WeLaR Virtual Expert Café (VXC)

Hosted by Ursula Holtgrewe & Stella Wolter (ZSI)

19 September, 2 pm

Funded by
the European Union

1.

The format

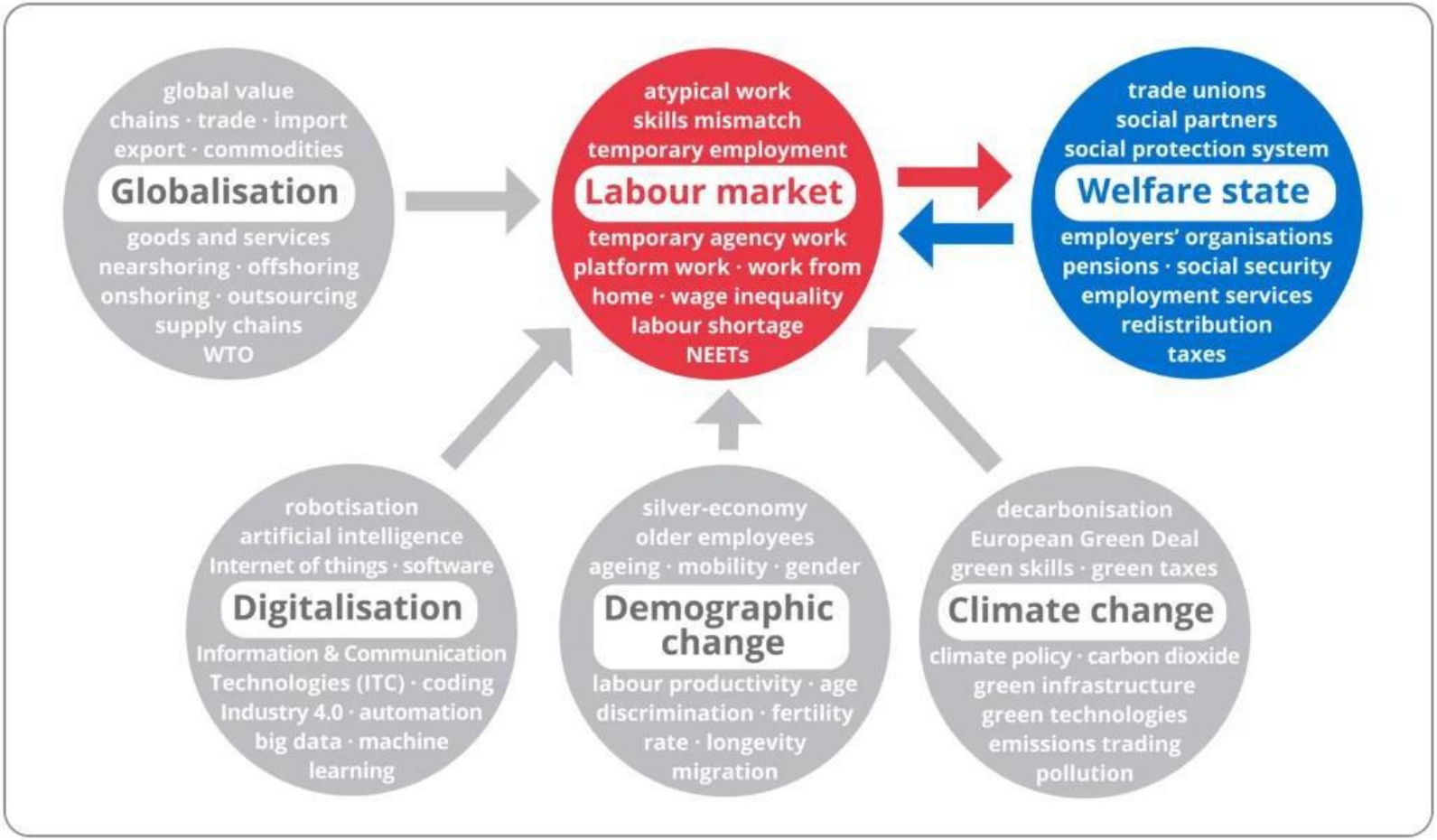
The VXC format

- A low-threshold virtual forum for exchange on globalisation, digitisation, demographic change, climate change, labour markets and the welfare state
- A 90-minute virtual meeting
- news, ideas, results, collaborations in an ‘elevator pitch’ format
- Everybody’s welcome to contribute or listen and comment!
- Contributors have a 5 – 7 minute time slot (may be 3 minutes or sometimes even 10) and 2 ppt slides (headline, keywords, links, contact data!) to present projects, programmes, ideas, results, events …

2.

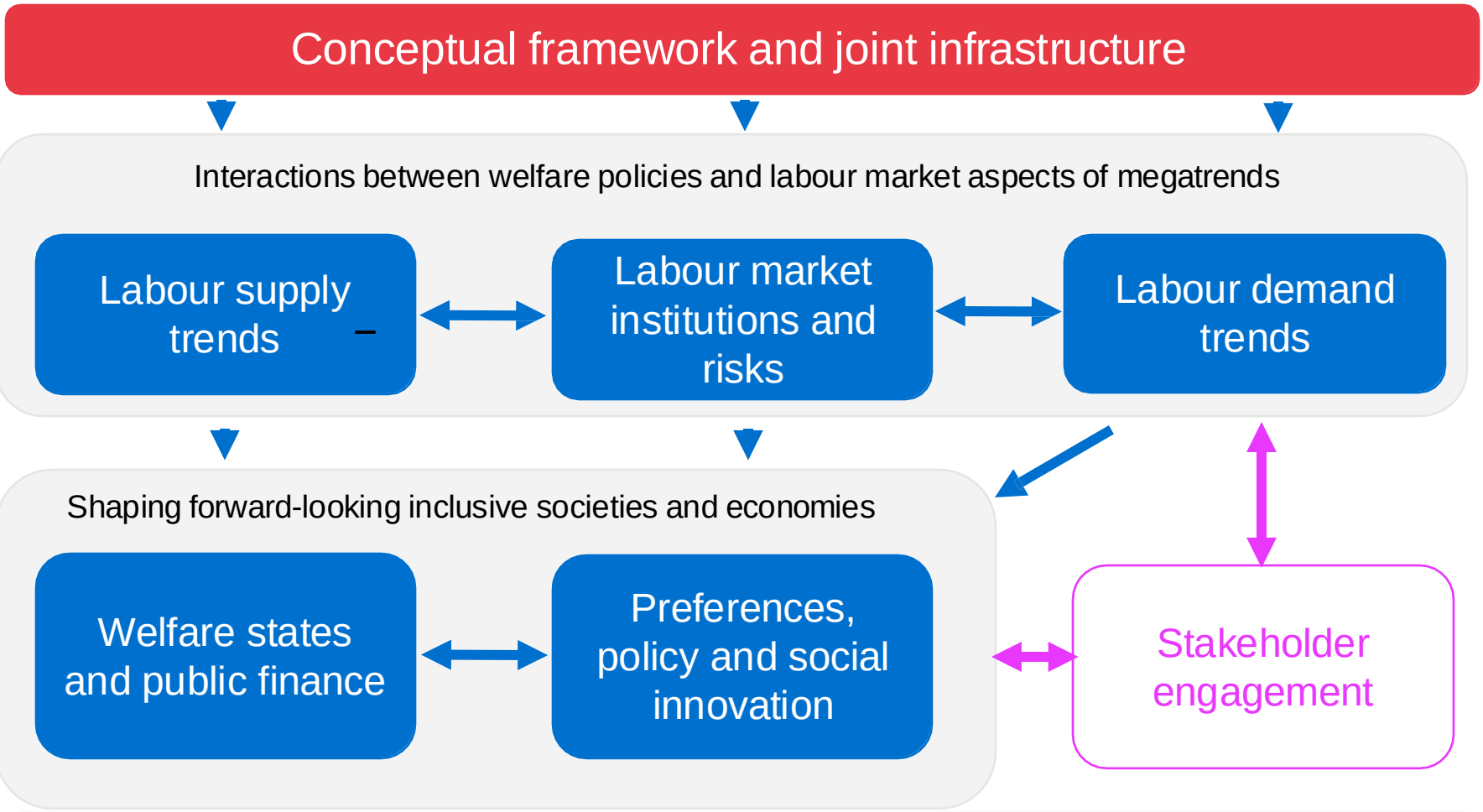
Your host: The WeLaR project

What do we study and why?



Funded by the European Union

How do we study this?



Funded by the European Union

The role of public social expenditure for mitigating local income inequality: An investigation across spatial scales in Austria

https://doi.org/10.1111/jors.1272

Tatjana Neuhuber, Antonia E. Schneider

Problem and Motivation:

Most welfare states have undergone major changes over the past decades.

- Population ageing, migration and rising within-inequality have put pressure on many welfare states.
- Generally, social expenditure per capita has been rising over the past decade:
- Trend towards decentralization and focus on service provision.

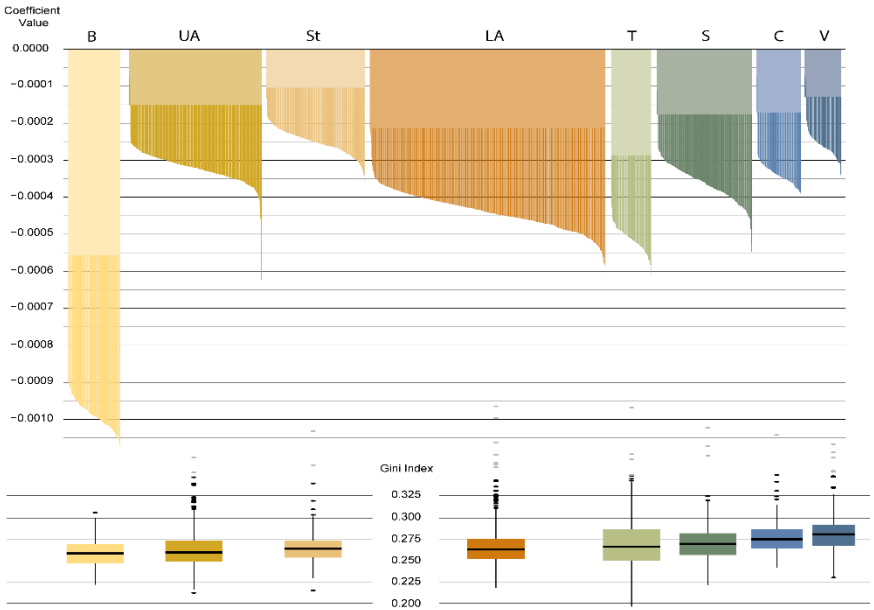
Research Questions, Data and Method:

- How do municipal and provincial social public expenditures contribute to reducing local income inequality in Austria?
- Are there differences in the effects of distinct types of social expenditure (education, health, and social protection)?
- **Dependent variable:** Municipal Gini indices (2018), **main independent variables:** social infrastructure spending on provincial and municipal level
- **Method:** Multi-level model with three levels (municipal, districts, provinces)

Vienna University of Technology
Department of Spatial Planning
Public Finance and Infrastructure Policy
raum ifip

Results:

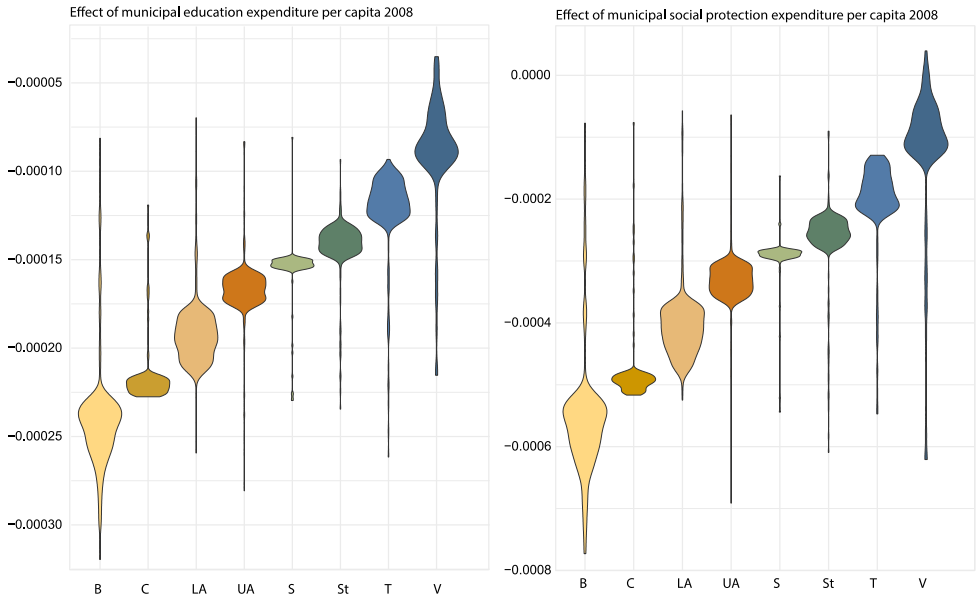
Figure 1: Mean effect of municipal and provincial social expenditure pc and Gini indices for each province



Note: The upper graph shows the coefficients of provincial and municipal social spending on inequality. The solid (upper) part of the bar plot represents the effects of provincial social expenditure on municipalities. The dashed (lower) part depicts the effects of social expenditure of each municipality on its inequality. The bottom graph shows boxplots of the Gini indices grouped by province.

B = Burgenland, UA= Upper Austria, St = Styria, LA = Lower Austria, T = Tyrol, S = Salzburg, C = Carinthia, V= Vorarlberg

Figure 2: Mean effects of municipal education expenditure and municipal social protection expenditure per capita



Note: B = Burgenland, UA= Upper Austria, St = Styria, LA = Lower Austria, T = Tyrol, S = Salzburg, C = Carinthia, V = Vorarlberg

Discussion and Conclusion:

- Both social expenditure on a municipal and provincial level have a negative effect on inequality.
- There are large differences between the provinces in how a 1% increase in public spending translates into a reduction of income inequality after taxes and transfers.
- Research and policymakers must be sensitive to the multiple spatial dimensions on which influential factors, especially social policies, operate.

Vienna University of Technology
Department of Spatial Planning
Public Finance and Infrastructure Policy
raum ifip

KU LEUVEN

HIVA

RESEARCH INSTITUTE FOR WORK AND SOCIETY

A novel technique measuring education-labour market mismatch

Prof. dr. Sofie Cabus

Background

- Traditional ways measuring vertical and horizontal mismatch take an individual rather than institutional perspective.
- The linkage score (Bol et al., 2019) looks at the distribution of diplomas, both in terms of level and field of education, across jobs and sectors of employment.
- Inspired by Bol et al (2019), we calculated the ‘linkage score’ for 18 European Union countries.

Method

- To calculate the linkage score we look at employment (E), occupations (J) (according to the ISCO-classification) and diploma (G) (according to ISCED-classification, or level of education, and field of education).

$$linkage\ score = \frac{\Pr(E = 1|G = g)}{\Pr(J = j|G = g)}$$

Results

- Diplomas sorting for specific jobs (e.g. veterinary, health, teaching, law) produce higher linkage scores than diplomas broadly deployable across jobs and sectors (e.g. humanities, general programmes).
- A substantial group of graduates (+10%) hold degrees in general programmes. It is precisely for this group of graduates that a lower linkage score is calculated.
- When compared to the findings of traditional literature, it seems to hold true that Norway, Slovenia and Switzerland are top ranked countries in terms of full match, both vertically and horizontally, but also in terms of high linkage scores. Italy and Spain produce rather low linkage scores.
- Similarities in results between traditional literature and novel mismatch indicator not hold true for all countries, for example, France.

Thank you! Questions?

Sofie.cabus@kuleuven.be

European social partners' approaches to AI/AM.
Report to the INCODING project "Democracy at work through transparent and inclusive algorithmic management"

ZSI - Centre for Social Innovation (ZSI)
Ursula Holtgrewe, Leonie Dworsky (holtgrewe@zsi.at, dworsky@zsi.at)

Reading: https://incoding-project.eu/eu-level-stock-taking-report/

And national reports from DE, DK, ES, HU, plus policy briefs

IN{CODING}

The situation

- Slow-moving tech implementation in „traditional sectors“ vs dynamisms and network effects of platforms
- Slow advances in European social dialogue (Joint Declarations Telco, metal engineering, Insurance, Framework on Digitalisation), some emerging company-level agreements (Just Eat Takeaway EWC, UNIGlobal agreement with Teleperformance)
- AI Act: limited potential seen by social partners, some „regulation fatigue“ on employer side, sense of urgency on union side (keeping platform business models in mind)
- Platform Directive: presumption of employment being weakened
- Unions aiming for distinct „AI in the Workplace“ Directive 2024ff.

Devils in the details

- **Human-in-control** and **transparency** – essential for social dialogue,
  - BUT: platform companies‘ obfuscation of responsibilities, long supply chains, information asymmetries, technical possibilities (intrusive monitoring vs „explainability“)
- **Ethical** and trustworthy AI – through social dialogue or instead?
- „**Presumption of employment**“ – how will national implementation work?
- **Skill needs:** agreements but who pays and invests?

Recent Trends in Migrants' Labour Market Integration in Europe:

A Focus on Digitalisation and Migrant Integration

Sarah McNamara (ZEW)

Funded by the European Union

We Find Low Rates of Assimilation - Now What?

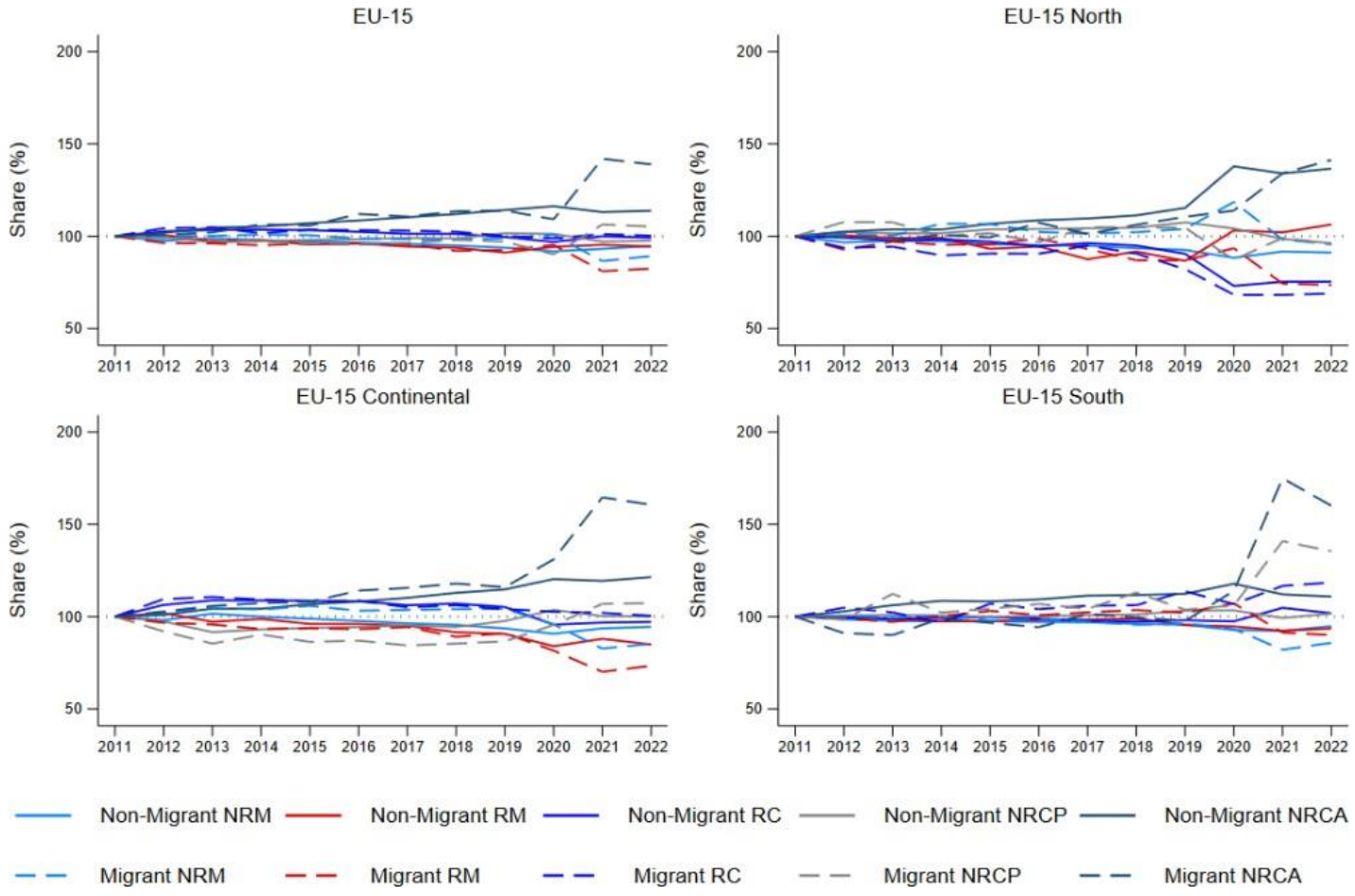
- In D 5.5, we investigate assimilation in Europe on a number of dimensions
- See report here
- Despite small differences in employment, and shorter unemployment durations following job-loss than natives, we find migrants are:
  - more likely to work in "low quality" jobs (low wage sector, poor working hours, impermanent or part-time contracts)
  - more likely to experience vertical or horizontal education-occupation mismatch
  - experience persistent income gaps across the life course post-migration (controlling for socio-demographics and fixed effects for year surveyed/country of residence)

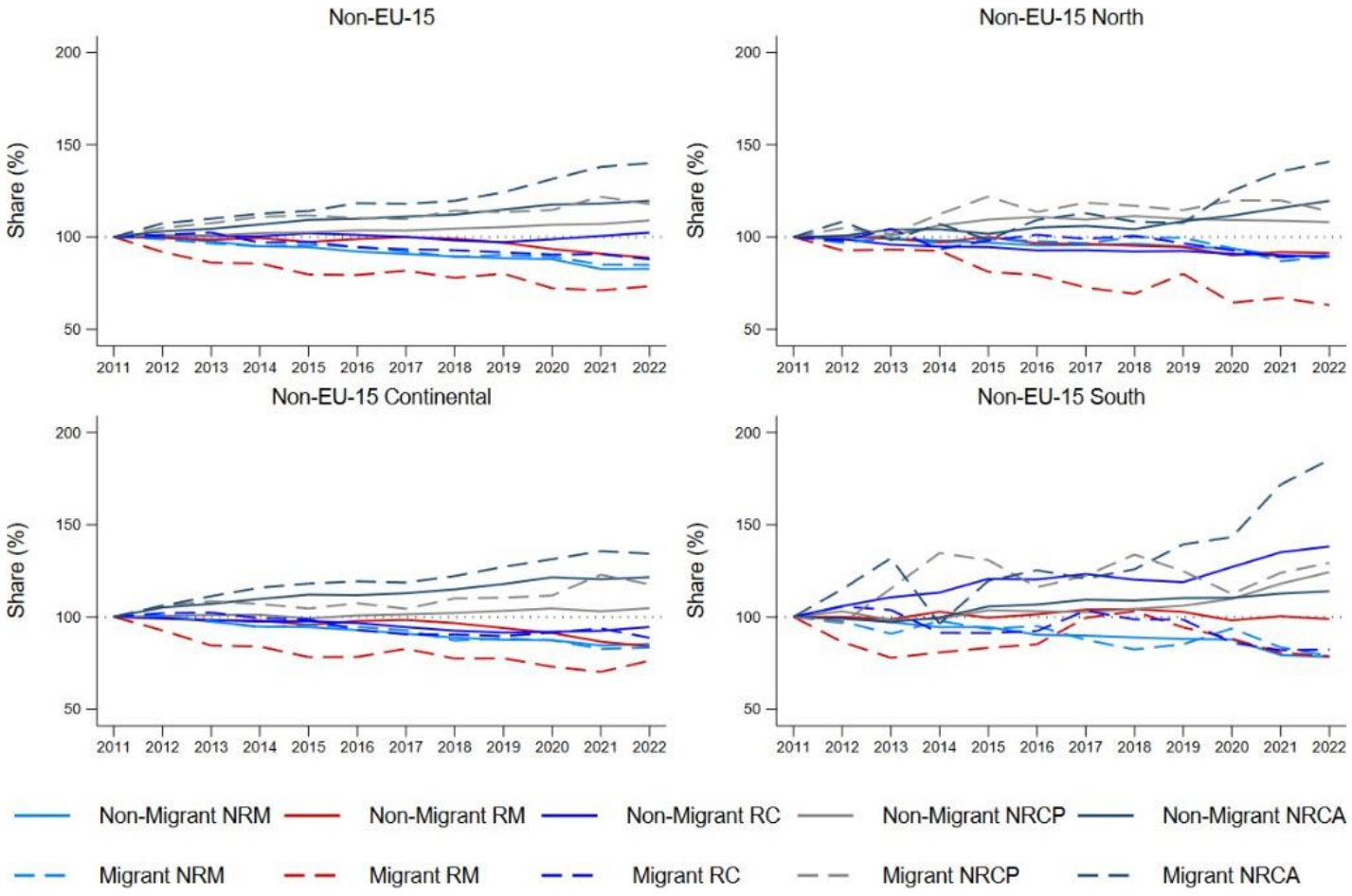
So what now?

⇒ We investigate the mechanisms behind these phenomena

The Evolution of Occupational Tasks

- Using cross-walks (from Lewandowski et al., 2020), we allocate occupations (ISCO 2008 3-digit) to five occupational task groups based on dominant task intensity:
  i. non-routine cognitive analytical (NRCA)
  ii. non-routine cognitive personal (NRCP)
  iii. routine cognitive (RC)
  iv. non-routine manual (NRM)
  v. routine manual (RM)
- In the following, we restrict EU-LFS sample to employed, working-age individuals, and construct an index of occupational task share with 2011 as the base year


EU-15
EU-15 North
EU-15 Continental
EU-15 South
Share (%)
200
150
100
50
2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022
Non-Migrant NRM
Non-Migrant RM
Non-Migrant RC
Non-Migrant NRCP
Non-Migrant NRCA
Migrant NRM
Migrant RM
Migrant RC
Migrant NRCP
Migrant NRCA

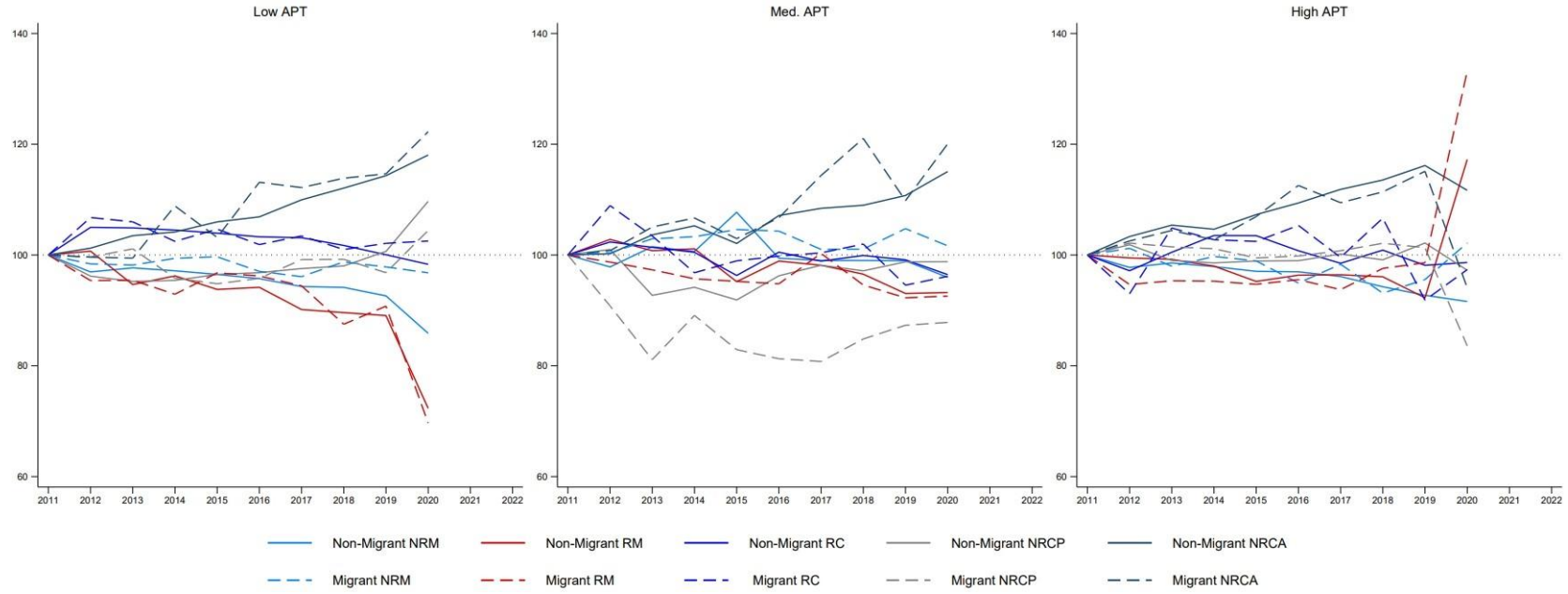

Non-EU-15
Non-EU-15 North
Non-EU-15 Continental
Non-EU-15 South
Share (%)
200
150
100
50
2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022
Non-Migrant NRM
Non-Migrant RM
Non-Migrant RC
Non-Migrant NRCP
Non-Migrant NRCA
Migrant NRM
Migrant RM
Migrant RC
Migrant NRCP
Migrant NRCA

Measuring Digitalisation

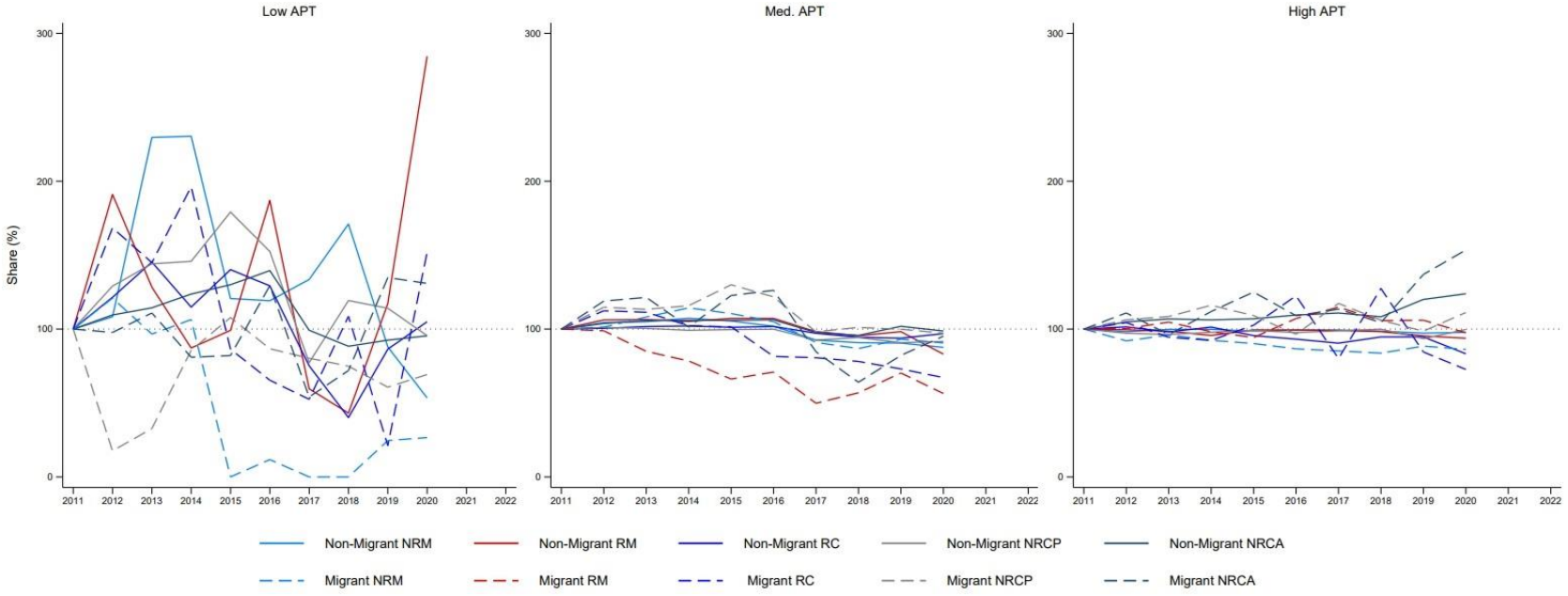
- We use EU KLEMS data (v. 2023) to create our measure of digitalization
  - ICT capital: real fixed capital stock in computing equipment, communications equipment, computer software, and databases in industry j and year t
  - technology penetration at country-industry level (Acemoglu & Restrepo, 2020):

$$APT_{jt} = \frac{\Delta ICT_{jt}}{emp_{jt_0}} - \frac{\Delta output_{jt}}{output_{jt\,0}} * \frac{ICT_{jt_0}}{emp_{jt_0}}$$

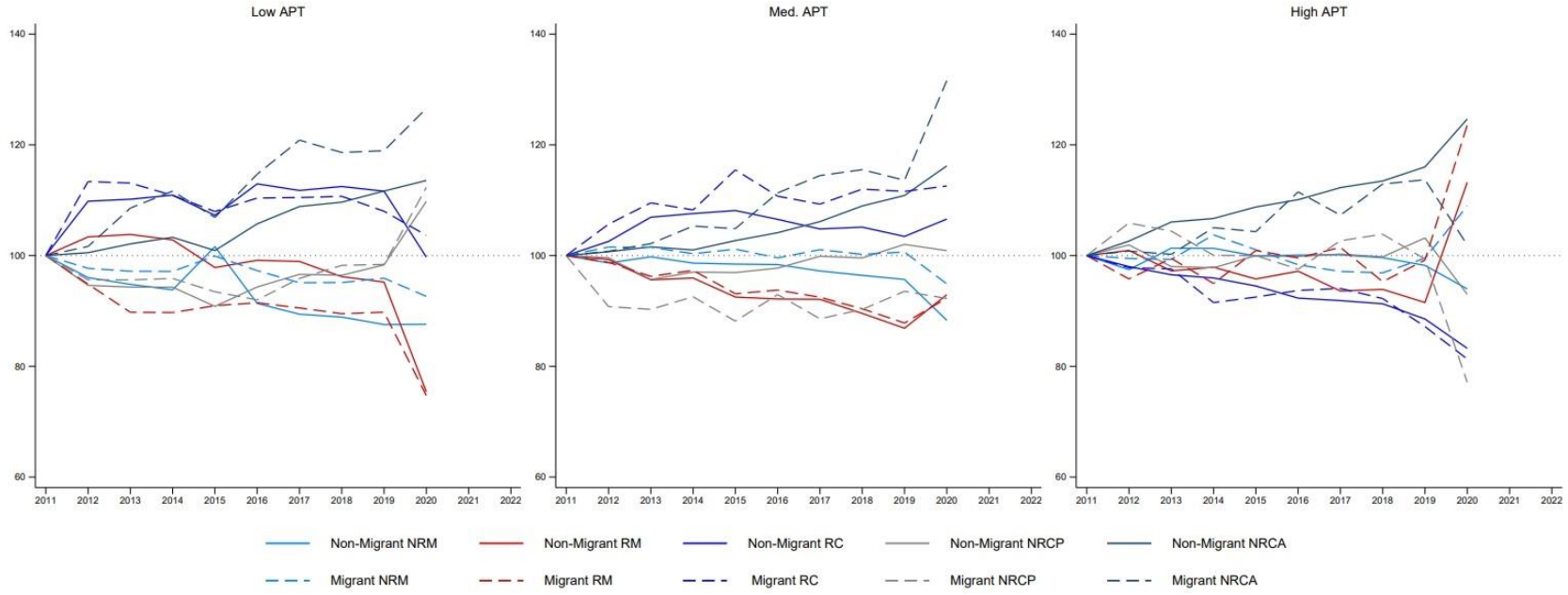
  - first term: change in ICT in industry j in between $t = 0$ and t normalised by baseline employment to account for initial differences in industry size
  - second term: accounts for changes in industry composition – change in output for j normalised by initial industry size
  - third term: second term normalised by ratio of baseline ICT stock to employment



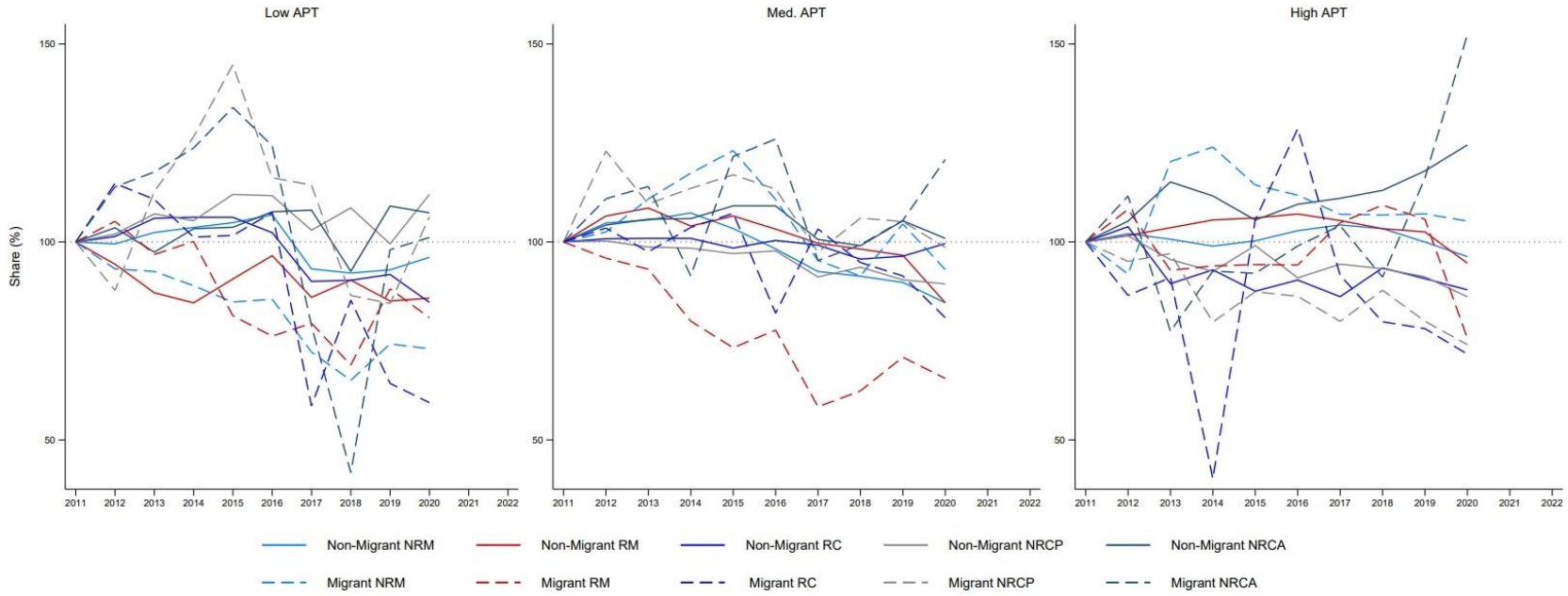
Baseline Terciles of APT EU-15



Baseline Terciles of APT Non-EU-15



Most Recent Period Terciles of APT EU-15



Most Recent Period Terciles of APT Non-EU-15

Next Steps

- Shift-share
  - demographic group specific exposure effects
- IV-GMM: does exposure to digitalisation conditional on migrant status affect:
  - the likelihood an individual is employed
  - the likelihood an individual is employed in a shortage or routine occupation
  - horizontal and vertical mismatch
  - Job Quality Index score

WeLaR is Horizon Europe research project examining the impact of digitalisation, globalisation, climate change and demographic shifts on labour markets and welfare states in Europe. It aims to improve the understanding of the individual and combined effects of these trends and to develop policy proposals fostering economic growth that is distributed fairly across society and generates opportunities for all.

www.projectwelar.eu

twitter@ProjectWeLaR

linkedin.com/company/ProjectWeLaR

Funded by the European Union