

## **Participation in adult education and training in CEE countries**

Zoltán Hermann  
IE-CERSHAS

GRINCOH workshop on Workpackages 4 and 5  
Vienna, 22nd November, 2013

the original research question:

do educational institutions (in particular: tracking) and educational quality  
have an impact on  
cross-country differences in skill maintenance (measured by adult education and training)?

assumptions:

1. under-investment of training is stronger in CEE countries
2. under-investment in CEE countries is disproportionately higher for the low-skilled
3. this might be related to the low level of employment

→ can these assumptions be taken from granted?

lessons from the literature:

1. under-investment of training is stronger in CEE countries

1a. the patterns of cross-country differences in participation in adult training:

is there a gap between CEE countries and old EU countries?

compared to the continental countries participation in adult training is

- higher in Nordic countries and the UK
- smaller in Southern Europe

participation in the group of CEE countries is not well documented and analysed

short description: Badescu-Loi, 2010, for few countries: Hámori, 2008

Beblavy et al. 2013: in Central Europe adult education is more about increasing attainment

descriptive statistics from different sources are not always consistent

1b. is there under-investment?

policy context (EU, OECD ...) : more training is better

increasing skills is a key to boost economic growth, innovation, productivity, employment

economic perspective - market failures ? (e.g. Bassanini et al, 2007)

- usually costs and returns can not be fully measured

  - only theoretical argument and indirect evidence

    - e.g.: Brunello-dePaola, 2004:

      - employers provide and pay for general training

      - the provision of skills encourages labour turnover

        - under-investment

- a possible efficiency-equity trade-off in adult training:

the training of the low-skilled may provide low returns (Heckman), though this is often contested (e.g. Ok-Tergeist, 2003)

## 2. under-investment in CEE countries is disproportionately higher for the low-skilled

- papers using the European Community Household Survey do not include CEE countries (e.g. Bassanini et al 2007)
- no detailed analysis available

some evidence from estimating the effects of demographic characteristics separately for countries:

Hátori, 2008; Biaggetti-Scicchitano, 2009

## 3. under-investment in CEE countries for the low-skilled might be related to the low level of employment

– is there a room for policy to foster employment by supporting adult education and training?

different forms of adult education and training might have different effects:

- workplace training (provided or organised and/or financed by the employer)
  - usually considered to provide substantial returns, but the evidence is still mixed (e.g. Asplund, 2005)
- government programmes for education and training for the unemployed
  - ambiguous results on returns
- formal education providing a degree at a higher level / in a different field
- other ?

→ **the paper should be re-focused:**

1. detailed descriptive analysis of participation in adult education and training in CEE countries

- different forms of training should be distinguished

economically meaningful categories (workplace training – government programmes – other)

can be measured only indirectly in available data

- the incidence of training should be analysed by individual characteristics (gender, education, age, labour market status, job characteristics for the employed: industry, firm size)

2. collecting and assessing the potential explanations for cross-country differences and potential under-investment in (some) CEE countries

**Which data to be used?** Comparative data on adult education and training in Europe

1. Adult Education Survey (AES) (2007)
  - covers a longer period (1 year)
  - detailed information for a sample of training activities (1-3 activities / person)
2. Labour Force Survey (LFS)
  - a single question on non formal education
  - covers a short period (past 4 weeks)
  - changes over time can be measured
3. LFS special module on Lifelong Learning (2003)
4. Continuing Vocational Training Survey (2005)
  - firm-level survey
  - not available for this project yet
5. European Community Household Survey (ECHS) and Statistics on Income and Living Conditions (SILC)
  - no CEE countries in ECHS
  - few questions on training
6. International Adult Literacy Survey (IALS) and similar data (ALL)
  - no full coverage, small number of countries
  - relatively small samples

Measuring different forms of adult education and training in the AES:

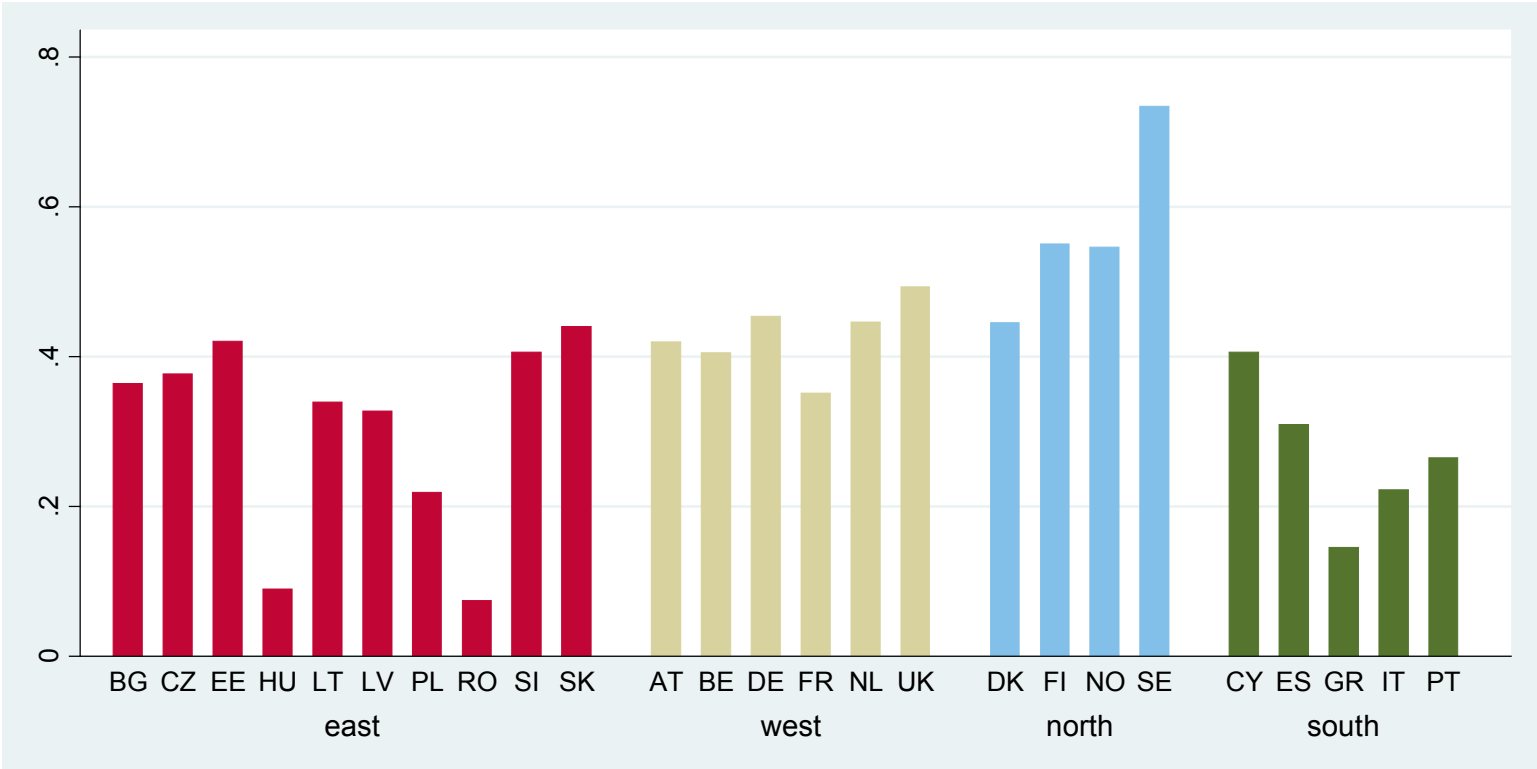
• formal education – non-formal education and training  
~ school based, provides a certificate e.g. on the job training, seminars, workshops, private lessons, distance educ.  
(explicit in the questionnaire)

• job related – non-job related / personal  
as stated by the respondent OR  
reasons for participation are job related OR  
on the job training

• workplace related – non-workplace related  
job-related AND  
takes place in working hours OR  
financed by the employer OR  
provided by the employer OR  
on the job training



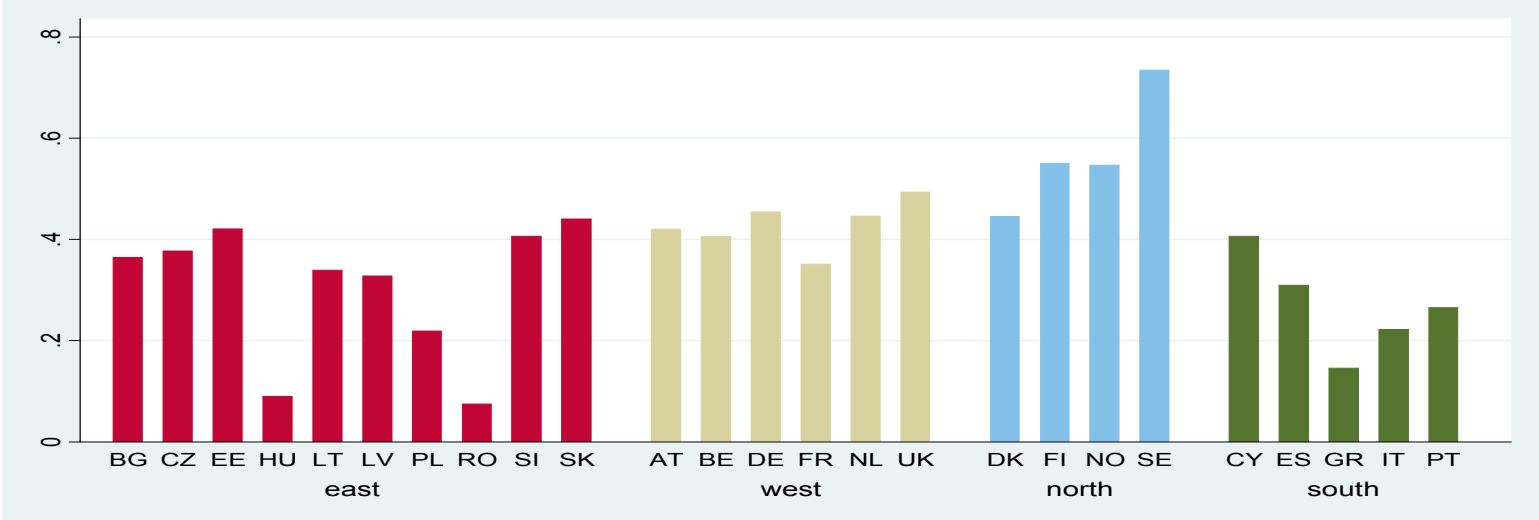
# Overall participation in adult education and training



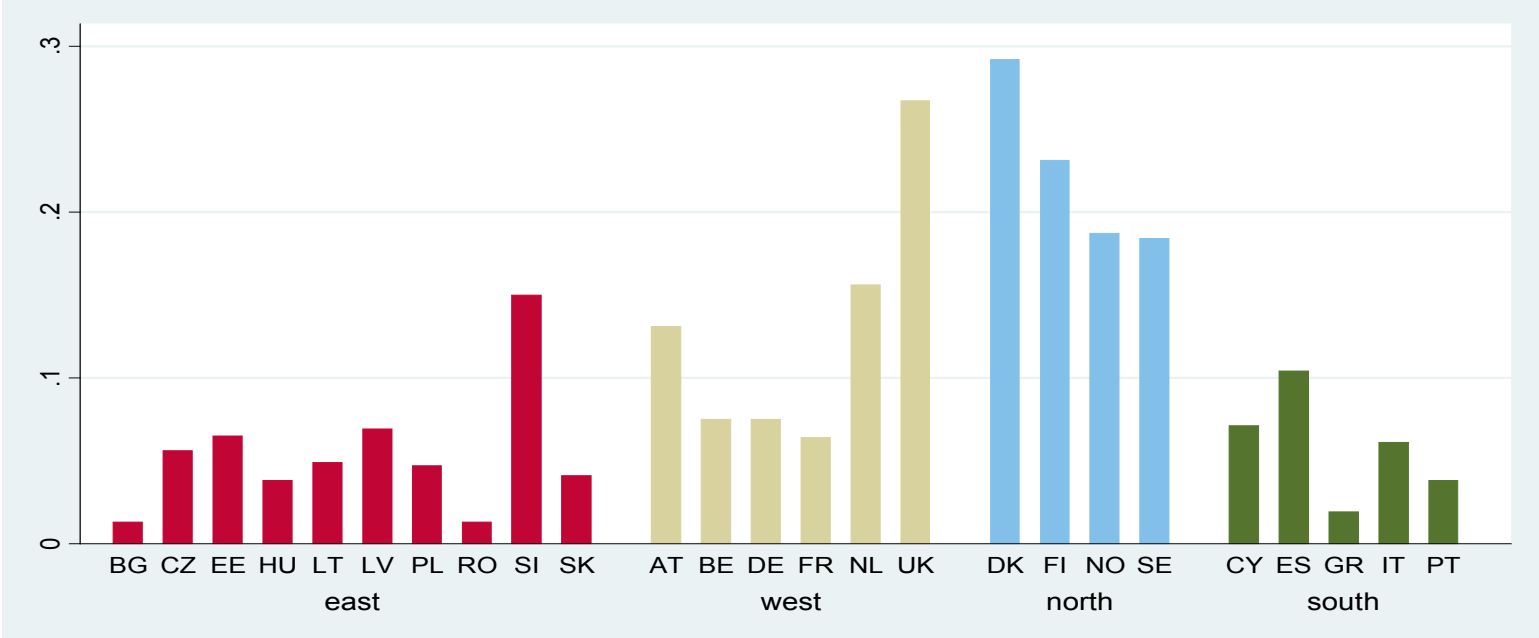
no CEE - old EU gap

substantial heterogeneity within the CEE group

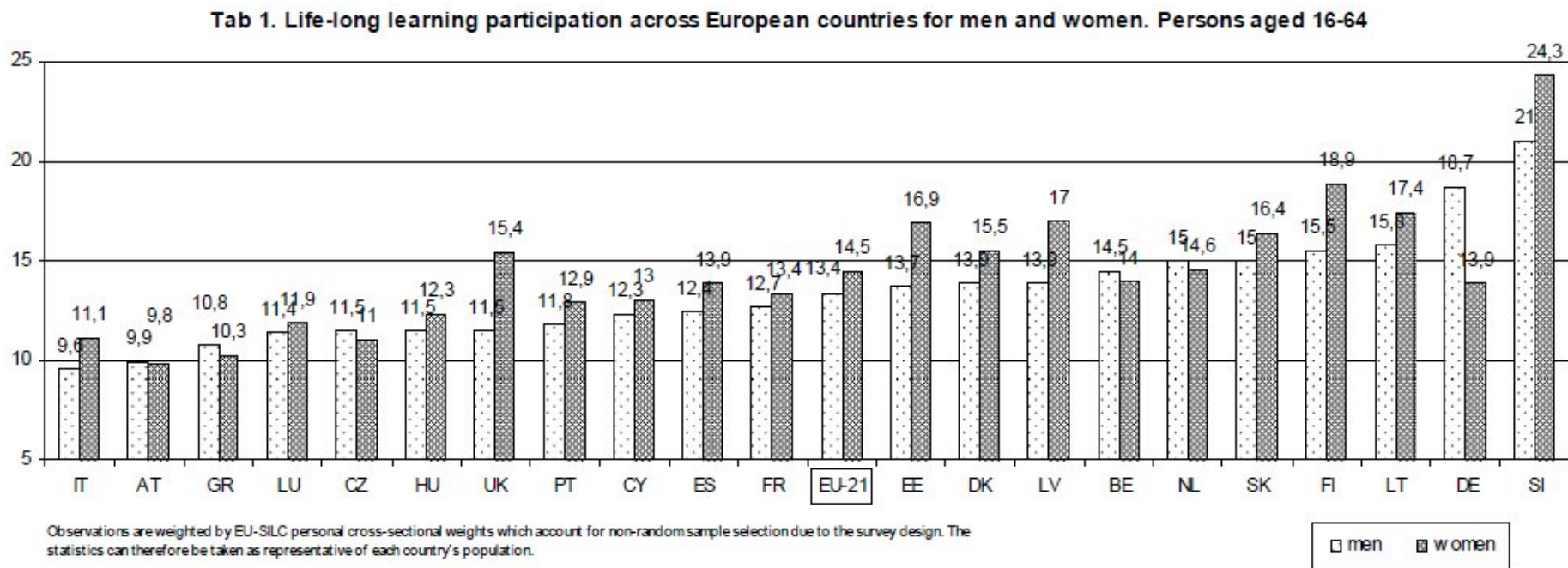
Adult Education Survey, 2007



Labour Force Survey, 2006



Participation in education and training in the SILC (2005) survey (Biaggetti-Scicchitano, 2009)

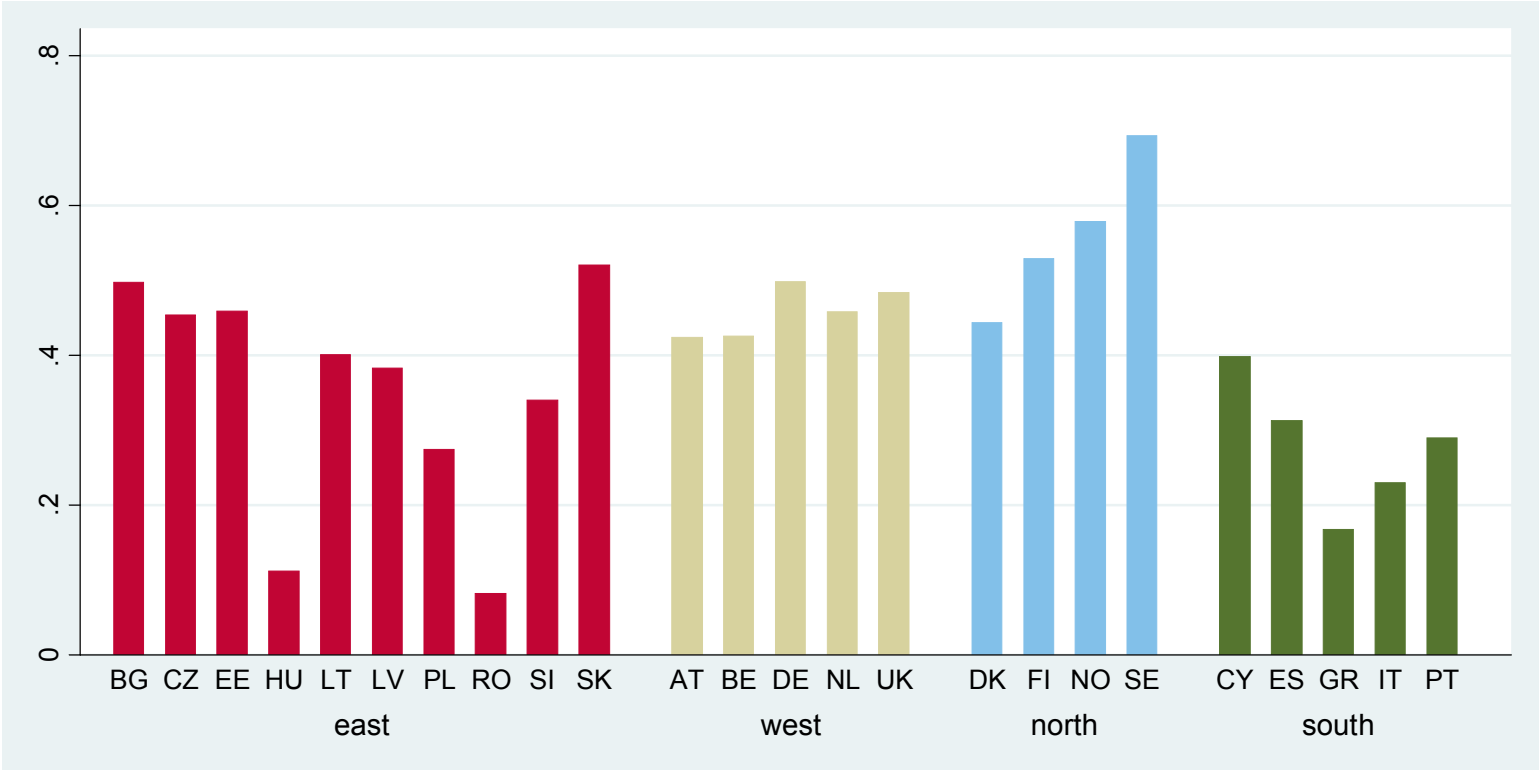


SI and LiT among top performers

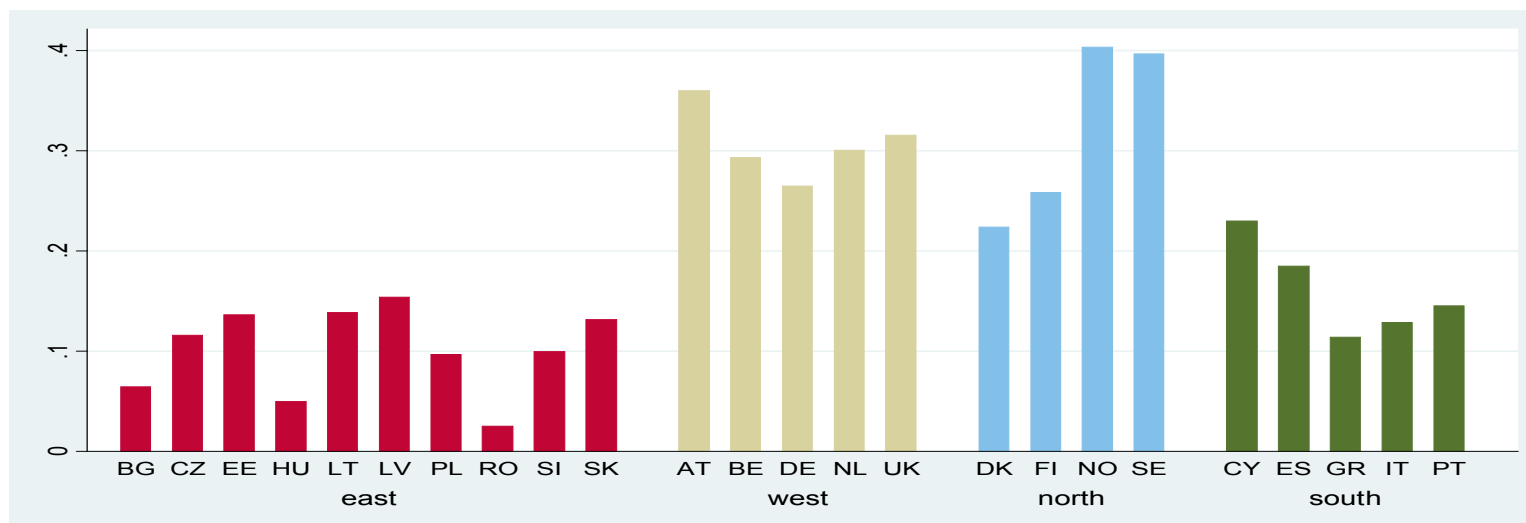
CZ vs SK and Baltic countries

UK, AT

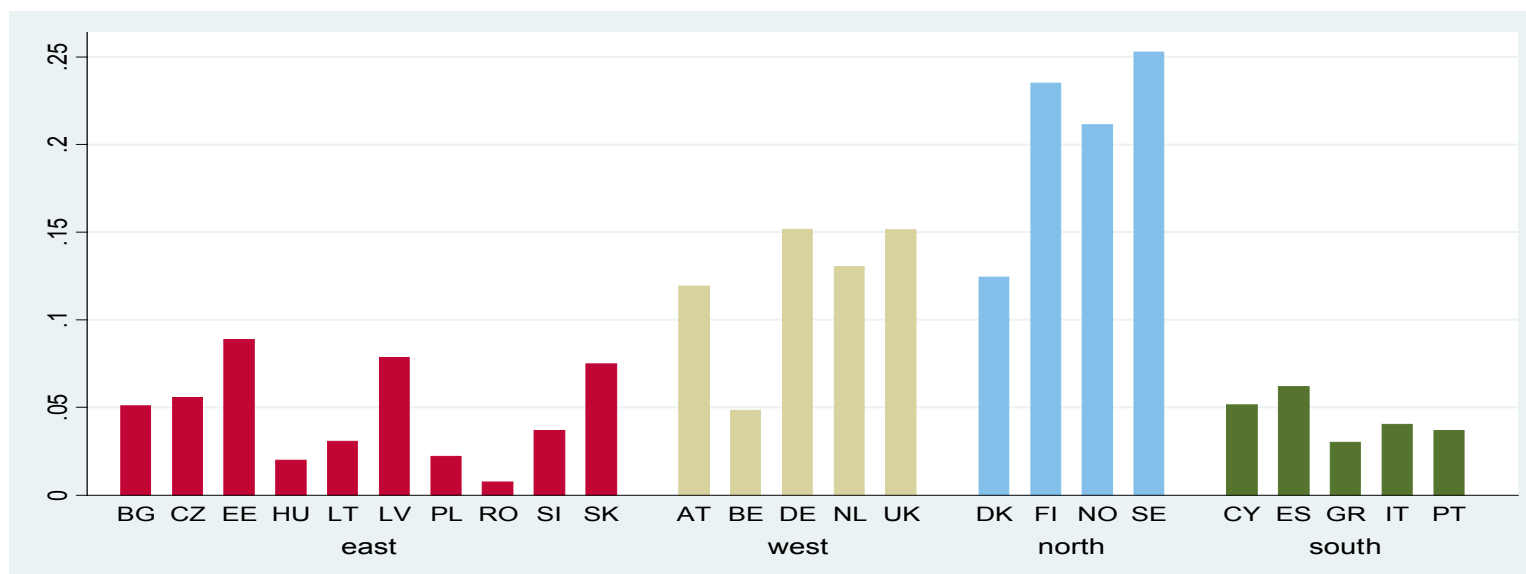
Participation in job related educ. or training by labour market status: **employed**



### Participation in job related educ. or training by labour market status: **unemployed**

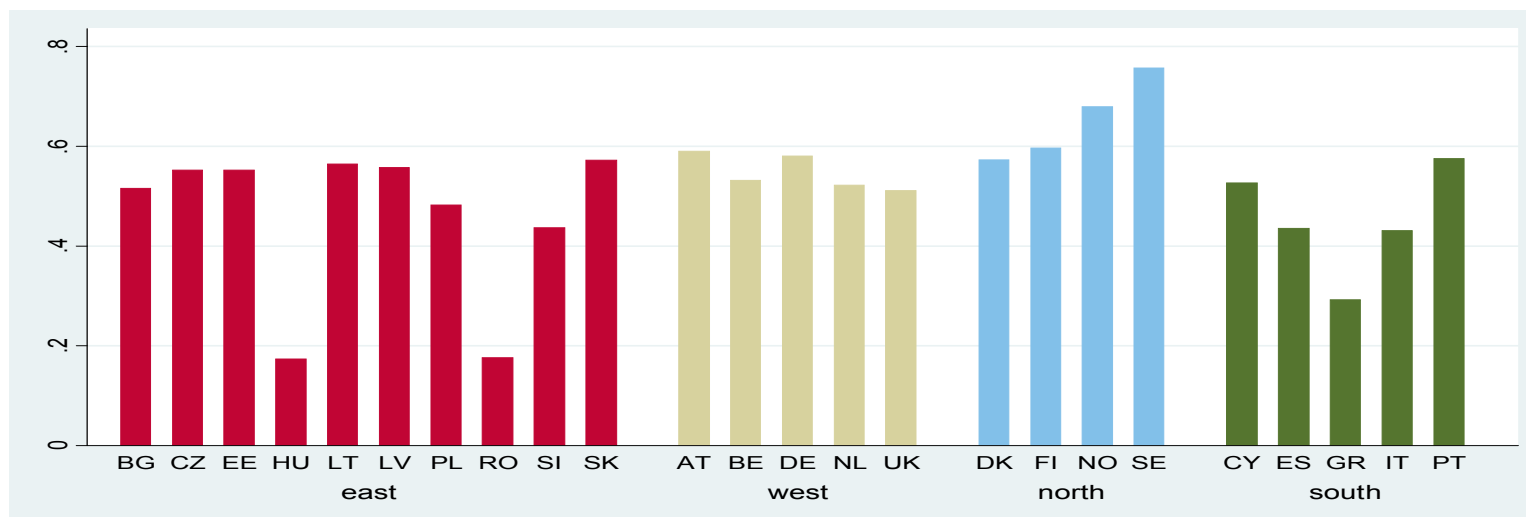


### Participation in job related educ. or training by labour market status: **inactive**

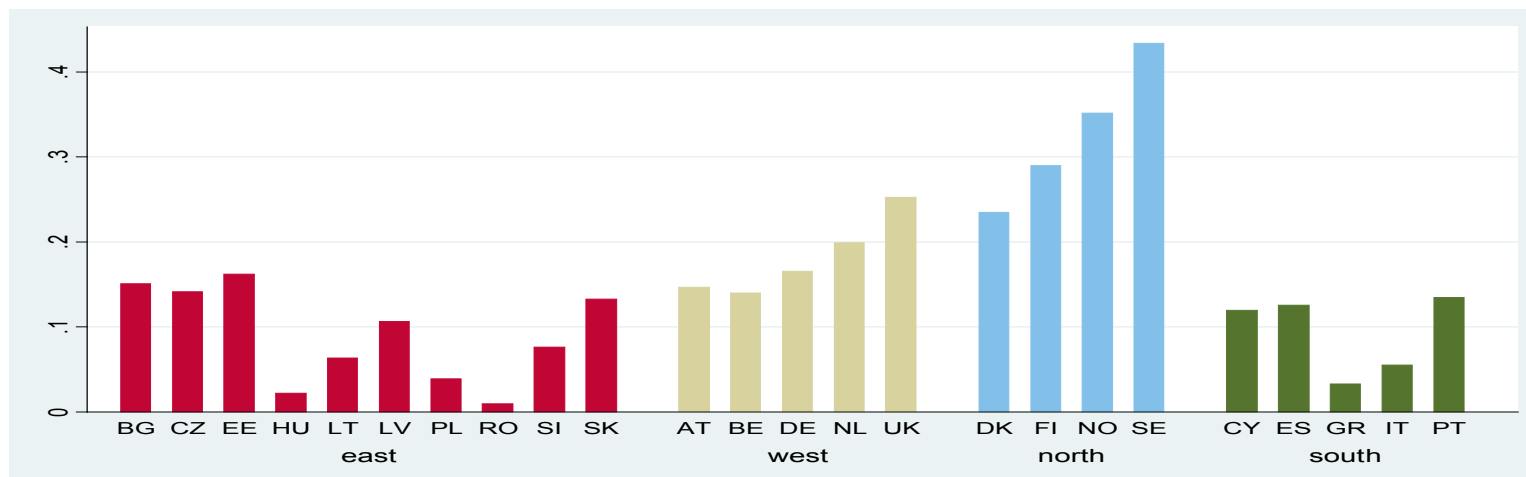


Participation in job related educ. or training by educational attainment:

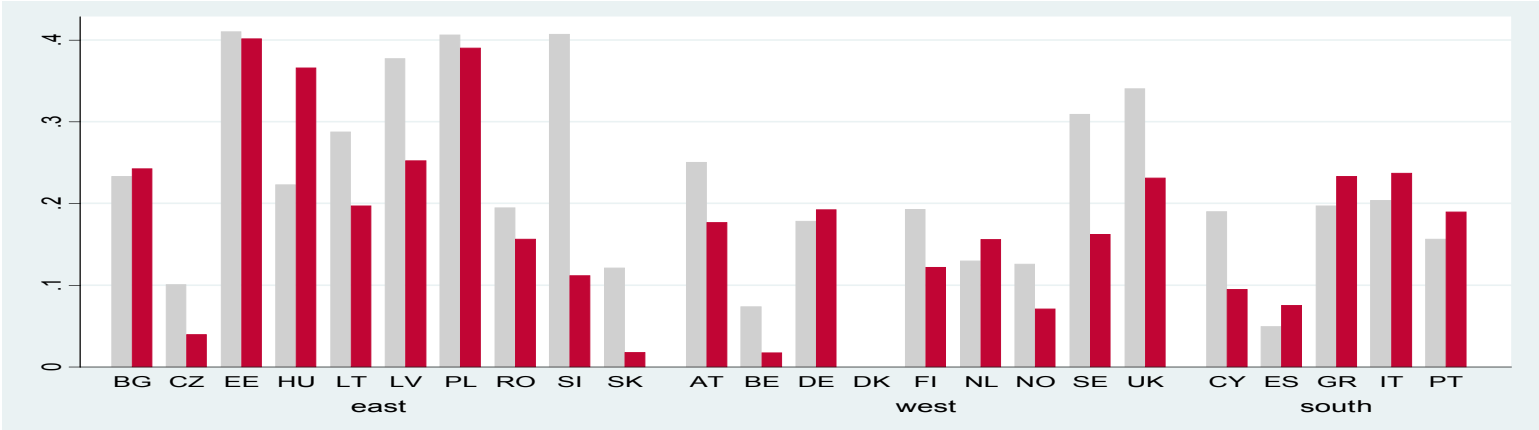
**higher education**



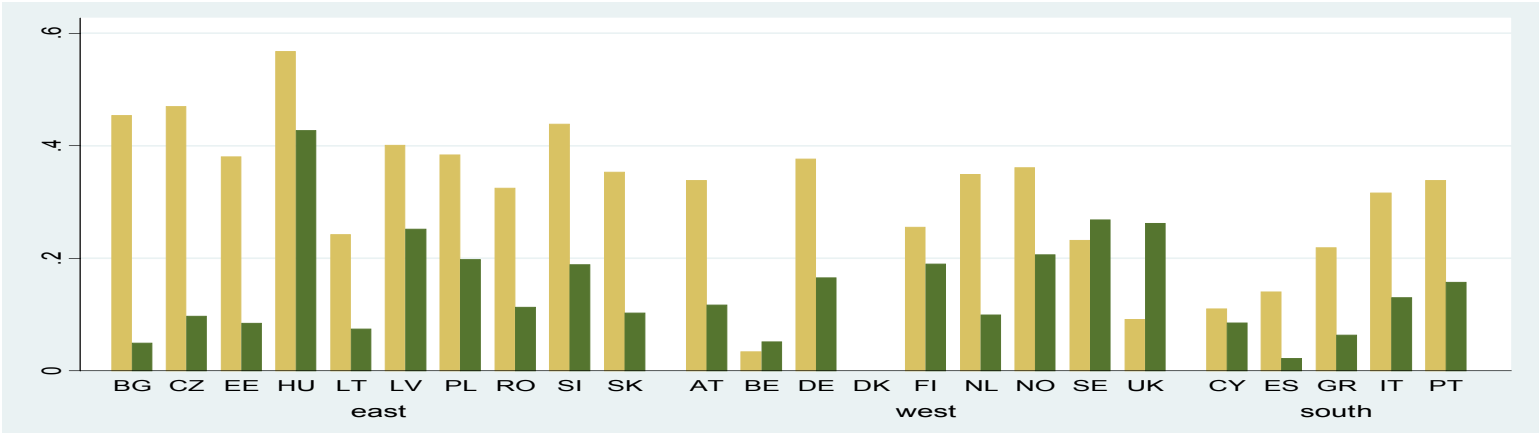
**below upper-secondary**



# Why non-participants did not participate?



Grey bar : too expensive, Red bar : not confident with the idea of going back to something that is like school



Yellow bar : no need for the job, Green bar : lack of employer's support

## Individual characteristics and participation in job related adult education and training

	(1)		(2)	
female	-0.0185***	(0.00413)	-0.00648	(0.00430)
educ low	-0.270***	(0.00542)	-0.268***	(0.00574)
educ u.sec.	-0.148***	(0.00452)	-0.144***	(0.00473)
unemployed	-0.177***	(0.00946)	-0.169***	(0.0104)
inactive	-0.289***	(0.00713)	-0.290***	(0.00795)
age 25-35	0.0492***	(0.00515)	0.0517***	(0.00532)
age 46-55	-0.0323***	(0.00511)	-0.0445***	(0.00528)
age 56-65	-0.111***	(0.00606)	-0.144***	(0.00624)
self employed	-0.0817***	(0.00668)	-0.0769***	(0.00690)
firm 0-10	-0.0263***	(0.00610)	-0.0287***	(0.00642)
firm 11-19	0.0245***	(0.00760)	0.0180**	(0.00790)
firm 50-	0.0848***	(0.00554)	0.0706***	(0.00592)
exp at firm 0-2	0.0235***	(0.00649)	0.0130*	(0.00701)
exp at firm 3-5	-0.00218	(0.00539)	-0.0234***	(0.00557)
temporary contr.	-0.0506***	(0.00769)	-0.0265***	(0.00852)
part-time job	0.00353	(0.00728)	-0.0696***	(0.00756)
second job	-0.0397***	(0.00623)	0.0762***	(0.00999)
immig non-EU	-0.0274***	(0.01000)	-0.0731***	(0.0102)
immig EU	0.0865***	(0.00655)	-0.00529	(0.0114)
child	0.0648***	(0.00670)	0.0190***	(0.00702)
child 0-3	-0.0443**	(0.0174)	-0.0584***	(0.0179)
urban (small)	0.0304***	(0.00486)	0.00567	(0.00508)
rural	0.0127***	(0.00446)	-0.00904*	(0.00496)
industry (NACE) FE	yes		yes	
country FE	no		yes	

probit model for participation, marginal effects



Does controlling for individual characteristics reduce differences between country groups?

	(1)		(2)	
BG	-0.00340	(0.00797)	-0.0634***	(0.0119)
CZ	-0.0106*	(0.00639)	-0.0322***	(0.00759)
EE	0.0225**	(0.00959)	-0.0246**	(0.0109)
HU	-0.281***	(0.00519)	-0.437***	(0.00921)
LT	-0.0574***	(0.00864)	-0.130***	(0.0105)
LV	-0.0528***	(0.0132)	-0.0911***	(0.0167)
PL	-0.169***	(0.00478)	-0.246***	(0.00641)
RO	-0.302***	(0.00445)	-0.441***	(0.00767)
SI	-0.104***	(0.00782)	-0.145***	(0.0103)
SK	0.0568***	(0.00797)	0.00595	(0.00896)
north	0.109***	(0.00561)	0.0887***	(0.00693)
south	-0.142***	(0.00452)	-0.153***	(0.00607)
ind. controls	no		yes	

Are the correlations between individual characteristics and participation different across the country groups?

	east	west	north	south		east	west	north	south
female	0.0206*** (0.00674)	-0.0452*** (0.0105)	-0.0137 (0.00967)	-0.0195*** (0.00731)	self employed	-0.0925*** (0.0108)	-0.0241 (0.0167)	-0.0876*** (0.0185)	-0.0546*** (0.0112)
educ low	-0.301*** (0.0101)	-0.295*** (0.0129)	-0.212*** (0.0130)	-0.256*** (0.00983)	firm 0-10	-0.0157 (0.00964)	0.0217 (0.0151)	-0.0351** (0.0147)	-0.0766*** (0.0113)
educ u.sec.	-0.163*** (0.00757)	-0.141*** (0.0104)	-0.109*** (0.01000)	-0.143*** (0.00883)	firm 11-19	0.0323*** (0.0114)	-0.00832 (0.0190)	0.0391** (0.0176)	-0.00490 (0.0156)
unemployed	<b>-0.282***</b> (0.0148)	<b>-0.0435*</b> (0.0263)	<b>-0.173***</b> (0.0290)	<b>-0.0893***</b> (0.0148)	firm 50-	<b>0.0410***</b> (0.00865)	<b>0.0991***</b> (0.0134)	<b>0.0637***</b> (0.0129)	<b>0.121***</b> (0.0121)
inactive	<b>-0.372***</b> (0.0120)	<b>-0.274***</b> (0.0209)	<b>-0.289***</b> (0.0217)	<b>-0.237***</b> (0.0112)	exp at firm 0-2	0.0509*** (0.0107)	0.0447*** (0.0157)	0.0492*** (0.0155)	-0.0135 (0.0117)
age 25-35	0.0374*** (0.00835)	0.0412*** (0.0124)	0.0685*** (0.0122)	0.0692*** (0.00882)	exp at firm 3-5	0.00344 (0.00822)	0.0248* (0.0132)	-0.0394*** (0.0116)	-0.00899 (0.0114)
age 46-55	-0.0376*** (0.00819)	-0.0510*** (0.0119)	-0.0256** (0.0125)	-0.0281*** (0.00846)	temporary contr.	-0.0454*** (0.0155)	0.00562 (0.0224)	-0.0533** (0.0213)	0.0240** (0.0107)
age 56-65	<b>-0.0778***</b> (0.0105)	<b>-0.192***</b> (0.0143)	<b>-0.148***</b> (0.0133)	<b>-0.110***</b> (0.0104)	part-time job	-0.0744*** (0.0162)	-0.0303** (0.0131)	-0.0371** (0.0145)	-0.0708*** (0.0178)
child 0-3	-0.0197 (0.0347)	-0.0770** (0.0336)	-0.0528 (0.0328)	-0.128*** (0.0373)	second job	-0.0595*** (0.00781)	0.0462** (0.0227)	0.0156 (0.0187)	0.136*** (0.0192)