

The drivers of inequality: technology and institutions

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Is inequality a matter of technology or of institutional settings?



Technology is the *cause* of inequality in the dominant approach

- ▶ The literature developed during the last thirty years has stressed the role of technology:
 - ▶ Skill-bias technical change
 - ▶ Routine-bias technical change
 - ▶ Task-bias technical change

All theories pointing at technology as the driving force behind inequality



The narrative

- ▶ the impact of automation upon employment has become a major topic of discussion both in policy and academic debate

Brynjolfsson and McAfee (2011, 2014) the root of current unemployment is not the Great Recession, but rather a '**Great Restructuring**' characterised by an exponential growth in computers' processing power having an ever-bigger impact on jobs, skills, and the whole economy ("*This time is different*")

Acemoglu and Autor (2011) technology destroys occupation in the middle part of the wage distribution substituting repetitive and routinised tasks

Frey and Osborne (2017) 47% of the occupational categories are at high risk of being automated, including **services** and highly **cognitive** jobs



Some long term patterns before this *different time*

1. De-industrialization
2. Stagnant wages and divergence between productivity growth and wage growth
3. Declining labour share
4. Massive surge in corporate profits, especially financial ones
5. Soaring inequality
6. Polarization and growing number of part-time jobs (gig-economy)



Matching or mismatching between three subsystems

Technological determinism

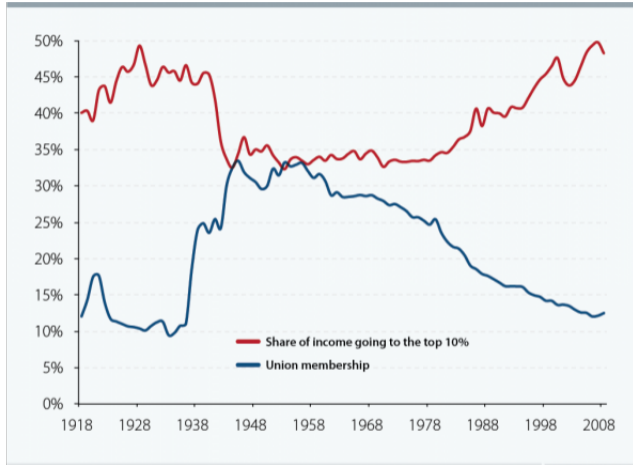
Is it all about technology? \Rightarrow NO

There are three subsystems:

1. The system of technologies
2. The economic machine
3. The system of social relations and institutions



Declining labor force unionization rate and increasing inequality



Growinpro results

- ▶ Decline of the labour share across sectors and along GVCs (Abraham and Bormans, 2020, WP9/2022)
- ▶ Weak micro-level pass-through of productivity growth to wage growth (WP19/2020)
- ▶ Weakening of unions as source of wage inequality and productivity stagnation (Dosi et al., 2021; Dawid et al., 2020)
- ▶ Inequality, rather than a technological-driven phenomenon can be largely attributed to wage compression policies, eroding working bargaining power, occupational stability and wage increases. (WP 34/2021)



Growinpro results: key messages

- ▶ The institutional settings and the weakening of labour institutions count more than technology to explain inequality
- ▶ Technologies rather than determining "biases" in wage remunerations, act as reinforcing devices worsening working conditions



When your boss is an algorithm? Source FT


How the App changes the salary - UberEats

- ▶ Started paying 20 pounds an hour
- ▶ Then it moved to 3.30 pounds a delivery plus 1 pounds a mile, minus a 25 per cent “Uber service fee”, plus a 5 pounds “trip reward”
- ▶ Then the “trip reward” had been cut to 4 pounds for weekday lunch and weekend dinner times, and to 3 pounds for weekday dinner and weekend lunch times.



Joseph Stiglitz - GROWINPRO conference - Steering innovation

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Unless we change the direction of innovation or establish a global framework for redistribution there will be greater divergence between richer and poorer nations.

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