky's financial cycle
3. The Stolper-Samuelson theorem
4. The Keynesian multiplier
5. The Nash equilibrium
6. The Mundell-Fleming trilemma





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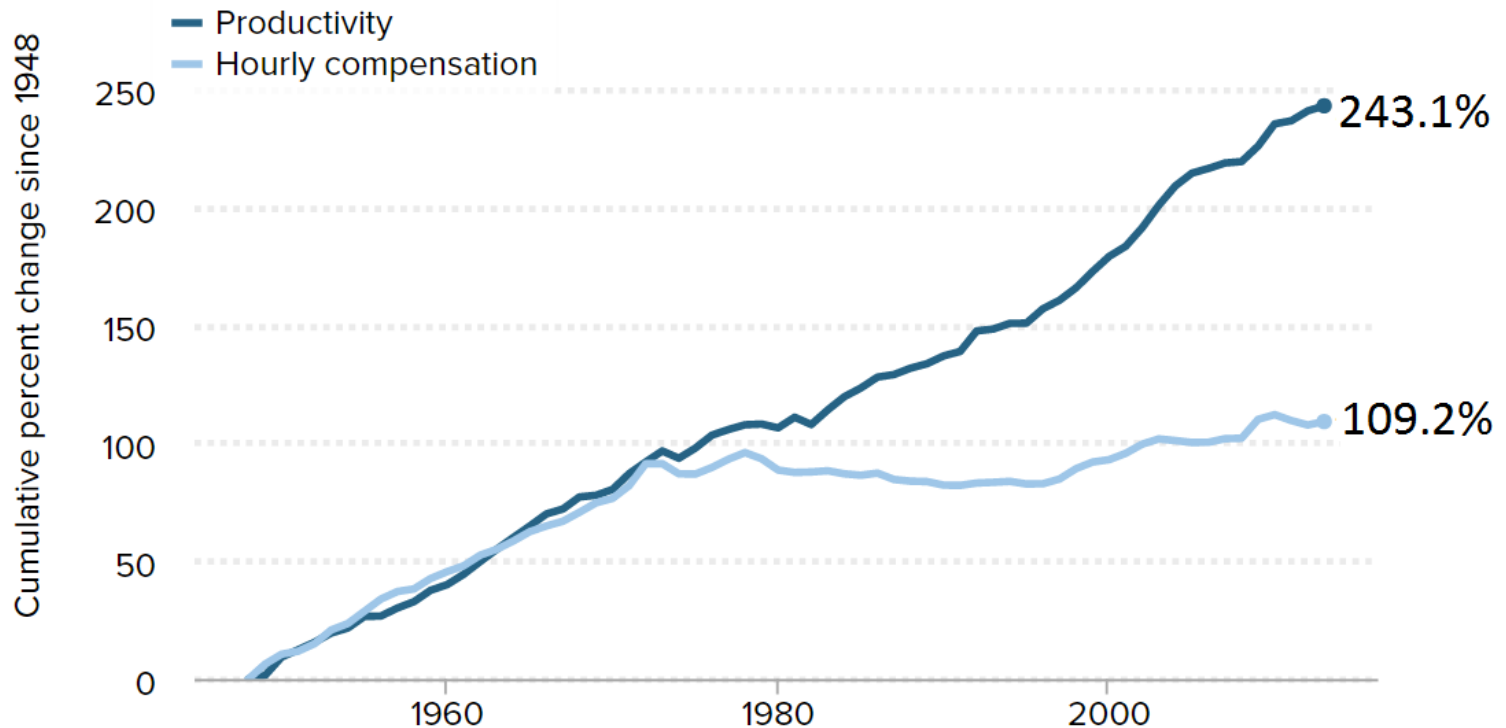
# 1. Free Trade and Economic Theory: The Stolper-Samuelson Theorem (REStud 1941)

- a. Workers producing traded goods in a high-capital country will be worse off as international trade increases.
- b. Unskilled workers producing traded goods in a high-skill country will be worse off as international trade increases
- a. Regardless of the number of goods and factors, at least one factor of production must experience a decline in real income from trade.



## 2. Implications of the Stolper-Samuelson Theorem

Disconnect between productivity and typical worker compensation, 1948–2013



**Note:** From 1948 to 1979, productivity rose 108.1 percent, and hourly compensation increased 93.4 percent. From 1979 to 2013, productivity rose 64.9 percent, and hourly compensation rose 8.2 percent.

Economic Policy Institute



### 3. Political implications of raising inequality

- Another way of stating Stolper-Samuelson's theorem:
  - “**international trade necessarily lowers** the real wage of the [relative] scarce factor”.
  - **Protectionism necessarily raises the real wage** of the relative scarce factor
- Donald Trump, Bernie Sanders, Jean Marie & Marine Le Pen
- Brexit





## 4. Should we reverse globalization? No, we should redistribute

- We know since David Ricardo that every country benefits from Free International Trade.
- How is this compatible with the theorem that tells us that someone must loose?
- The only way to be sure that everybody benefits is with redistribution: welfare state.



## 5. How to finance redistribution? What happens to competitiveness?

- i. Higher taxes on capital => Capital runs away
- ii. Higher taxes on labour => Labour runs away
- iii. Taxes on any production factor increase production costs and, therefore, affects external competitiveness.



# 6. Pigou taxes

## Consumption taxes

- i. Taxes on negative externalities.
  - i. They increase economic efficiency and, as a bonus, they increase Government revenues
  - ii. No drawbacks.
  
- ii. Consumption taxes
  - i. Do not affect exports
  - ii. Imported goods also pay the tax
  - iii. They work as currency devaluation
  - iv. Drawbacks: regressive taxation (or, at least, not progressive)



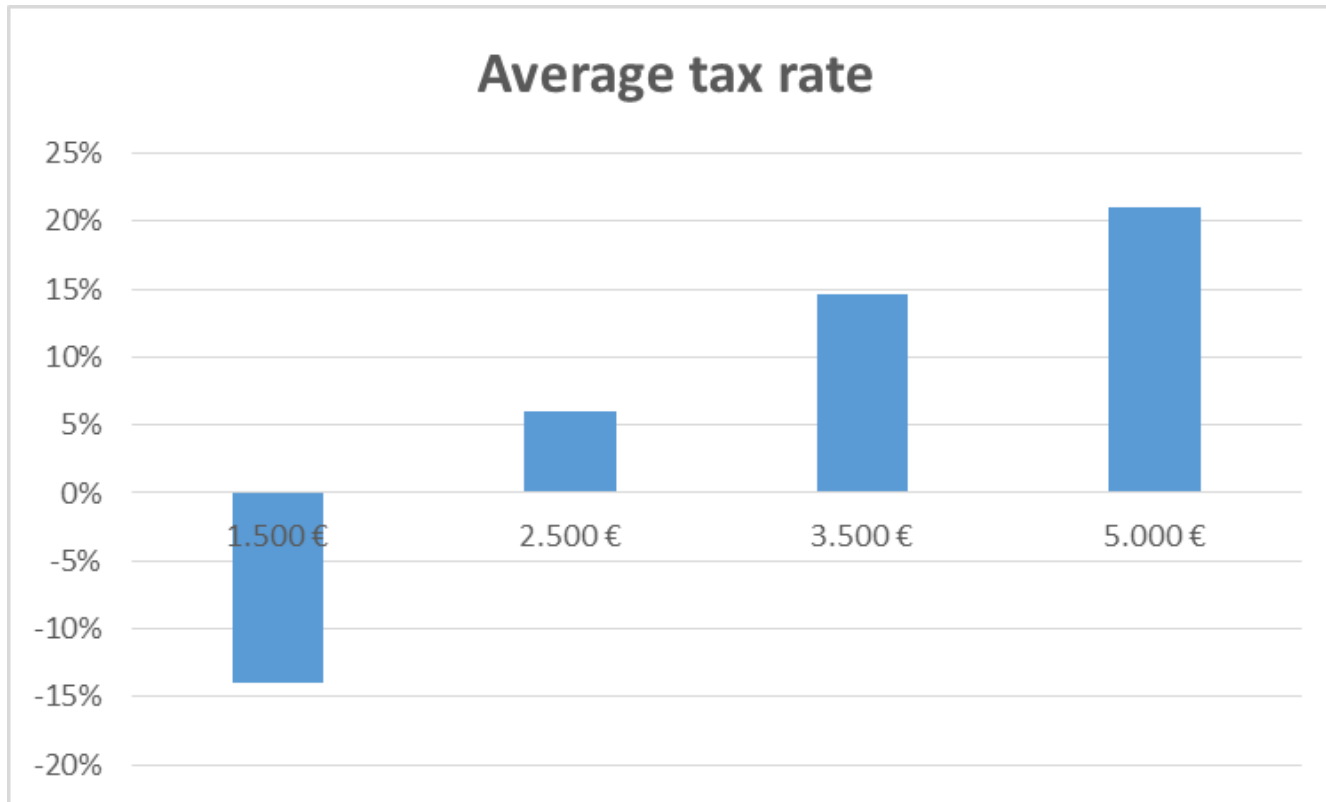
## 6. VAT coupled with Government transfers (Isabel Horta Correia – Bank of Portugal)

- i. Isabel Horta Correia (AER 2010) argues that this decreases inequality (and increases efficiency)
  - i. The marginal tax rate is flat
  - ii. The average tax rate increases
- ii. Numerical example:
  - i. VAT = 35%; each family receives a government transfer of 750€. Assume that each family spends 90% of its income.



# 6. VAT

## Coupled with Government transfers



# 7. A progressive VAT (John Cochrane – University of Chicago)

- i. Everybody pays a very high VAT, equivalent to the higher marginal tax rate, say 40%.
- ii. Then, you get your tax back, depending on how much you consume.
- iii. Example
  - i. €10,000 of purchases in each year, you get a refund of all VAT taxes paid. You get €40 out of every €40 tax payments back, so you pay no taxes.
  - ii. For the next €20,000 of purchases, you get €30 out of every €40 tax payments back, so you pay a 10% rate.
  - iii. For the next €20,000 of purchases, you get €20 out of every €40 tax payments back, so you pay a 20% rate.
  - iv. ...
  - v. Above €100.000, you get nothing back, so you pay the 40% maximum rate.



## 7. A progressive VAT (John Cochrane – University of Chicago)

- i. In an era of electronic payment, this is feasible and can, actually, be done automatically.
- ii. By taxing consumption, instead of income, there is no need to hide your wealth.
  - i. Tax heavens would tend to disappear.
  - ii. Simplify tax systems
  - iii. No longer tax investment or labour. Stronger incentives to produce.

