Political Economy of Inequality

Session 6: Skills, education and the transition to the knowledge economy

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Welcome back!

What we will focus on today:

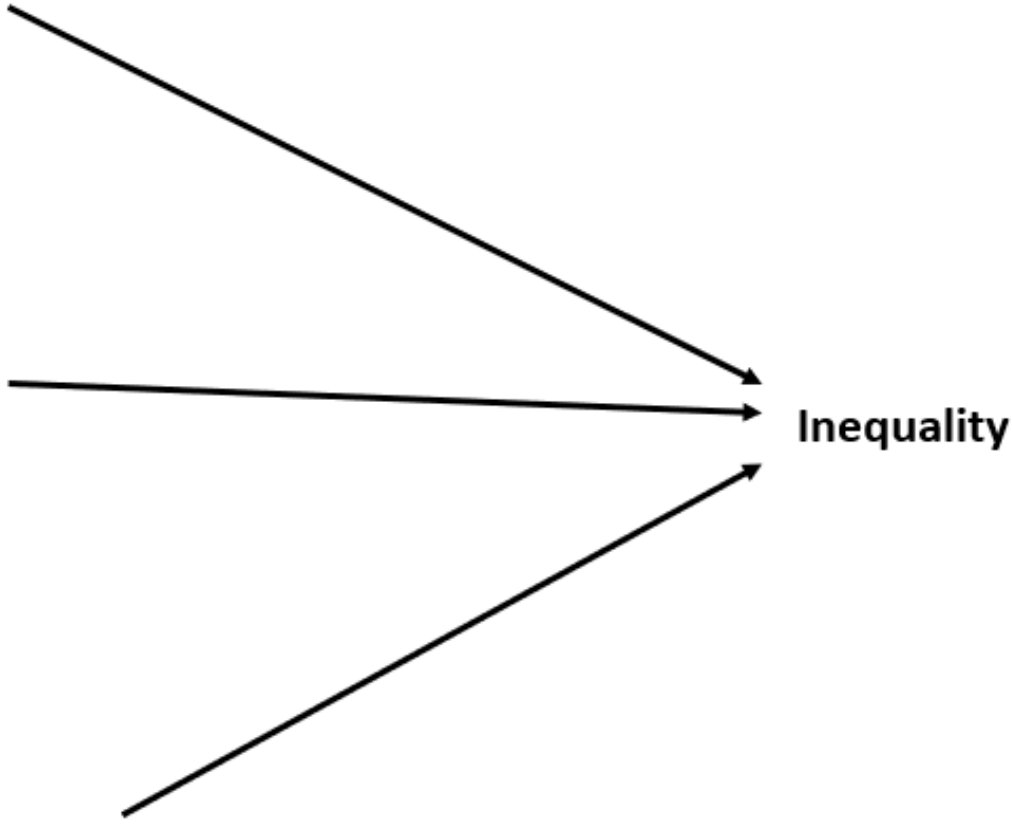
- Skills, education and the transition to the knowledge economy and the impact on inequality
- The role of institutions in mediating this relationship

Our course so far

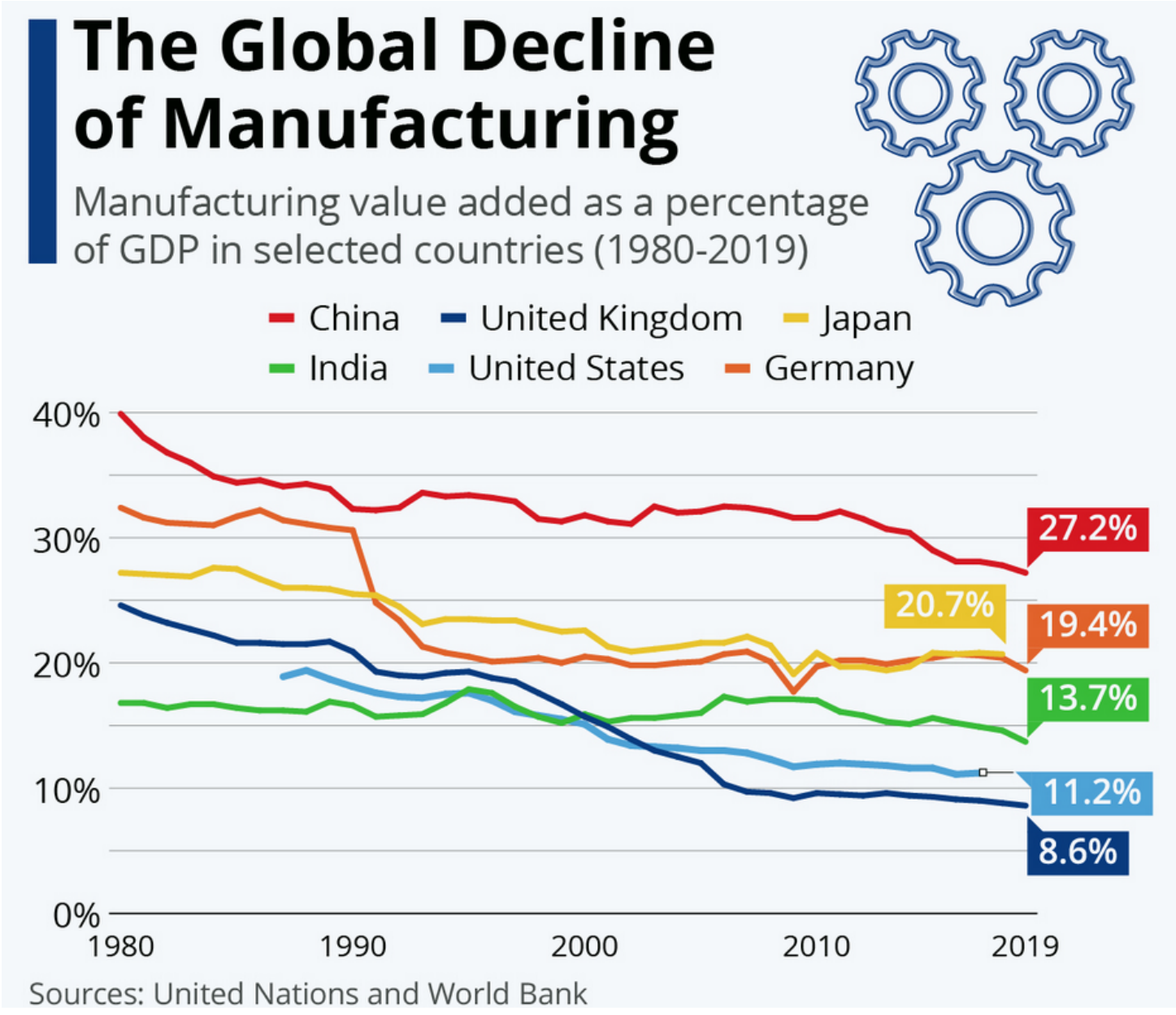
Global changes:
- Globalization
- Technological changes
- Demographic changes

Politics:
- Trickle-down economics and neoliberalism
- Party competition and redistributive preferences
- Austerity

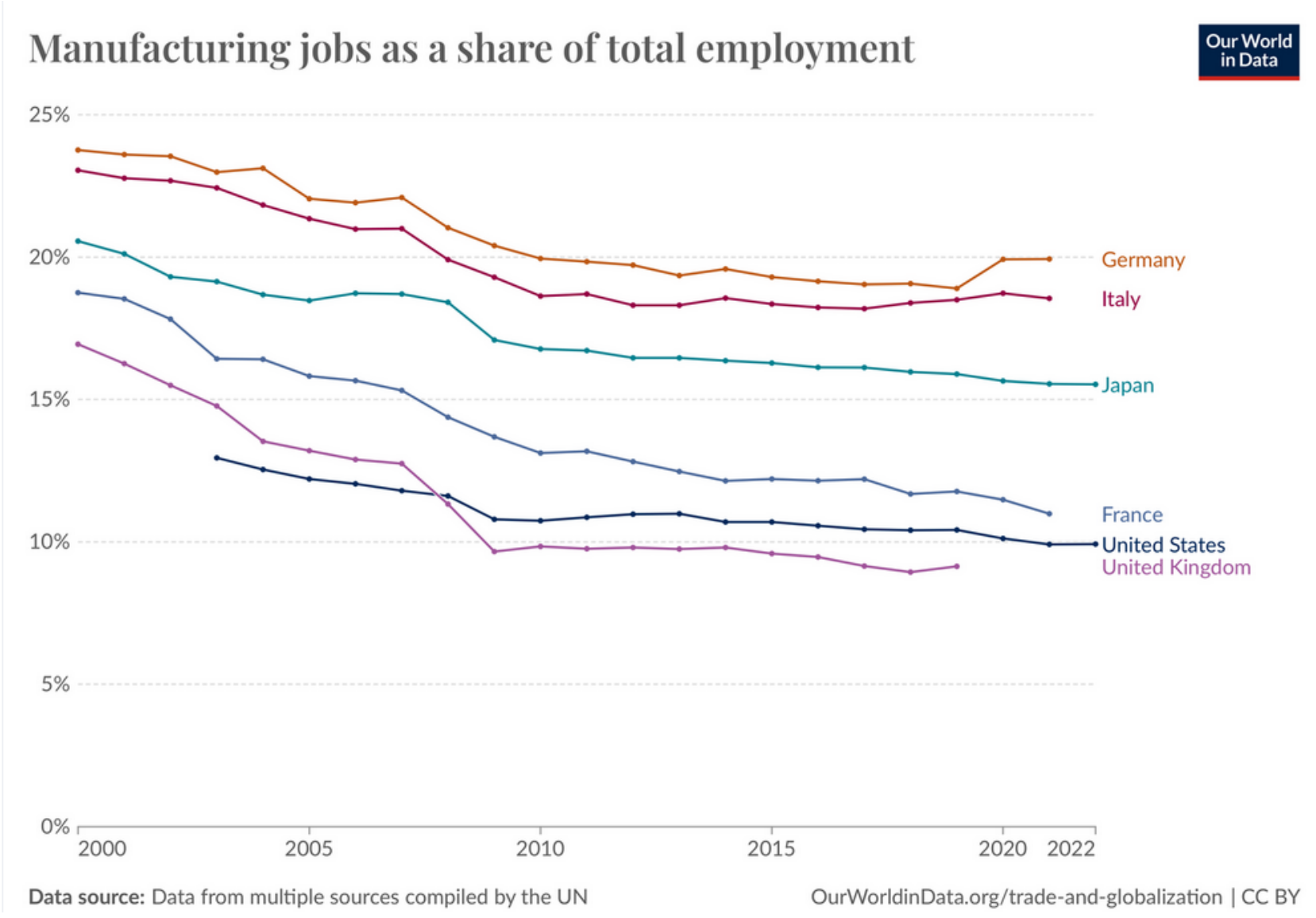
Institutions:
- Trade unions
- Collective bargaining
- Wage-setting coordination/centralization
- Corporatism



Changes in the economy



Changes in employment



So where are we now?

- Increased employment and economic value added in the services sector
- From **Fordism** (mass consumption and production of standardized consumer goods) to **knowledge economy** (consumption and production based on intellectual capital)
  - Patents
  - Intellectual property
  - Research and development (R & D)
  - Tangible vs. intangible assets

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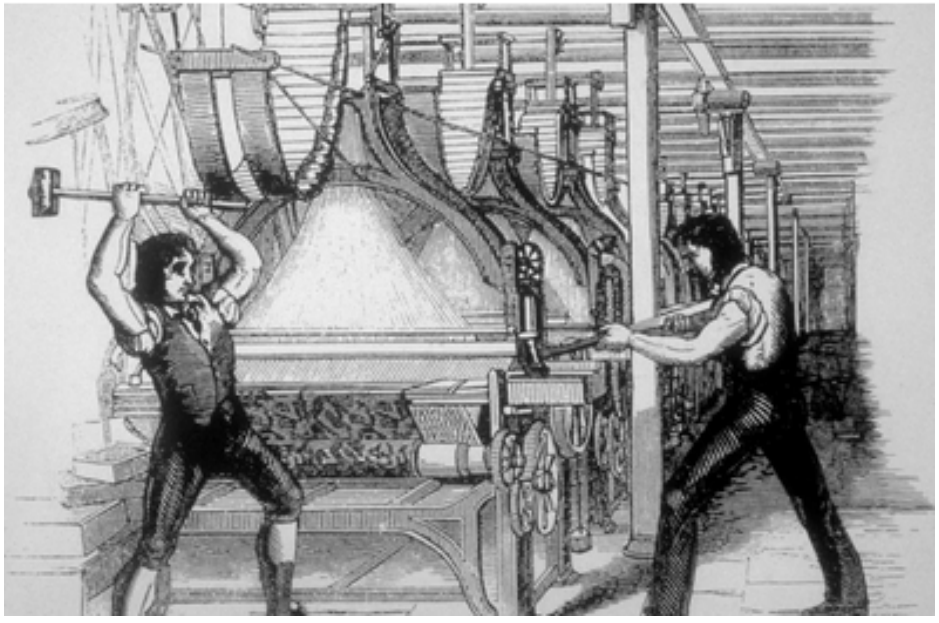
  - Tangible vs. intangible assets
- Less knowledge vs. knowledge-intensive services
- Industry 4.0 (AI, robotics, Internet of Things)

Technological changes and inequality



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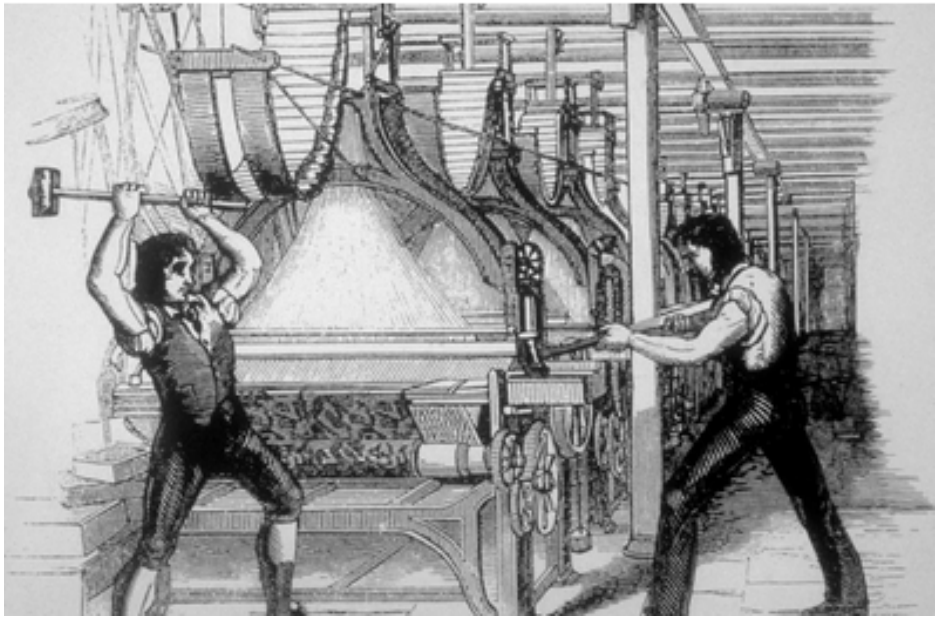

- Industrial revolution and the Luddites (English textile workers)
- Industrialization led to greater economic output but widened the gap between capital owners and laborers (Shifts in returns from capital and labor)
- Automation: Computers, AI
- Geographic disparities (Silicon Valley)

Skilled-biased technological change (SBTC)

- Technological changes that favor skilled workers, with higher education and specialized knowledge
  - *Substitute* or *complement* labor/productivity?
- Income of skilled workers grows faster than that of unskilled workers
- Economic mobility $\rightarrow$Access to education and skill development becomes fundamental
- **Focus:** Divide is between high-skilled and low-skilled workers

Routine-biased technological changes (RBTC)

- IT revolution $\rightarrow$Skills-polarizing effect on the employment structure (*job polarization*), rather than an upgrading one as traditionally predicted by SBTC.
- **Non-routine tasks**—whether cognitive (e.g., problem-solving, creativity) or manual (e.g., caregiving, cooking) are not so easy to automate, preserving jobs at the high and low ends of the skill spectrum.
- **Job polarization**: Middle-skill jobs shrink, leading to a "hollowing out" of the labor market. Workers are pushed either into high-skill, high-paying roles or low-skill, low-paying jobs.
- Examples: ATMs and office productivity software (data entry, document filng)
  - **High-skill jobs** (e.g., AI developers, data scientists): commanding high wages and job security.
  - **Low-skill jobs** (e.g., janitorial services, fast food): offering low pay and limited benefits.

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- How does the transition to the knowledge economy affect union membership strategies? (Ibsen and Thelen 2017)
- Lack of complementarity between low and high-skilled workers in the knowledge economy, industrial relations no longer safeguard of wage solidarity (Iversen and Soskice 2015)
- Wage compression across skill levels within industries and firms
- Focus on employer-funded training programs to help workers acquire skills
- Job security protections:
  - Container terminals and the international Longshoremen's Association
- Lobby government to invest in public education

What is the role of the state?

- Corporatism: Social partners and state collaborate for social and economic policy
- Globalization, deregulation and less state support
- Nordics and the **social investment state** →Don't subsidize jobs in declining industries, rather retrain workers (Huo and Stephens 2012)

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- State active in the creation and preservation of human capital (supply-side) →Policy instruments: early childhood education, active labor market training, formal education
- Success in transitioning to high-tech sectors in Finland and Sweden →Coordination of social actors and state information-sharing in R&D because of established practices of coordination (less fear of competitors) (Ornston 2013)
- State investment in human capital, private R&D and employment in knowledge-intensive goods and services

Skills, education, and the rise of earnings inequality among the "other 99 percent" (Autor, 2016)

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- Hacker and Pierson reading: focus on top 1%, but what about the other 99%?
- Education, incentives and inequality
- Inequality and inter-generational mobility. Dynamic society? Equality of opportunity?
- Education as the 'great equalizer'?
- US $\rightarrow$Countries with high returns to education tend to have relatively low mobility.
  - Educational attainment: strongest predictors of children educational attainment is parents' education and earnings

The transition to the knowledge economy, labor market institutions and income inequality in advanced democracies (Hope and Martelli, 2019)

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- Shift to a knowledge economy across different economies
- But what accounts for differences in inequality?
- Interaction with labor market institutions
- Industrial relations help control levels of inequality in the transition to the knowledge economy
- Difference to Baccaro and Howell (2011) argument on the trajectories of liberalization argument

Literature Review: Some 'new' causes of inequality

- Goldin-Katz hypothesis: Educational advancement (supply of skills) has not kept up with technological advancement (demand for skills) $\rightarrow$upward pressure on wages
- Financialization, direct effects:
  - Financial services employees command higher wages
  - Shareholder value maximization and short-term profits, encourage cost cutting and layoff
- Trade liberalization and reduced use of tariffs and inequality
- Wage-setting centralization and egalitarian wage outcomes
- Acemoglu and Pischke (1999) $\rightarrow$Training, labor market institutions and ICT revolution
  - Strong LMIs $\rightarrow$Worker training also to low-skilled workers
  - Weak LMIs $\rightarrow$Worker training to high-skilled workers

Data and measurement

TABLE 3
SUMMARY STATISTICS

Variable	*Obs.*	*Mean*	*Std. Dev.*	*Minimum*
Top 1% income share	541	0.09	0.03	0.04
90/10 wage ratio	322	3.04	0.67	1.88
Knowledge employment (% of total employment)	682	0.11	0.04	0.03
Wage coordination (1–5 scale)	669	3.25	1.40	1.00
Union density (%)	659	40.41	19.71	7.55
EPL (0–6 scale)	414	2.20	0.99	0.26
Bargaining coverage (0–100)	614	70.62	24.38	12.61
Education expenditure (% of GNI)	684	4.63	1.32	1.00
Stock market capitalization (% of GDP)	525	0.49	0.41	0.00
Private credit (% of GDP)	682	74.80	38.22	16.93
Outward FDI (% of GDP)	628	2.16	3.98	–4.70
Southern import penetration (% of GDP)	661	13.78	8.17	1.11
Unemployment rate	684	6.92	3.88	0.57

Method: Panel data analysis

Interaction

- The effect of an **independent variable** on the **dependent variable** *depends* on the level of another independent variable
- The variables work together in a way that their **combined effect** is from adding up their separate effects

Country fixed effects

Findings

- Interaction moderates the negative effect of transition to knowledge on inequality
- Scandinavian countries' unions successful in reaching out also to non blue collar workers
- Micro studies could map out the mechanisms presented in the paper

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